

Economic and Fiscal Impacts of the New Jersey Housing and Mortgage Finance Agency's Investment in Affordable Housing



Prepared for the New Jersey Housing and Mortgage Finance Agency

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EXECUTIVE SUMMARY

INTRODUCTION

The New Jersey Housing and Mortgage Finance Agency (NJHMFA) retained HR&A Advisors, Inc. (HR&A) to conduct an economic and fiscal impact analysis of the agency's investments in affordable housing.

NJHMFA supports the production of new and rehabilitated ownership and rental units, funds mortgages for affordable homeownership products, and encourages the stabilization of communities and neighborhoods. The agency funds these activities through the sale of taxable and tax-exempt bonds, federal and state grants and housing assistance programs, and support from state and municipal sources, not-for-profit agencies, and foundations.

HR&A is a real estate, economic development, and public policy consulting firm originally founded in 1976. The firm specializes in conducting economic and fiscal impact studies of organizations, development projects, and policies. The firm serves clients out of its offices in New York, Los Angeles, and Washington, D.C.

This study focuses on NJHMFA's investment in affordable housing and includes both ownership and rental products. Between 2008 and 2012, NJHMFA supported the creation of 10,650 multifamily and owner-occupied units and 1,621 special needs beds across 302 individual projects in the State of New Jersey. It also supported the weatherization of 5,483 units across 38 projects. These investments collectively comprise the "analyzed investments."

THE BENEFITS OF AFFORDABLE HOUSING

Despite the lingering effects of the 2007-2009 Great Recession, New Jersey's housing prices are higher, and increasing at a faster rate, than the nation as a whole. According to data from the U.S. Census Bureau:

- New Jersey ranked **third in median home value (\$339,000) amongst the 50 states** in 2010. The nationwide median home value was \$180,000. Between 2000 and 2010, the median home value increased 102 percent in New Jersey versus 61 percent in the United States overall. The **2010 ratio of median housing value to median household income in New Jersey was 5.0**, while it was **only 3.6 nationwide**.
- New Jersey ranked **third in median contract rent (\$967 monthly) amongst the 50 states** in 2010. The nationwide median contract rent was \$713. Between 2000 and 2010, the median contract rent increased 44 percent in New Jersey versus 37 percent in the United States overall.

The investment in affordable housing by NJHMFA helps improve conditions for thousands of households and address critical economic and social challenges. The provision of sufficient quantities of well-located, affordable housing offers many social and economic benefits, including facilitating business retention, restoring jobs-housing balance, and curbing the out-migration of low-income residents.

ECONOMIC IMPACTS

HR&A estimated the economic impacts of construction and ongoing operations for the analyzed investments. Total impacts include the direct and “multiplier” impacts, the latter of which reflects additional economic activity that occurs as a result of the direct spending. The estimated one-time, project development-related economic impacts of NJHMFA’s project development and weatherization activities between 2008 and 2012 are:

- Creation of **24,350 full-time equivalent (FTE) jobs**.
- Generation of **\$1.2 billion in employee compensation**¹.
- Generation of **\$4.1 billion in economic output**² (i.e. spending).

NJHMFA’s \$1.9 billion in affordable housing investments between 2008 and 2012 generated over \$4.1 billion in economic output, i.e. **for every dollar of NJHMFA invests or administers, \$2.15 of economic output is returned to the economy of New Jersey.**

NJHMFA project investments in 2009 alone, the agency’s most prolific year of investment, generated one-time project development impacts of 7,250 jobs, \$341 million in employee compensation, and over \$1.16 billion in spending. This impact represented a critical economic infusion to the State of New Jersey at a time when its economy was contracting, particularly in industries related to the housing sector.

The estimated ongoing annual economic impacts of operational spending (i.e. building operations expenses) and resident spending

¹ Employee compensation includes wage and salary income as well as employee benefits and employer paid payroll taxes.

² Economic output is the total value of production across all industries in the New Jersey economy. It is equivalent to total spending in the economy and total business revenues.

(i.e. spending in New Jersey by residents of these NJHMFA-supported projects) associated with the analyzed investments are:

- Creation of **2,600 FTE jobs**.
- Generation of **\$136 million in employee compensation**.
- Generation of **\$447 million in economic output**.

FISCAL IMPACTS

HR&A estimated the tax revenues generated to the State of New Jersey and local governments from one-time construction activity and ongoing operations. NJHMFA’s development and weatherization activities between 2008 and 2012 generated **\$145.3 million in one-time State and local tax revenue** in New Jersey. This tax revenue, \$79.9 million in State tax and \$65.4 million in local tax, included:

- \$35.1 million in New Jersey State Individual Income Tax.
- \$9.6 million in New Jersey State Corporation Business Tax.
- \$35.2 million in New Jersey State Sales Tax.
- \$65.4 million in local property tax.

The ongoing annual fiscal impacts of operational and resident spending associated with the analyzed investments are approximately **\$26.5 million in State and local tax revenue**. This tax revenue, \$15.6 million in State tax and \$10.9 million in local tax, includes:

- \$6.8 million in New Jersey State Individual Income Tax.
- \$1.9 million in New Jersey State Corporation Business Tax.
- \$6.9 million in New Jersey State Sales Tax.
- \$10.9 million in local property tax. Payments in lieu of taxes (PILOTs) made by NJHMFA projects represent \$8.6 million of this local property tax revenue.

ECONOMIC AND FISCAL IMPACTS OF A DEVELOPMENT PROJECT WITH \$10 MILLION IN NJHMFA FUNDING

HR&A also estimated the one-time and ongoing economic and fiscal impacts of a hypothetical project receiving \$10 million in funding facilitated by NJHMFA.

This project is estimated to have the following one-time, project development-related economic impacts to New Jersey:

- Creation of **120 one-time FTE jobs**.
- Generation of **\$6.2 million in one-time employee compensation**.
- Generation of **\$21.3 million in one-time economic output**.

This project is estimated to have the following ongoing annual economic impacts to New Jersey:

- Creation of **14 ongoing FTE jobs**.
- Generation of **\$720,000 in ongoing employee compensation**.
- Generation of **\$2.37 million in ongoing economic output**.

This project is estimated to generate **\$761,000 in one-time, project development-related State and local tax revenue** in New Jersey.

This tax revenue consists of:

- \$183,000 in one-time New Jersey State Individual Income Tax.
- \$50,000 in one-time New Jersey State Corporation Business Tax.
- \$185,000 in one-time New Jersey State Sales Tax.
- \$343,000 in one-time local property tax.

This project is estimated to generate **\$141,000 in ongoing annual State and local tax revenue** in New Jersey. This tax revenue consists of:

- \$36,000 in ongoing New Jersey State Personal Income Tax.
- \$10,000 in ongoing New Jersey State Corporation Business Tax.
- \$37,000 in ongoing New Jersey State Sales Tax.
- \$58,000 in ongoing local property tax.

I. INTRODUCTION

PURPOSE OF THIS STUDY

The New Jersey Housing and Mortgage Finance Agency (NJHMFA) retained HR&A Advisors, Inc. (HR&A) to conduct an economic and fiscal impact analysis of the agency's investments in affordable housing. Between 2008 and 2012, NJHMFA supported the creation of 10,650 units and 1,621 special needs beds across 302 individual projects. It also supported 38 weatherization projects to enhance the energy efficiency of existing multifamily units. These investments collectively comprise the "analyzed investments."

HR&A measures the economic impacts of NJHMFA's investments in terms of full-time equivalent employment, employee compensation and economic output in the State of New Jersey. Economic output includes the value of all industry production resulting from the direct spending. HR&A measures the fiscal impacts of NJHMFA's investments in terms of State individual income taxes, corporation business, and sales taxes, and local property taxes generated.

NEW JERSEY HOUSING AND MORTGAGE FINANCE AGENCY

NJHMFA creates housing opportunities for New Jersey residents through a range of programs. The agency supports the production of new and rehabilitated ownership and rental units, funds mortgages for affordable ownership products, and encourages the stabilization of communities and neighborhoods. The agency funds these activities through the sale of taxable and tax-exempt bonds, Federal and State grants and housing assistance programs, and support from State, municipal, and not-for-profit agencies, and foundations.

NJHMFA's administrative activities also have a significant impact on New Jersey's economy. In 2012, NJHMFA employed 279 FTE employees, distributed roughly \$16.9 million in salaries, and had an operating budget of roughly \$22.5 million, funded primarily by operating revenues and earned income.

This study focuses on NJHMFA's investment in affordable housing and includes both ownership and rental products. These projects consist substantially or entirely of units restricted to low- and moderate-income households in accordance with the State of New Jersey's Uniform Housing Affordability Controls, a subchapter of the New Jersey Administrative Code designed to implement the New Jersey Fair Housing Act. Although restrictions vary, low-income units are typically restricted to households making up to 50 percent of area median income, and moderate income units are typically restricted to households making up to 80 percent of area median income.

The Agency funds affordable housing construction and rehabilitation through four programs:

- Multifamily lending
- Preservation
- Supportive and special needs housing
- Single-family development (The Choices in Home Ownership Program – CHOICE)

NJHMFA also supports affordable housing construction in New Jersey as an administrator of Federal programs:

- Low Income Housing Tax Credits. (LIHTC)

- Weatherization Assistance Program for multifamily housing in New Jersey

ORGANIZATION OF THE REPORT

This study is divided into six sections following this introduction:

- **Section II. New Jersey's Affordability Challenge** details the social and economic importance of affordable housing to the New Jersey. It also introduces NJHMFA's investments in affordable housing by year and program.
- **Section III. Economic Impact Analysis** offers an overview of the statewide economic impact analysis process and the spending associated with NJHMFA's project investments, and presents the results of HR&A's economic impact analysis.
- **Section IV. Fiscal Impact Analysis** identifies the different State and local taxes examined by this study and presents the results of HR&A's fiscal impact analysis.
- **Section V. Economic and Fiscal Impacts of a Typical NJHMFA Development Project** presents the economic and fiscal impacts of a hypothetical development receiving \$10 million in funding facilitated by NJHMFA.
- **Section VI. Technical Appendix** provides a more detailed description of the economic and fiscal impact modeling process, including more detail on how the spending attributed to NHMFA project development, project operations, and resident spending was tabulated.
- **Section VII. Data Appendix** presents the economic and fiscal impacts of \$1 million in project funding facilitated by NJHMFA, as well as summaries of NJHMFA's investments and their annual economic and fiscals impacts, 2008-2012.

II. NEW JERSEY'S AFFORDABILITY CHALLENGE

THE COST OF HOUSING IN NEW JERSEY

New Jersey is one of the most expensive states in the nation in which to purchase or rent a home. The high costs are driven by the State's location between two of the largest economic centers in the United States—New York and Philadelphia. It also has a highly educated workforce, high skill jobs commanding high wages, and some of the best school systems in the country. New Jersey also features relatively restrictive local land use regulations that can act to constrain the supply of new housing.³ These factors, in addition to its status as the most densely populated state in the country, contribute to upward pressure on housing prices. Figure 1 presents median home values in the most expensive states. New Jersey has the third most expensive housing values in the nation, trailing only Hawaii and California. Figure 2 presents median contract rent (the median monthly rent paid by renters or asked by landlords for vacant units) in the most expensive states. New Jersey is also the third most expensive state to rent in, again trailing only Hawaii and California.

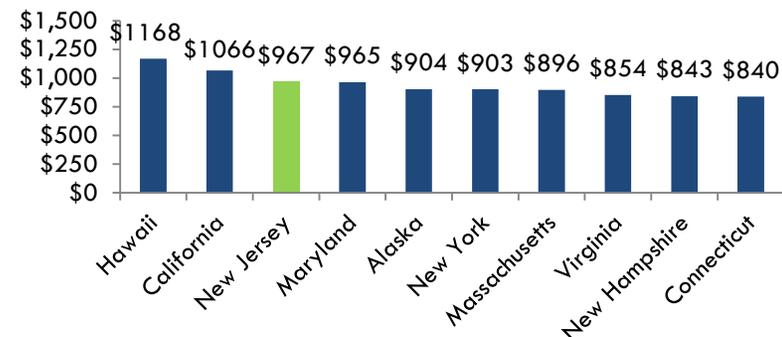
³ Gyourko, A., Saiz, A., & Summers, A. "A New Measure of the Local Regulatory Environment for Housing Markets: The Wharton Residential Land Use Regulatory Index," University of Pennsylvania, March 2007. This index of regulatory restrictiveness ranked New Jersey 5th out of the 50 states.

Figure 1: States with the Highest Median Housing Value in Thousands of Dollars (2010)



Source: U.S. Census Bureau, 2010 American Community Survey 1-Year Estimates

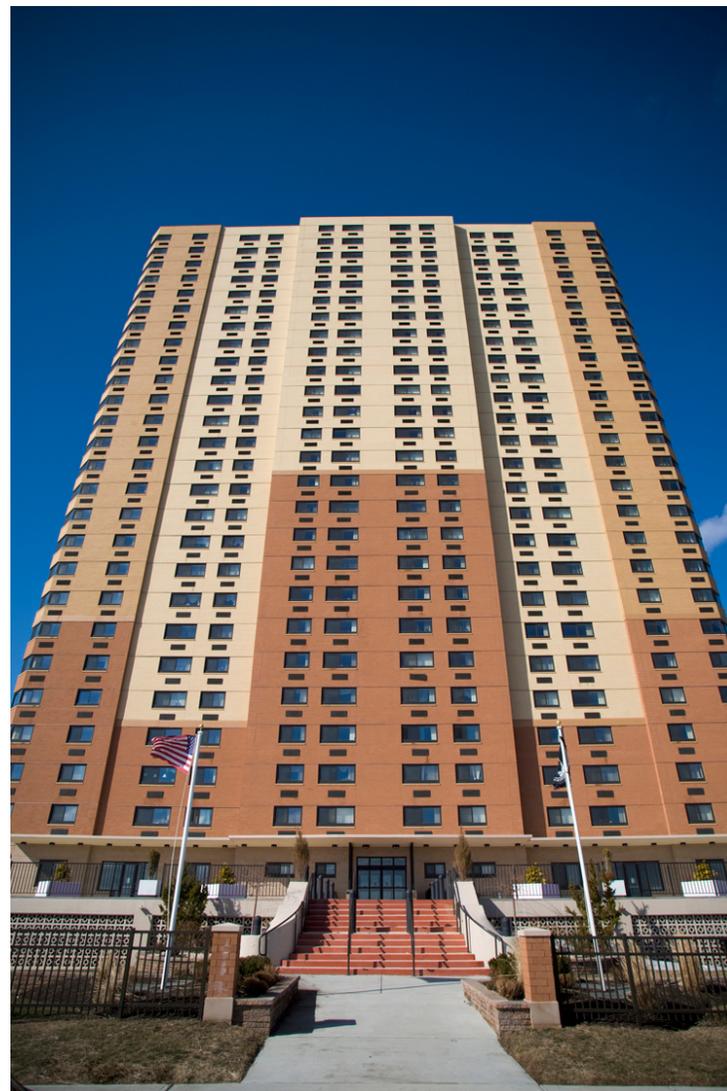
Figure 2: States with the Highest Median Contract Rent (2010)



Source: U.S. Census Bureau, 2010 American Community Survey 1-Year Estimates

Socioeconomic data suggests that the cost of housing is an increasing burden on the State's residents. Figure 3 presents a snapshot of several key socioeconomic and housing characteristics in 2000 and 2010 in New Jersey, along with the United States to provide greater context. Median household income in New Jersey increased 23 percent in nominal terms between 2000 and 2010, but median housing values and contract rents increased significantly more, at 102 percent and 44 percent, respectively, over the same time period. Average United States housing values increased only 61 percent and median contract rents increased only 37 percent over the same time period. In New Jersey, the 2010 median housing value to median household income ratio was 5.0, while in the United States as a whole it was 3.6, demonstrating that higher incomes in New Jersey are not commensurate with higher housing values.⁴

Most troubling is the increase in New Jersey's poverty rate. In 2000, 8.5 percent of individuals in New Jersey fell below the poverty line, while in 2010 this had increased to 10.3 percent of individuals. While this is still below the national average of 15.3 percent,⁵ it does suggest that housing affordability is an increasing challenge for the State and NJHMFA may have a more important role to play in addressing it.



Asbury Tower, Asbury Park, NJ

⁴ United States Census Bureau, Census 2000 and 2010 American Community Survey 1-Year Estimates.

⁵ Ibid.

Figure 3: Summary of Demographic and Housing Data, 2000 and 2010

Indicator	New Jersey			United States		
	2000	2010	Percent Change	2000	2010	Percent Change
Population	8,414,350	8,791,894	4%	281,421,906	308,745,538	10%
Median Household Income	\$55,146	\$67,681	23%	\$41,994	\$50,046	19%
Percentage of Individuals Below Poverty Level	8.5%	10.3%	21%	12.4%	15.3%	23%
Total Housing Units	3,064,645	3,214,360	5%	105,480,101	116,716,292	11%
Homeowner Vacancy Rate	1.2%	1.8%	50%	1.7%	2.4%	41%
Rental Vacancy Rate	4.5%	7.6%	69%	6.8%	9.2%	35%
Median Home Value	\$167,900	\$339,200	102%	\$111,800	\$179,900	61%
Median Contract Rent	\$672	\$967	44%	\$519	\$713	37%

Source: United States Census Bureau, Census 2000 and 2010 American Community Survey 1-Year Estimates

THE BENEFITS OF AFFORDABLE HOUSING

While high and increasing for-sale housing prices and rental rates reflect the attractiveness of New Jersey as a place to live and do business, they strain the ability of many New Jersey families to live comfortably in the State and deter businesses from re-locating to the State. The provision of sufficient quantities of well-located, affordable housing throughout New Jersey’s communities helps address several socio-economic challenges:

Business Attraction and Economic Growth: Despite New Jersey’s talented and productive workforce, high costs of living for employees can deter businesses from moving to the State, as these costs create demands for higher levels of compensation. Spending more on housing may also divert workers from making investments in new skills. In the long term, this could weaken the State’s level of human capital and ultimately its economic competitiveness.

Jobs-Housing Balance: Affordable housing is especially scarce in growing suburban areas, which during the 1990s and 2000s were adding jobs more quickly than areas where affordable housing is more available. Of the 46 municipalities that gained at least 2,000 private-sector jobs in the 1990s, only five had “a more than proportional share of affordable units relative to share of statewide employment.”⁶ Strategically located affordable housing can help improve the jobs-housing balance, and reduce commuting times for low-income residents. The provision of affordable housing near employment opportunities enhances the amount of time workers can spend with family, working, or investing in new skills.⁷

⁶ New Jersey Future. “Affordable Housing Policy: Smart Growth Recommendations from New Jersey Future,” October 2004, pg. 10.

⁷ Similarly, New Jersey has policies such as the Urban Transit Hub Tax Credit that incentivize job creation near transit lines within communities that have significant numbers of low-income residents and existing affordable housing.

Retention of Population and Talent: A 2008 Princeton University study found that the high cost of housing in the State is a principal driver of out-migration. Like many states in the Northeast, New Jersey has experienced net out-migration to other states in recent decades, as more people moved out of the State than moved into the State. The State lost approximately 150,000 residents to net out-migration between 2000 and 2006. Low income households comprise a disproportionate share of this out-migration. Between 2000 and 2006, New Jersey experienced net out-migration of 129,000 people in the bottom 20 percent of earners. In contrast, New Jersey experienced net-immigration of 7,000 people in the top 20 percent of earners, as more high income workers moved into the State. The study found that, on average, people who left the State moved to states with an average housing value 35 percent lower than in New Jersey.⁸ The availability of affordable homeownership and rental opportunities helps low and moderate income households to remain residents of New Jersey and contribute to the State's economy, rather than leave in search of lower housing costs.

In summary, affordable housing is essential to maintaining a dynamic economy and society. The next section describes NJHMFA's efforts to provide housing opportunities for low- and moderate-income households in the State.

OVERVIEW OF NJHMFA'S INVESTMENT IN AFFORDABLE HOUSING

NJHMFA created 10,650 units and 1,621 special needs beds across 302 projects between 2008 and 2012. As Figure 4 indicates, NJHMFA's level of activity varied over this time period driven by changes in funding availability. Production peaked at 3,009 units and 482 special needs beds in 2009 as a result of additional federal

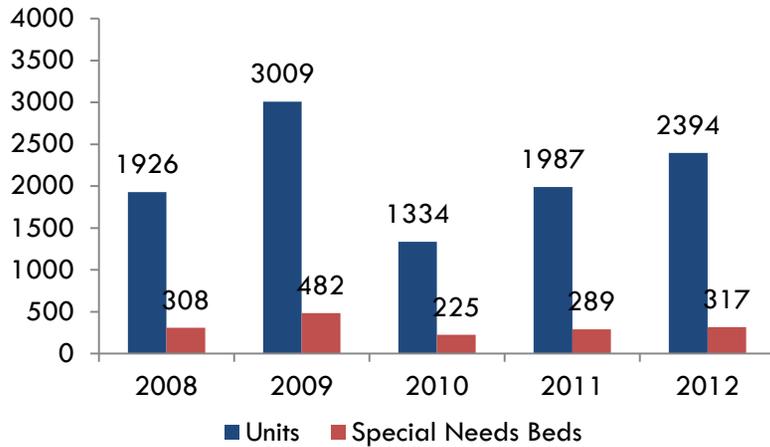
⁸ Princeton University Policy Research Institute for the Region. "Trends in New Jersey Migration: Housing, Employment, and Taxation," September 2008.

stimulus funding to the affordable housing sector. Fewer units and special needs beds have been funded since this peak point as funding for affordable housing development has declined.

As shown in Figure 5, affordable housing investments span five NJMHFA programs:

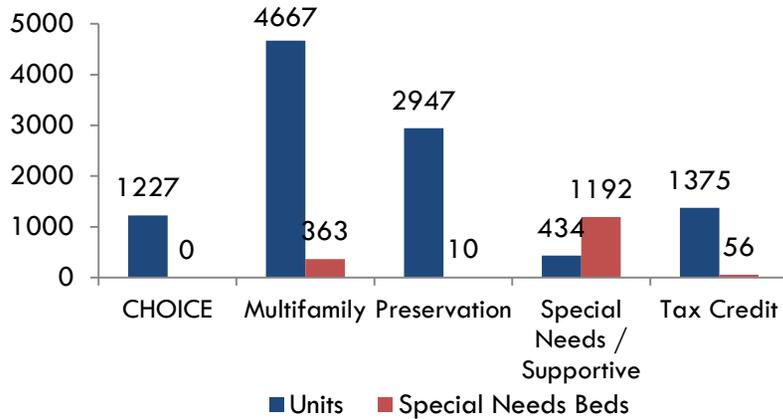
- CHOICE (single-family) – Newly constructed and substantially rehabilitated single-family affordable homeownership housing units.
- Multifamily – Newly constructed and rehabilitated affordable multifamily housing units.
- Preservation – Rehabilitated existing deed restricted affordable housing units.
- Special Needs / Supportive – New and rehabilitated permanent supportive housing units or beds in a residential community setting for individuals with development disabilities or other special needs.
- Tax Credit – Newly constructed and rehabilitated affordable multifamily housing units financed through the Federal Low Income Housing Tax Credit (LIHTC).

Figure 4: NJHMFA Production by Year, 2008-2012



Source: NJHMFA; HR&A Advisors, Inc.

Figure 5: NJHMFA Production by Program



Source: NJHMFA; HR&A Advisors, Inc.

The multifamily and preservation programs together account for over 70 percent of units created. Although the special needs and

supportive housing programs account for over 70 percent of special needs beds, all other programs except CHOICE have also included special needs beds.

NJHMFA draws on a variety of financing sources in order to facilitate the creation of its developments. Direct allocations made by the agency include HMFA Funding, Special Needs Funding, and other subsidies. NJHMFA also administers three Federal tax credit allocations: the Low Income Housing Tax Credit Program (LIHTC), the Tax Credit Assistance Program (TCAP), and the Tax Credit Exchange Program (TCX).

A summary of funding sources and total development costs is presented in Figure 6. These funding sources comprise 74.7 percent of the total development costs of NJHMFA’s projects, indicating the necessity of NJHMFA’s role in creating these affordable housing opportunities.

Figure 6: NJHMFA Funding Sources By Year, 2008-2012

Funding Source	2008	2009	2010	2011	2012	Total
Total Funding (\$ M)	\$282.2	\$575.4	\$225.9	\$393.4	\$411.3	\$1,888.3
HMFA Funding (\$ M)	\$85.9	\$136.4	\$87.5	\$158.1	\$144.9	\$612.7
S/N Funding (\$ M)	\$25.2	\$49.2	\$19.1	\$27.1	\$12.8	\$133.5
Subsidy (\$ M)	\$29.3	\$31.2	\$1.5	\$21.5	\$9.3	\$92.6
LIHTC (\$ M)	\$125.1	\$293.1	\$92.6	\$186.7	\$244.3	\$941.8
TCAP (\$ M)	\$0.0	\$55.4	\$0.0	\$0.0	\$0.0	\$55.4
TCX (\$ M)	\$16.7	\$10.2	\$25.3	\$0.0	\$0.0	\$52.3
Total Dev. Costs (\$ M)	\$418.1	\$723.8	\$370.8	\$519.9	\$494.2	\$2,526.7
Funded Portion of Total Dev. Costs	67.5%	79.5%	60.9%	75.7%	83.2%	74.7%

Source: NJHMFA; HR&A Advisors, Inc.

III. ECONOMIC IMPACT ANALYSIS

OVERVIEW OF ECONOMIC IMPACT ANALYSIS

HR&A's analysis is designed to estimate the economic impacts of NJHMFA's affordable housing investments in terms of full-time equivalent (FTE) employment,⁹ employee compensation, and economic output generated within New Jersey. Employee compensation includes wage and salary income as well as employee benefits and employer paid payroll taxes. Economic output is the total value of production across all industries that results from the initial direct spending. It is equivalent to total spending in the economy and total business revenues.

This analysis considers both direct economic impacts and the "multiplier effect" of direct spending generated by these investments. The multiplier effect reflects the fact that each dollar of direct spending supports further spending and job creation in the State through buyer-supplier relationships between businesses and household spending.

HR&A conducted this analysis using the 2010 New Jersey State IMPLAN model. This model estimates how initial spending within specific sectors of the State's economy impacts the entire State economy through multiplier relationships between sectors and new household spending. The economic impacts generated can be disaggregated into direct impacts and multiplier impacts, i.e. the sum of indirect and induced impacts as defined below:

⁹ A FTE (full-time equivalent) employee is assumed to work 2,080 hours annually.

- The **direct impact** represents the initial change in employment, employee compensation, or economic output attributable to spending associated with NJHMFA's project investments. For example, expenses incurred by contractors during the construction of NJHMFA developments are direct economic impacts.
- The **indirect impact** represents the change in employment, employee compensation, or economic output of businesses that supply the industries that NJHMFA directly affected. For example, when a construction firm working on one of NJHMFA's projects purchases supplies, this additional demand causes the firm's suppliers to purchase more inputs from their suppliers, and so forth, promoting spending and job creation throughout the State economy.
- The **induced impact** represents the change in household spending of employees who are compensated for working in industries directly and indirectly affected by NJHMFA's investments. For example, the supplier to the construction firm working on NJHMFA's project must pay more in wages in order to produce additional output. A portion of this additional income is spent by employees on various goods and services, which ripples through the State economy, promoting spending and job creation.

This analysis considers four main sources of spending, which fall into two overarching categories: **one-time economic impacts** and **ongoing annual economic impacts**. One-time economic impacts are generated by project development and weatherization and represent a one-time infusion to the economy. It is assumed that absent

NJHMFA's provision of financing or other contributions, these development and weatherization activities would not have occurred, meaning all spending associated with these activities is *net new* to New Jersey's economy, i.e. *but for* NJHMFA's support, these economic impacts would not have occurred. This study reports these one-time impacts annually in the year in which they occurred between 2008 and 2012, as well as in aggregate over the entire period.

Ongoing annual economic impacts are generated by the operations and resident spending associated with projects in which NJHMFA has invested. Again, it is assumed that *but for* NJHMFA's support, these ongoing economic impacts would not have occurred. Given the high out-migration rates of low-income households in New Jersey cited previously, the analysis assumes that absent the availability of affordable housing from NJHMFA, residents living in these housing units would not continue to contribute to the State's economy. This study reports the annual ongoing impacts owing to all 10,650 units and 1,621 special needs beds supported by NJHMFA over the 2008-2012 period for a hypothetical stabilized year in which each of these projects has been in operation for the entire year.

The next section describes how HR&A developed estimates of project development, weatherization, operational, and resident spending that formed the basis of the IMPLAN model.

METHODOLOGY FOR ESTIMATING DIRECT SPENDING

HR&A calculated total direct spending for the one-time project development and weatherization impacts and ongoing annual impacts based on inputs provided by NJHMFA and worked closely with the agency to develop reasonable assumptions when data were not available. The following bullets summarize the approach for the three key spending types analyzed in the IMPLAN model.

- **Project development and weatherization.** NJHMFA provided total development costs for each development, and detailed budget breakdowns for a sample of 21 developments. HR&A developed estimates of project development spending across nine different budgetary categories by applying this budgetary data to the total development costs by project. Total project development spending (excluding acquisition costs) is estimated at \$2.01 billion. For weatherization, NJHMFA provided the total direct spending associated with weatherizing 5,438 units across 38 projects, about \$25 million. Annual project development and weatherization costs are displayed in Figure 7.
- **Project operations.** The estimate of direct operations spending was developed based on a review of detailed operating budgets for a sample of 45 projects across different programs. HR&A converted these costs to per-unit estimates, and applied them to the total unit counts to estimate aggregate annual operational spending. Annual spending on operations is estimated at \$59 million. This approach conservatively assumes there is no operational spending associated with the CHOICE program's single-family projects. Operational costs are displayed in Figure 8.
- **Resident spending.** HR&A employed different methodologies for multifamily, preservation, special needs, and tax credit projects versus single-family projects to estimate residential spending. For units developed in all programs except single-family, NJHMFA provided average household incomes and vacancy rates for a sample of 45 projects. HR&A estimated aggregate household income by multiplying (a) total housing units by (b) average household income and (c) the occupancy rate. For single-family projects, NJHMFA provided income requirements for purchasing low-

and moderate-income units and the distribution of low- and moderate-income units across projects. HR&A used this data to calculate average household income for single-family units, and multiplied (a) this average household income by (b) the number of units and (c) the occupancy rate to estimate aggregate annual total household income of \$314 million. The IMPLAN model translates this aggregate household income into spending by households. Aggregate household income is displayed in Figure 8.

A more detailed explanation of this methodology is included in the Technical Appendix.

Figure 7: Project Development Spending and Weatherization Spending, 2008-2012

Project Year	Project Development Spending (\$ Millions)	Weatherization Spending (\$ Millions)	Total (\$ Millions)
2008	\$340	\$0	\$340
2009	\$577	\$0	\$577
2010	\$290	\$0	\$290
2011	\$417	\$0	\$417
2012	\$389	\$25	\$414
2008-2012	\$2,012	\$25	\$2,037

Source: NJHMFA; HR&A Advisors, Inc.

Figure 8: Annual Project Operations and Resident Income

Project Operations (\$ Millions)	Resident HH Income (\$ Millions)	Total (\$ Millions)
\$59	\$314	\$373

Source: NJHMFA; HR&A Advisors, Inc.



Garfield Court, Long Branch, NJ



Stafford Park, Stafford Township, NJ

ONE-TIME ECONOMIC IMPACTS OF PROJECT DEVELOPMENT, 2008-2012

Total Economic Impacts

The analyzed investments between 2008 and 2012 are estimated to have the following one-time economic impacts to New Jersey:

- **Creation of 24,350 FTE jobs.** Project development directly supported 12,100 of these jobs, while multiplier activity supported 12,250 jobs.
- **Generation of \$1.2 billion in employee compensation.** Project development activities directly generated \$526 million of this compensation, and multiplier activity generated \$643 million in compensation.
- **Generation of \$4.1 billion in economic output (i.e. spending).** Project development activities directly generated \$2.04 billion of this spending, and multiplier activity generated \$2.02 billion in economic output.

NJHMFA's 74.7 percent share of funding for the development costs of these projects leverages significant economic impacts for the State. \$1.9 million in contributions generates \$4.1 million in economic output, i.e. for every dollar of NJHMFA invests or administers, \$2.15 of economic output is returned to the economy of New Jersey.

Total economic impacts over the period are presented in Figures 9, 10, and 11.

Figure 9: One-Time Employment Impacts, 2008-2012

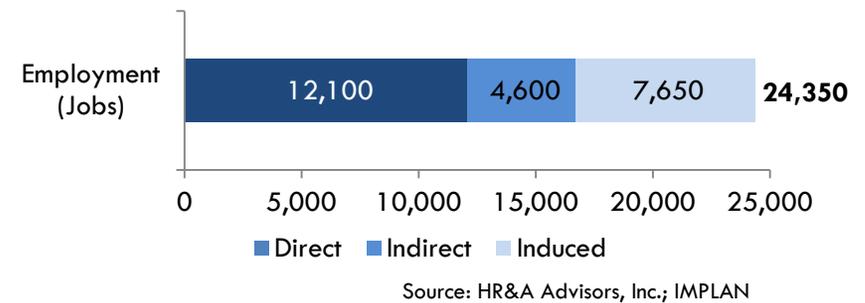


Figure 10: One-Time Compensation Impacts, 2008-2012

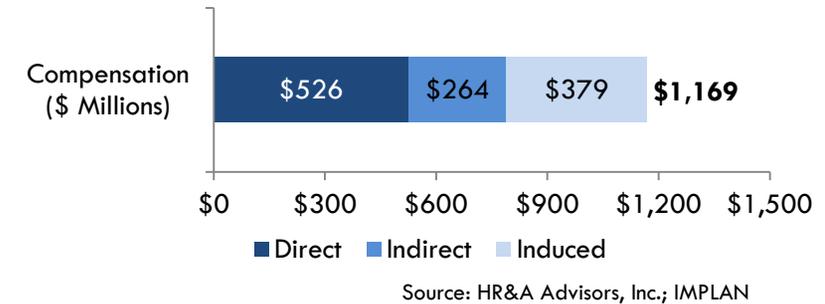
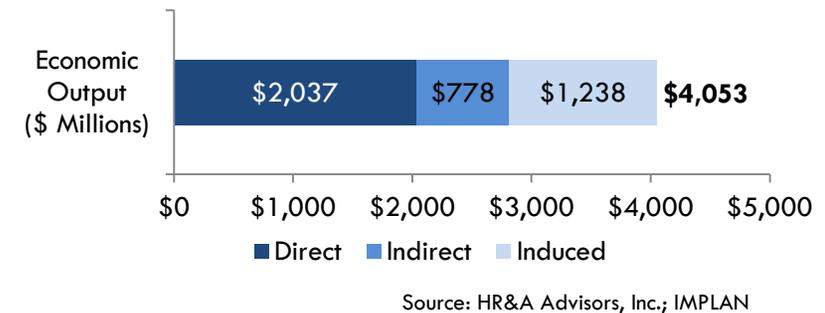


Figure 11: One-Time Economic Output Impacts, 2008-2012



Economic Impacts by Year

The level of investment NJHMFA can make in affordable housing is tied to resources available. Examining years in which NJHMFA was able to undertake a larger quantity of development activity reveals the extent to which the agency's investments can be a source of growth and jobs during periods of economic uncertainty. The annual one-time economic impacts of NJHMFA's project investments are displayed in Figure 12.

Figure 12: Total One-Time Economic Impacts of Project Development and Weatherization, 2008-2012

Year	Employment (Jobs)	Compensation (\$ Millions)	Economic Output (\$ Millions)
2008	4,150	\$193	\$682
2009	7,250	\$341	\$1,164
2010	3,500	\$170	\$579
2011	4,850	\$238	\$821
2012	4,600	\$227	\$807
2008-2012 Total	24,350	\$1,169	\$4,053

Note: Values include direct and multiplier (indirect and induced) effects; 2012 data also includes the one-time impacts of NJHMFA's Weatherization program.

Source: HR&A Advisors, Inc.; IMPLAN

NJHMFA project investments in 2009 generated 7,250 jobs, \$341 million in employee compensation, and over \$1.16 billion in spending. This represents a critical economic infusion to the State of New Jersey at a time when its economy was contracting. According to the IMPLAN model, 2,850 of these full-time equivalent jobs were in residential construction. Another 530 jobs were in architectural and engineering services, and 230 were in real estate.

Figure 13 displays recent employment trends in New Jersey. Between 2008 and 2011, the State lost approximately 200,000

jobs. The building construction industry was especially hard hit, losing 9,500 jobs (a 25 percent decline) over this time period, as were the real estate (3,150 jobs lost) and architectural and engineering (4,800 jobs lost) industries. As NJHMFA's countercyclical project investments funded in 2009 have been constructed, they have created critical jobs for New Jersey residents, and have helped stabilize industries that were among the hardest hit by the Great Recession. It is likely that increased levels of investment by NJHMFA could help spur further revitalization of these industries.

Figure 13: Employment in Selected New Jersey Industries, 2008-2011

New Jersey Industry	2008	2009	2010	2011	Change, 2008-2011
Total Employment	3,934,789	3,771,296	3,735,703	3,734,660	(200,129)
Building Construction	37,576	30,967	28,763	28,071	(9,505)
Real Estate	40,555	38,619	38,298	37,395	(3,160)
Architectural and Engineering Services	40,307	38,273	36,785	35,511	(4,796)

Source: BLS Quarterly Census of Employment and Wages, HR&A Advisors, Inc.

ONGOING ECONOMIC IMPACTS

Building operations and resident spending associated with the analyzed investments developed between 2008 and 2012 are estimated to have the following ongoing impacts to New Jersey on an annual basis:

- **Creation of 2,600 FTE jobs.** Project operations supported 450 of these jobs, which consisted of 300 direct jobs and 150 multiplier jobs. Resident spending supported 2,150 of these jobs.
- **Generation of \$136 million in total employee compensation.** Project operations generated \$17 million in employee compensation, which included \$8 million in direct compensation and \$9 million in compensation from multiplier activities. Resident spending generated \$119 million in employee compensation.
- **Generation of \$447 million in economic output (i.e. spending).** Project operations generated \$84 million of this spending, which consisted of \$56 million in direct spending and \$28 million in spending from multiplier activity. Resident spending contributed \$363 million of this total.

Although one-time development impacts are larger than annual impacts, annual impacts represent continuing benefits to New Jersey’s economy. For instance, after about ten years of operations, the cumulative annual economic output impacts of the analyzed investments will be larger than the one-time \$4.1 billion infusion represented by project development.

These total economic impacts are disaggregated in Figure 14.

Figure 14: Total Annual Ongoing Economic Impacts

Category	Annual Employment	Compensation (\$ Millions)	Economic Output (\$ Millions)
Project Operations	450	\$17	\$84
Resident Spending	2,150	\$119	\$363
Total	2,600	\$136	\$447

Note: Values include direct and multiplier (indirect and induced) effects.

Source: HR&A Advisors, Inc.; IMPLAN

IV. FISCAL IMPACT ANALYSIS

OVERVIEW OF FISCAL IMPACT ANALYSIS

The purpose of this fiscal impact analysis is to determine how much tax revenue the analyzed NJHMFA investments generated for state and local agencies. This analysis considers four categories of taxes:

- **New Jersey State Individual Income Tax.** New Jersey has a progressive income tax with rates ranging between 1.4 percent and 8.97 percent. Various deductions are available.
- **New Jersey State Sales and Use Tax.** New Jersey has a seven percent sales and use tax. Groceries, medicine, and clothing are exempted. In Urban Enterprise Zones, the sales tax is reduced to 3.5 percent on eligible purchases.
- **New Jersey State Corporation Business Tax.** New Jersey has a nine percent corporate tax on net income. Modifications exist for different corporation types and income levels.
- **Local Property Tax.** Property tax is charged at the municipal level in New Jersey. The tax due on each property is based upon the general tax rate in its home municipality and the assessed value of the property.

HR&A used slightly different approaches to estimate the fiscal impacts of project development, project operations, and household spending.

For the fiscal impacts of project development activities, State income tax, sales and use tax, corporation business tax, and local property tax were generated by the IMPLAN model according to the change in total value-added (the sum of employee compensation, proprietor

income, other property income, and indirect business taxes) owing to NJHMFA's affordable housing investments. The model assumes that the economy's current ratios between value-added and tax revenues for each of the taxes also hold for the impacts generated.

For the fiscal impacts of project operations, State income tax, sales and use tax, and corporation business tax were generated by the IMPLAN model according to the change in total value-added owing to NJHMFA's affordable housing investments. To estimate local property taxes, the local property taxes generated by the IMPLAN model were supplemented using data from NJHMFA's project operations. The vast majority of NJHMFA projects receive a property tax abatement, and instead make a payment in lieu of taxes (PILOT) to their municipality. HR&A estimated the total value of the PILOT based upon actual PILOT expenditures for a sample of 45 projects provided by NJHMFA. This calculation is described in further detail in the Technical Appendix.

For the fiscal impacts of resident spending, State sales and use tax and corporation business tax were generated by the IMPLAN model according to the change in total value-added owing to NJHMFA's affordable housing investments. To estimate State individual income tax, the individual income taxes generated by the IMPLAN model were supplemented to reflect the value of individual income taxes paid by project residents themselves, which are not considered by the model. This calculation is described in further detail in the Technical Appendix. Since the PILOT described previously accounts for the local property tax impact of ongoing project operations, no property tax is assumed to be associated with resident spending.

ONE-TIME FISCAL IMPACTS OF PROJECT DEVELOPMENT, 2008-2012

Total Fiscal Impacts

The analyzed investments between 2008 and 2012 generated **\$145.3 million in State and local tax revenue** in New Jersey, comprised of \$79.9 million in State tax and \$65.4 million in local tax. This tax revenue consists of:

- \$35.1 million in New Jersey State Individual Income Tax.
- \$9.5 million in New Jersey State Corporation Business Tax.
- \$35.3 million in New Jersey State Sales Tax.
- \$65.4 million in local property tax.¹⁰

Total fiscal impacts over the period are presented in Figure 15.

Annual Fiscal Impacts

The annual one-time fiscal impacts of NJHMFA’s project investments are displayed in Figure 16. Correlated with the production of the highest number of units in 2009, NJHMFA’s investments in that year also produced the highest fiscal impacts of the years included in the analysis. The fiscal impacts of project development in 2009 totaled \$42.5 million, consisting of \$10.3 million in New Jersey State Individual Income Tax, \$2.8 million in New Jersey State Corporation Business Tax, \$10.3 million New Jersey State Sales Tax, and \$19.1 million in local property tax.

¹⁰ In the case of project development, property taxes are those paid by firms as part of business expenses resulting from direct and indirect spending and households as part of induced spending.

Figure 15: One-Time Fiscal Impacts, 2008-2012



Source: HR&A Advisors, Inc.; IMPLAN

Figure 16: Total One-Time Fiscal Impacts of Project Development, 2008-2012

Year	State Individual Income Tax (\$ M)	State Corporation Business Tax (\$ M)	State Sales Tax (\$ M)	Local Property Tax (\$ M)	Total (\$ M)
2008	\$5.8	\$1.6	\$5.9	\$10.9	\$24.2
2009	\$10.3	\$2.8	\$10.3	\$19.1	\$42.5
2010	\$5.0	\$1.4	\$5.0	\$9.4	\$20.8
2011	\$7.0	\$1.9	\$7.1	\$13.2	\$29.2
2012	\$7.0	\$1.9	\$6.9	\$12.8	\$28.6
2008-2012 Total	\$35.1	\$9.6	\$35.2	\$65.4	\$145.3

Source: HR&A Advisors, Inc.; IMPLAN

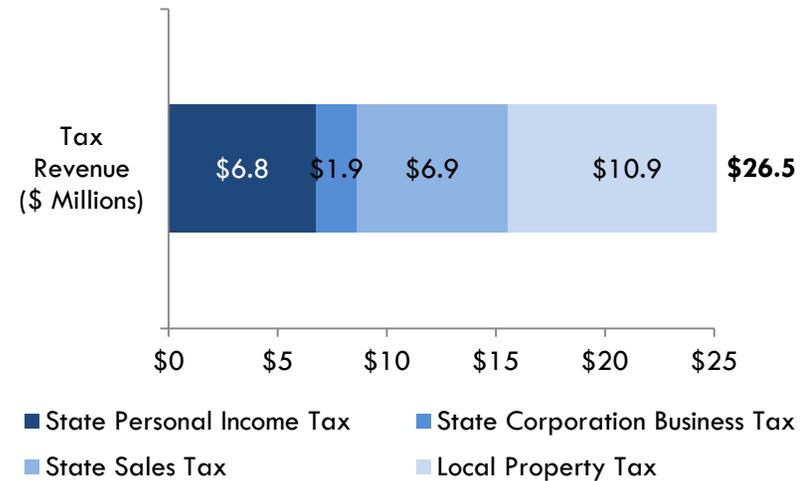
ONGOING FISCAL IMPACTS

Operational and resident spending associated with the analyzed investments generate **\$26.5 million in State and local tax revenue** in New Jersey, comprised of \$15.6 million in State tax and \$10.9 million in local tax. This tax revenue consists of:

- \$6.8 million in New Jersey State Individual Income Tax.
- \$1.9 million in New Jersey State Corporation Business Tax.
- \$6.9 million in New Jersey State Sales Tax.
- \$10.9 million in local property tax/PILOT. Payments in lieu of taxes (PILOTs) made by NJHMFA projects represents \$8.6 million of this local property tax revenue.

Total fiscal impacts of project operations and resident spending are presented in in Figure 17.

Figure 17: Total Ongoing Fiscal Impacts, 2008-2012



Source: HR&A Advisors, Inc.; IMPLAN

V. ECONOMIC AND FISCAL IMPACTS OF DEVELOPMENT PROJECT WITH \$10 MILLION IN NJHMFA FUNDING

ECONOMIC IMPACTS OF DEVELOPMENT PROJECT

This section presents the economic impacts of a hypothetical project receiving \$10 million in funding facilitated by NJHMFA. Assuming funding facilitated by NJHMFA would cover about 74.7 percent of total development costs, the average amount covered between 2008 and 2012, this project would have a total development cost of about \$13.4 million.

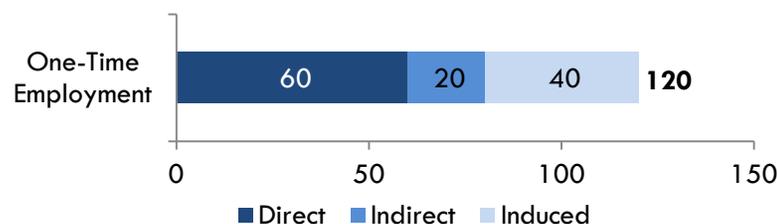
One-Time Economic Impacts of Development Project

Such a project is estimated to have the following one-time impacts to New Jersey:

- **Creation of 120 FTE jobs.** Project development directly supports 60 jobs and 60 jobs are multiplier jobs. Of these 120 FTE jobs, about 50 are in the residential construction sector.
- **Generation of \$6.2 million in employee compensation.** Project development directly generates \$2.8 million in compensation and multiplier activity generates \$3.4 million in compensation.
- **Generation of \$21.3 million in one-time economic output (i.e. spending).** Project development directly generates \$10.7 million in spending and multiplier activity generates \$10.6 million in spending.

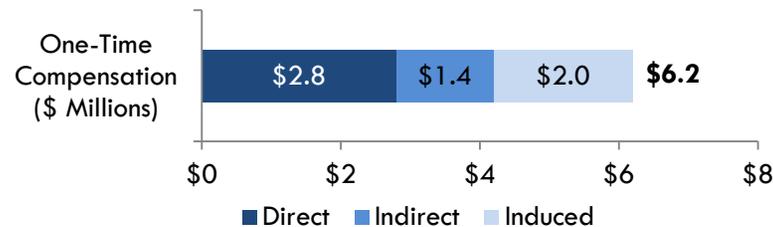
Total one-time economic impacts are disaggregated in Figures 18, 19, and 20.

Figure 18: Total Employment Impacts of Development Project with \$10 Million in NJHMA Funding



Source: HR&A Advisors, Inc.; IMPLAN

Figure 19: Total Compensation Impacts (\$M) of Development Project with \$10 Million in NJHMA Funding



Source: HR&A Advisors, Inc.; IMPLAN

Figure 20: Total Economic Output Impacts (\$M) of Development Project with \$10 Million in NJHMA Funding



Source: HR&A Advisors, Inc.; IMPLAN

Ongoing Economic Impacts of Development Project

Such a project is estimated to have the following ongoing impacts to New Jersey:

- **Creation of 14 ongoing FTE jobs.** Project operations supports three jobs and resident spending supports 11 jobs.
- **Generation of \$720,000 in ongoing employee compensation.** Project operations generate \$90,000 in compensation and resident spending generates \$630,000 in compensation.
- **Generation of \$2.37 million in ongoing economic output.** Project operations generate \$450,000 in spending and resident spending generates \$1.92 million in spending.

Annual ongoing economic impacts are presented in Figure 21.

Figure 21: Annual Ongoing Economic Impacts of Development Project with \$10 Million in NJHMFA Funding

Category	Annual Employment	Compensation	Economic Output
Ongoing Project Operations	3	\$90,000	\$450,000
Ongoing Resident Spending	11	\$630,000	\$1,920,000
Total	14	\$720,000	\$2,370,000

Note: Values include direct and multiplier (indirect and induced) effects.

Source: HR&A Advisors, Inc.; IMPLAN

FISCAL IMPACTS OF DEVELOPMENT PROJECT

One-Time Fiscal Impacts of Development Project

This project would generate **\$761,000 in one-time, project development-related State and local tax revenue** in New Jersey.

This tax revenue consists of:

- \$183,000 in New Jersey State Individual Income Tax.
- \$50,000 in New Jersey State Corporation Business Tax.
- \$185,000 in New Jersey State Sales Tax.
- \$343,000 in local property tax.

One-time fiscal impacts are presented in Figure 22.

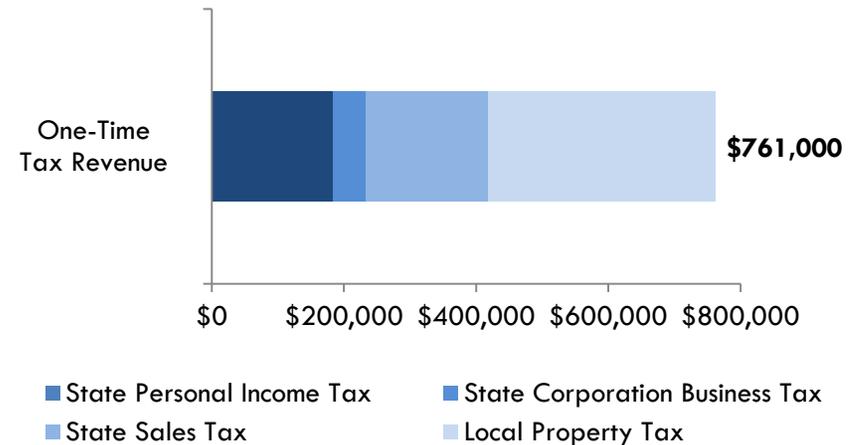
Ongoing Fiscal Impacts of Development Project

Such a project would generate **\$141,000 in ongoing annual State and local tax revenue** in New Jersey from ongoing project operations and resident spending. This tax revenue consists of:

- \$36,000 in New Jersey State Individual Income Tax.
- \$10,000 in New Jersey State Corporation Business Tax.
- \$37,000 in New Jersey State Sales Tax.
- \$58,000 in local property tax. Payment in lieu of taxes (PILOT) made by NJHMFA projects represents \$45,000 of this local property tax revenue.

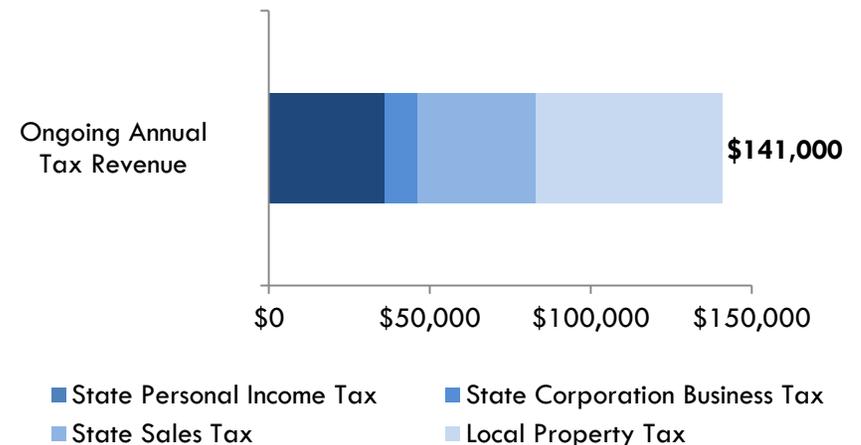
Annual fiscal impacts are presented in Figure 23.

Figure 22: Total Fiscal Impacts of Development Project with \$10 Million in NJHMA Funding



Source: HR&A Advisors, Inc.; IMPLAN

Figure 23: Annual Ongoing Fiscal Impacts of Development Project with \$10 Million in NJHMFA Funding



Source: HR&A Advisors, Inc.; IMPLAN

Economic and Fiscal Impacts of the New Jersey Housing and Mortgage Finance Agency's Affordable Housing Investments



Appendices
Technical Appendix
Data Appendix

VI. TECHNICAL APPENDIX

This technical appendix provides a detailed overview of the methodologies and assumptions used in the economic and fiscal impact analysis. The first subsections discuss the methodology for the economic impact modeling, including a discussion of IMPLAN. The later subsections discuss the methodology for the fiscal impact analysis.

OVERVIEW OF ECONOMIC IMPACT MODELING PROCESS

HR&A employed the IMpact analysis for PLANning (IMPLAN) input-output model for the State of New Jersey, created by MIG, Inc. (formerly Minnesota IMPLAN Group, Inc.), to analyze the economic impacts of NJHMFA's affordable housing investments. For each dollar of spending in the economy, IMPLAN traces the pattern of commodity purchases and sales between 440 industries within the specified geography. The IMPLAN model is used to conduct economic impact analyses by leading public and private sector organizations across the United States. It also has been used to monitor job creation for a range of Federal government initiatives including the economic impacts of the American Recovery and Reinvestment Act of 2009 on state economies. HR&A used 2010 data for the State of New Jersey, which is the most recent available as of December 1, 2012.

HR&A made minor adjustments to the IMPLAN output in estimating total impacts. IMPLAN employment estimates include both full-time and part-time workers. HR&A converted these numbers to full-time equivalent (FTE) employees using ratios based on national averages from the U.S. Department of Commerce, Bureau of Economic Analysis

and provided by MIG. Additionally, IMPLAN includes spending on rent and household maintenance and operations as a function of resident spending. HR&A subtracted this number from the total to prevent double counting with estimates of building operations spending provided by NJHMFA.¹

DETAILED METHODOLOGY FOR ESTIMATING DIRECT PROJECT DEVELOPMENT SPENDING

HR&A estimated direct project development spending based on data provided by NJHMFA. This data included total development costs for all 302 projects and a sample of 21 construction budgets that included details on nine cost categories. The sample included detailed budget data on both single-family (CHOICE) and multifamily programs (Multifamily, Preservation, Special Needs / Supportive, and Tax Credit). HR&A used this sample to extrapolate a percentage distribution of spending by cost category for the purpose of coding specific cost categories into IMPLAN. HR&A then allocated the total development costs by program across each spending category, as illustrated in Figure A-1. Acquisition costs, which do not generate new economic activity in the State, were excluded from the analysis.

¹ Since project operations are funded by rent paid by resident households, the economic impact of project operations could be doubled-counted if project operations are captured in this analysis as both: (a) a direct effect in the "project operations" analysis and (b) an indirect effect of resident spending on rent in the "resident spending" analysis.

Distribution of Total Development Costs

Cost Category	Single-Family Development	Multifamily Family Development
Carrying Costs	6.0%	10.1%
Construction	61.6%	53.2%
Construction Contingency	3.6%	0.9%
Contractor Fee	5.2%	0.0%
Developer's Fee	6.1%	7.0%
Other Charges	0.0%	1.8%
Professional Fees	5.3%	5.1%
Site/Building Acquisition	10.2%	21.9%
Soft Cost Contingency	0.2%	0.0%
Unit Sales Commission	1.8%	0.0%
Total	100.0%	100.0%

Source: NJHMFA; HR&A Advisors, Inc.

To model the impacts of new construction and rehabilitation construction separately in IMPLAN, HR&A relied on assumptions from NJHMFA regarding the portion of each program's portfolio that represents new versus rehabilitation construction. These assumptions are displayed in Figure A-2.

New vs. Rehab Construction Proportion by Program

Program	Proportion New Construction	Proportion Rehab Construction
CHOICE	75%	25%
Multifamily	80%	20%
Preservation	5%	95%
Special Needs / Supportive	40%	60%
Tax Credits	80%	20%

Source: NJHMFA

The total amounts of direct one-time project development spending associated with NJHMFA's affordable housing investments are displayed in Figure A-3. HR&A developed these numbers using the total development cost numbers provided by NJHMFA and extrapolated across the individual cost categories based on a review of a sample of 21 project pro forma documents provided by NJHMFA. This review supported the percentage estimates previously detailed in Figures A-1 and A-2.

Direct One-Time Spending Associated with Project Development and Weatherization

Year	New Construction						Rehab Construction						New and Rehab Construction			Weatherization
	Construction (\$ Millions)	Contractor Fee (\$ Millions)	Construction Contingency (\$ Millions)	Professional Fees (\$ Millions)	Developer's Fee (\$ Millions)	Other Charges (\$ Millions)	Construction (\$ Millions)	Contractor Fee (\$ Millions)	Construction Contingency (\$ Millions)	Professional Fees (\$ Millions)	Developer's Fee (\$ Millions)	Other Charges (\$ Millions)	Carrying Costs (\$ Millions)	Soft Cost Contingency (\$ Millions)	Unit Sales Commission (\$ Millions)	Weatherization (\$ Millions)
2008	\$152	\$5	\$5	\$14	\$18	\$3	\$80	\$2	\$2	\$8	\$10	\$2	\$37	\$0	\$2	\$0
2009	\$254	\$4	\$6	\$24	\$32	\$7	\$139	\$1	\$3	\$13	\$18	\$4	\$69	\$0	\$2	\$0
2010	\$137	\$0	\$2	\$13	\$18	\$5	\$60	\$0	\$1	\$6	\$8	\$2	\$37	\$0	\$0	\$0
2011	\$201	\$4	\$5	\$19	\$25	\$5	\$83	\$1	\$2	\$8	\$10	\$2	\$49	\$0	\$2	\$0
2012	\$170	\$1	\$3	\$16	\$22	\$5	\$94	\$0	\$2	\$9	\$12	\$3	\$49	\$0	\$0	\$25
2008-2012	\$915	\$13	\$22	\$86	\$116	\$26	\$456	\$4	\$10	\$43	\$59	\$14	\$242	\$1	\$6	\$25

Source: NJHMFA; HR&A Advisors, Inc.

DETAILED METHODOLOGY FOR ESTIMATING DIRECT ONGOING ANNUAL SPENDING

Project Operations

NJHMFA provided detailed operational costs for a sample of 45 projects including projects from each program type except CHOICE. HR&A converted these costs into per-unit estimates, which are displayed in Figure A-4. HR&A applied these per unit costs to the number of total units and special needs beds to estimate aggregate annual operational spending associated with NJHMFA projects funded between 2008 and 2012. HR&A inputted these operational costs by category into IMPLAN. PILOT payments represent a fiscal impact and are not included as part of the economic impact analysis. No operational spending is associated with the CHOICE program’s single-family projects. The total amounts of direct one-time project development spending associated with NJHMFA’s affordable housing investments are displayed in Figure A-5.

Distribution of Operational Costs

Cost Category	Annual Per Unit Cost
Administrative Cost	\$662
Insurance	\$470
Maintenance and Repairs	\$425
Maintenance Contracts	\$746
Management Fee	\$586
Salaries and Related Charges	\$1,387
Utilities	\$1,094
Total	\$6,069

Source: NJHMFA; HR&A Advisors, Inc.

Resident Spending

HR&A employed a multipronged methodology to estimate the resident spending impacts of single-family and multifamily projects. For multifamily projects, NJHMFA provided average household incomes and average vacancy rates for a sample of 45 projects. The average household income across all projects in the sample equaled \$24,300. The average vacancy rate equaled four percent. HR&A estimated aggregate household income by multiplying the average household income by the 12,271 total units and special needs beds and adjusted for vacancy. Since the average household income was \$24,300, HR&A entered the aggregate number into the relevant IMPLAN category – the \$15,000-\$25,000 income bracket.

For single-family projects, NJHMFA provided income requirements for purchasing low and moderate income units prescribed by the Uniform Housing Affordability Controls, which restrict low income units to households making no more than 50 percent of area median income and moderate income units to households making no more than 80 percent of area median income. NJHMFA also provided the distribution of low (18 percent) versus moderate (82 percent) units in its single-family projects. While the New Jersey Council on Affordable Housing does not publish a statewide median income, the 2010 New Jersey Median Household income is \$67,458 according to the U.S. Census. Based on the weighted distribution of units, HR&A estimated an average household income of \$50,400 for households living in NJHMFA supported single-family units. HR&A multiplied the total number of units in single-family projects by this average household income and vacancy rate in order to determine the amount of aggregate household income of residents of NJHMFA’s CHOICE projects. HR&A inputted this aggregate income into the relevant IMPLAN household income category – the \$50,000-\$75,000 income bracket.

The total amounts of direct ongoing operational spending and resident income are displayed in Figure A-5.

Direct Ongoing Spending and Income Associated with Project Operations and Residents

Year	Admin. (\$ Millions)	Salaries & Related (\$ Millions)	Maintenance and Repairs (\$ Millions)	Maintenance Contracts (\$ Millions)	Utilities (\$ Millions)	Management Fee (\$ Millions)	Insurance (\$ Millions)	HH Income \$20-25k (\$ Millions)	HH Income \$50-55k (\$ Millions)
2008-2012	\$7	\$15	\$5	\$8	\$12	\$6	\$5	\$255	\$59

Source: NJHMFA; HR&A Advisors, Inc.

Finally, HR&A adjusted the IMPLAN outputs to eliminate double counting between household spending on rent and operations and maintenance estimated by IMPLAN, and spending on operations and maintenance, which is funded by household rent payments, provided by NJHMFA. IMPLAN reports household spending impacts on real estate activities in sector code 360 for rental real estate. HR&A subtracted the values of output, compensation, and employment in this

sector from the estimates of total output, compensation, and employment, respectively. These impacts were already estimated based on data provided by NJHMFA under project operations.

DETAILED METHODOLOGY FOR ESTIMATING FISCAL IMPACTS

This section provides an overview of the methodology used by HR&A to estimate fiscal impacts of NJHMFA's affordable housing investments. Fiscal impacts include income, sales and use, and corporation business taxes generated to the State of New Jersey and property taxes generated to municipalities. HR&A used slightly different approaches to estimate the fiscal impacts of one-time project development, operation and maintenance activities, and household spending. The combined totals are reported in the body of the report. The following paragraphs describe the approach for each.

HR&A used the following approach to estimate the different types of taxes from *one-time project development impacts*:

- **State individual income, sales and use, and corporation business taxes** were generated by the IMPLAN model according to the change in total value-added (the sum of employee compensation, proprietor income, other property income, and indirect business taxes) resulting from NJHMFA's affordable housing investments. The model assumes that the economy's current ratios between value-added accounts and tax revenues for each state and local tax also hold for the new economic impacts, and uses these ratios to estimate the fiscal impacts generated by NJHMFA's affordable housing investments. IMPLAN uses the annual survey of State and Local Government Finances conducted by the U.S. Census Bureau to estimate these ratios.
- **Local property taxes resulting** are also estimated using the IMPLAN model. These local property taxes reflect those generated by project development activities (e.g. property

taxes paid by the construction firm developing the project), rather than local property tax owing to the developments themselves, which are an ongoing fiscal impact. The fiscal impacts of project development activities occurred in one year only for each analyzed project.

HR&A used the following approach to estimate the different types of taxes from *annual operation and maintenance spending*:

- **State individual income, sales and use, and corporation business taxes** were generated by the IMPLAN model according to the change in total value-added (the sum of employee compensation, proprietor income, other property income, and indirect business taxes) resulting from annual spending to operate and maintain the units that had been developed with support from NJFHMA. The model assumes that the economy's current ratios between value-added accounts and tax revenues for each state and local tax also hold for the new economic impacts, and uses these ratios to estimate the fiscal impacts generated by annual operation and maintenance spending. IMPLAN uses the annual survey of State and Local Government Finances conducted by the U.S. Census Bureau to estimate these ratios.
- **Local property taxes** are estimated using the IMPLAN model and supplemented with operational data provided by NJHMFA. Total local property taxes owe to the local property tax estimates generated by the IMPLAN model and payment in lieu of taxes (PILOT). Nearly all NJHMFA projects receive 100 percent property tax abatement, and instead make a PILOT to their host municipalities. NJHMFA provided PILOT amounts for a sample of 45 projects. Across this sample, the average PILOT per unit was \$698. This

average PILOT per unit was multiplied by the total number of units and special needs beds in analyzed projects to estimate the aggregate annual PILOT across all projects funded between 2008 and 2012, approximately \$8.6 million.

HR&A used the following approach to estimate the different types of taxes from *annual resident spending*. HR&A made an across the board adjustment to eliminate double counting with the fiscal impacts generated by operations and maintenance spending discussed previously by excluding impacts related to IMPLAN sector code 360 (rental real estate) in all tax categories. The value added from the rental real estate sector represents about 11 percent of the total value added across all sectors from direct household spending. To make this adjustment, HR&A reduced State individual income, sales and use, and corporation business taxes by 11 percent to adjust for this fiscal impact being counted under operation and maintenance spending.

- **State individual income taxes** are estimated using IMPLAN model outputs and supplemental analysis conducted by HR&A. As the IMPLAN model is driven by household spending, it reports individual income taxes that result from household spending on various goods and services (e.g., it includes the individual income taxes reported by a grocery store worker). It does not include the direct income taxes paid by households that generate this spending. To fill this gap, HR&A multiplied effective tax rates reported by the New Jersey Department of the Treasury's *Statistics of Income: 2010 Income Tax Returns* (the most recent edition available)

by the aggregate household income by income category previously estimated in the economic impacts section. Households in multifamily projects earn approximately \$24,300 per year and households in single-family projects earn approximately \$50,400 per year. The effective State tax rate is 1.01 percent on gross income between \$20,000 and \$25,000 and is 1.76 percent on gross income between \$50,000 and \$75,000. These numbers are added to the estimates of additional income taxes produced by IMPLAN.

- **State sales and use and corporation business taxes** were generated by the IMPLAN model according to the change in total value-added (the sum of employee compensation, proprietor income, other property income, and indirect business taxes) resulting from the annual spending on goods and services by households residing in NJHMFA supported units. The model assumes that the economy's current ratios between value-added accounts and tax revenues for each state and local tax also hold for the new economic impacts, and uses these ratios to estimate the fiscal impacts generated by annual household spending. IMPLAN uses the annual survey of State and Local Government Finances conducted by the U.S. Census Bureau to estimate these ratios.
- **Local property taxes** are counted under the fiscal impacts from housing operations and maintenance, so there is no direct local property tax impact attributed to resident spending.

VII. DATA APPENDIX

ECONOMIC AND FISCAL IMPACTS OF \$1 MILLION IN PROJECT DEVELOPMENT FUNDING FACILITATED BY NJHMFA

This section presents the economic impacts of \$1 million in project development funding facilitated by NJHMFA. Assuming funding facilitated by NJHMFA would cover about 74.7 percent of total development costs, the average amount covered between 2008 and 2012, this funding would support approximately \$1.3 million of development costs.

Economic Impacts

\$1 million in NJHMFA funding is estimated to have the following one-time impacts to New Jersey:

- **12.8 FTE jobs**
 - 6.3 direct FTE jobs
 - 6.5 indirect and induced FTE jobs
- **\$615,000 employee compensation**
 - \$278,000 in direct employee compensation
 - \$337,000 in indirect and induced compensation
- **\$2,121,000 economic output**
 - \$1,065,000 in direct economic output
 - \$1,056,000 in indirect and induced economic output

\$1 million in NJHMFA funding is estimated to have the following ongoing impacts to New Jersey:

- **1.4 FTE jobs**
 - 0.3 FTE jobs supported by project operations
 - 1.1 FTE jobs supported by resident spending
- **\$72,000 employee compensation**
 - \$9,000 from project operations
 - \$63,000 from resident spending
- **\$237,000 economic output**
 - \$45,000 from project operations
 - \$192,000 from resident spending

Fiscal Impacts

\$1 million in NJHMFA funding is estimated to have the following one-time fiscal impacts to New Jersey:

- **\$75,000 State & local property tax**
 - \$18,000 in New Jersey State Individual Income Tax
 - \$5,000 in New Jersey State Corporation Business Tax
 - \$18,000 in New Jersey State Sales Tax
 - \$34,000 in local property tax

\$1 million in NJHMFA funding is estimated to have the following ongoing fiscal impacts to New Jersey:

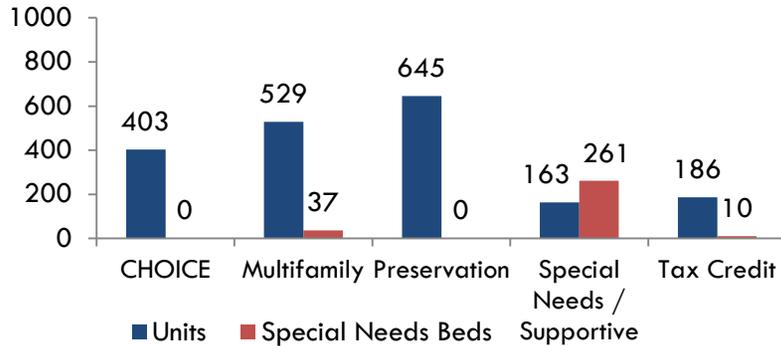
- **\$14,000 State & local property tax**
 - \$3,000 in New Jersey State Individual Income Tax
 - \$1,000 in New Jersey State Corporation Business Tax
 - \$4,000 in New Jersey State Sales Tax
 - \$6,000 in local property tax

IMPACTS BY YEAR: 2008 INVESTMENTS

NJHMFA Investments and Funding

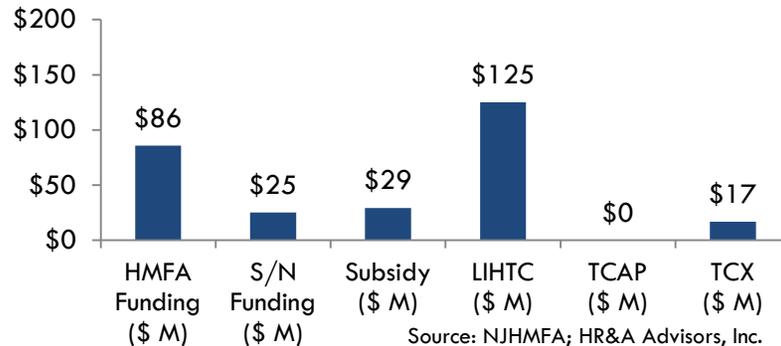
- 61 projects
- 1,926 units and 308 special needs beds
- \$418 million total development costs
- \$282 million funding facilitated by NJHMFA
- 67.5 percent of total development costs funded

NJHMFA Production by Program



Source: NJHMFA; HR&A Advisors, Inc.

NJHMFA Funding Sources



Source: NJHMFA; HR&A Advisors, Inc.

One-Time Economic Impacts

Economic Impact	Employment (FTE Jobs)	Compensation (\$ Millions)	Economic Output (\$ Millions)
Direct	2,050	\$86.0	\$340.0
Indirect and Induced	2,100	\$107.0	\$342.0
Total	4,150	\$193.0	\$682.0

Source: HR&A Advisors, Inc.; IMPLAN

Ongoing Economic Impacts

Category	Total Employment (FTE Jobs)	Total Compensation (\$ Millions)	Total Economic Output (\$ Millions)
Project Operations	80	\$3.0	\$14.0
Resident Spending	390	\$22.0	\$66.0
Total	470	\$25.0	\$80.0

Source: HR&A Advisors, Inc.; IMPLAN

One-Time Fiscal Impacts

Tax	Revenue (\$ Millions)
State Individual Income Tax	\$5.8
State Corporation Business Tax	\$1.6
State Sales Tax	\$5.9
Local Property Tax	\$10.9
Total	\$24.2

Source: HR&A Advisors, Inc.; IMPLAN

Ongoing Fiscal Impacts

Tax	Revenue (\$ Millions)
State Individual Income Tax	\$1.2
State Corporation Business Tax	\$0.3
State Sales Tax	\$1.2
Local Property Tax	\$1.9
Total	\$4.6

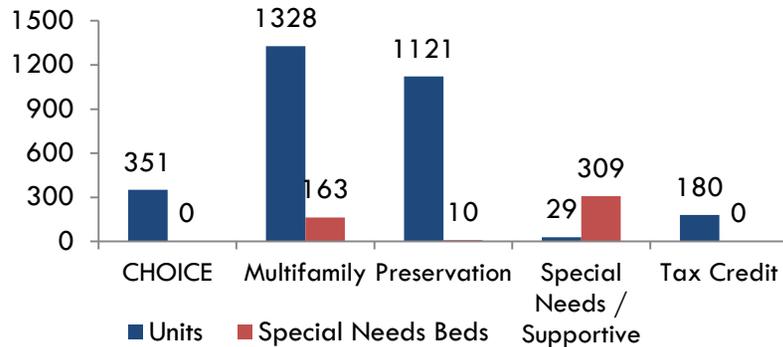
Source: HR&A Advisors, Inc.; IMPLAN

IMPACTS BY YEAR: 2009 INVESTMENTS

NJHMFA Investments and Funding

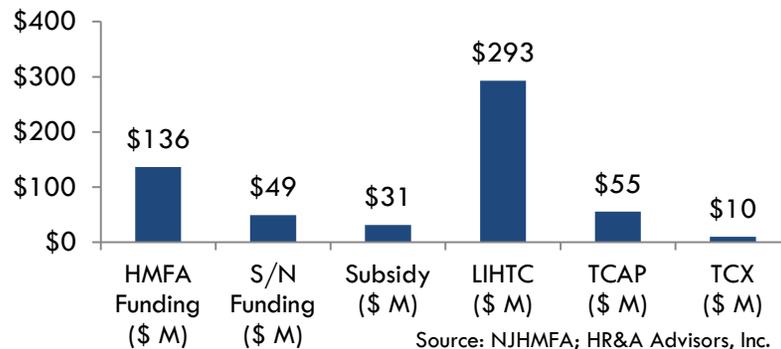
- 83 projects
- 3,009 units and 482 special needs beds
- \$724 million total development costs
- \$575 million funding facilitated by NJHMFA
- 79.5 percent of total development costs funded

NJHMFA Production by Program



Source: NJHMFA; HR&A Advisors, Inc.

NJHMFA Funding Sources



Source: NJHMFA; HR&A Advisors, Inc.

One-Time Economic Impacts

Economic Impact	Employment (FTE Jobs)	Compensation (\$ Millions)	Economic Output (\$ Millions)
Direct	3,600	\$153.0	\$577.0
Indirect and Induced	3,650	\$188.0	\$587.0
Total	7,250	\$341.0	\$1,164.0

Source: HR&A Advisors, Inc.; IMPLAN

Ongoing Economic Impacts

Category	Total Employment (FTE Jobs)	Total Compensation (\$ Millions)	Total Economic Output (\$ Millions)
Project Operations	130	\$5.0	\$24.0
Resident Spending	610	\$34.0	\$103.0
Total	740	\$39.0	\$127.0

Source: HR&A Advisors, Inc.; IMPLAN

One-Time Fiscal Impacts

Tax	Revenue (\$ Millions)
State Individual Income Tax	\$10.3
State Corporation Business Tax	\$2.8
State Sales Tax	\$10.3
Local Property Tax	\$19.1
Total	\$42.5

Source: HR&A Advisors, Inc.; IMPLAN

Ongoing Fiscal Impacts

Tax	Revenue (\$ Millions)
State Individual Income Tax	\$1.9
State Corporation Business Tax	\$0.5
State Sales Tax	\$2.0
Local Property Tax	\$3.1
Total	\$7.5

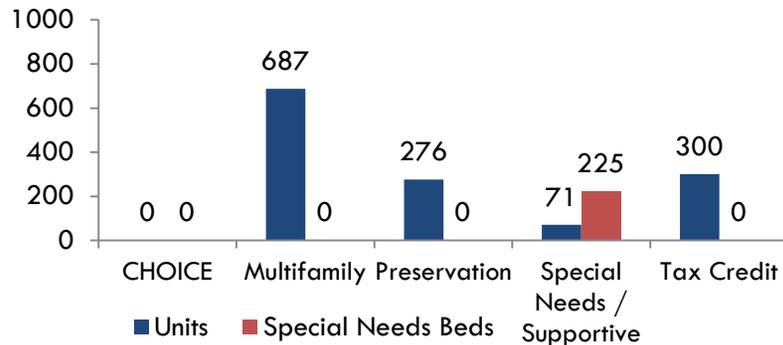
Source: HR&A Advisors, Inc.; IMPLAN

IMPACTS BY YEAR: 2010 INVESTMENTS

NJHMFA Investments and Funding

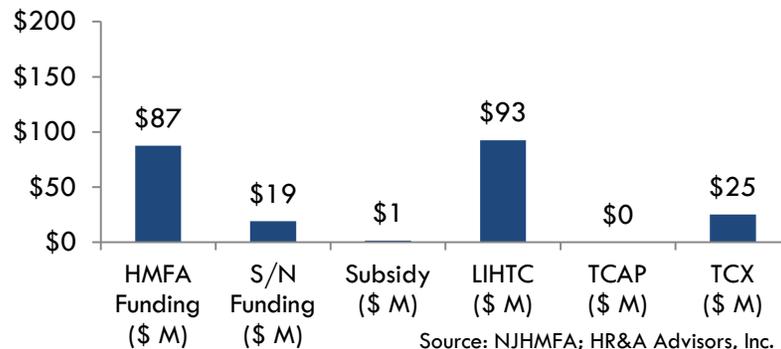
- 37 projects
- 1,334 units and 225 special needs beds
- \$371 million total development costs
- \$226 million funding facilitated by NJHMFA
- 60.9 percent of total development costs funded

NJHMFA Production by Program



Source: NJHMFA; HR&A Advisors, Inc.

NJHMFA Funding Sources



Source: NJHMFA; HR&A Advisors, Inc.

One-Time Economic Impacts

Economic Impact	Employment (FTE Jobs)	Compensation (\$ Millions)	Economic Output (\$ Millions)
Direct	1,750	\$78.0	\$290.0
Indirect and Induced	1,750	\$92.0	\$289.0
Total	3,500	\$170.0	\$579.0

Source: HR&A Advisors, Inc.; IMPLAN

Ongoing Economic Impacts

Category	Total Employment (FTE Jobs)	Total Compensation (\$ Millions)	Total Economic Output (\$ Millions)
Project Operations	60	\$2.0	\$12.0
Resident Spending	270	\$15.0	\$46.0
Total	330	\$17.0	\$58.0

Source: HR&A Advisors, Inc.; IMPLAN

One-Time Fiscal Impacts

Tax	Revenue (\$ Millions)
State Individual Income Tax	\$5.0
State Corporation Business Tax	\$1.4
State Sales Tax	\$5.0
Local Property Tax	\$9.4
Total	\$20.8

Source: HR&A Advisors, Inc.; IMPLAN

Ongoing Fiscal Impacts

Tax	Revenue (\$ Millions)
State Individual Income Tax	\$0.9
State Corporation Business Tax	\$0.3
State Sales Tax	\$0.9
Local Property Tax	\$1.4
Total	\$3.5

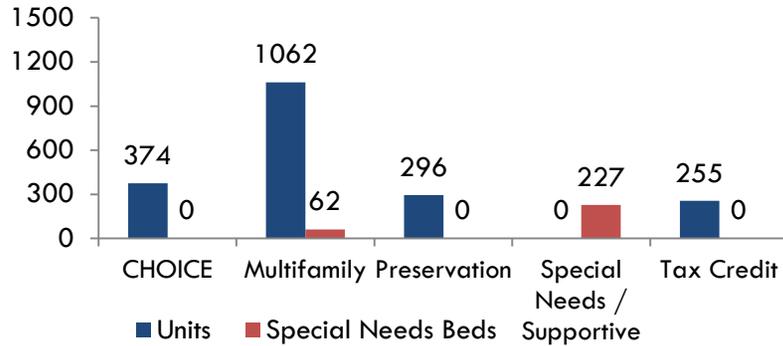
Source: HR&A Advisors, Inc.; IMPLAN

IMPACTS BY YEAR: 2011 INVESTMENTS

NJHMFA Investments

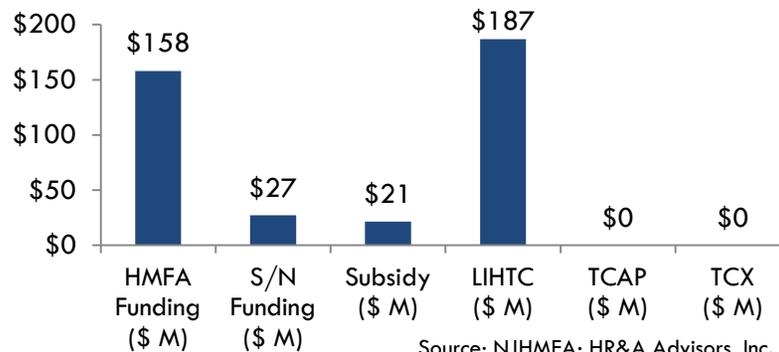
- 57 projects
- 1,987 units and 289 special needs beds
- \$520 million total development costs
- \$393 million funding facilitated by NJHMFA
- 75.7 percent of total development costs funded

NJHMFA Production by Program



Source: NJHMFA; HR&A Advisors, Inc.

NJHMFA Funding Sources



Source: NJHMFA; HR&A Advisors, Inc.

One-Time Economic Impacts

Economic Impact	Employment (FTE Jobs)	Compensation (\$ Millions)	Economic Output (\$ Millions)
Direct	2,400	\$108.0	\$417.0
Indirect and Induced	2,450	\$130.0	\$404.0
Total	4,850	\$238.0	\$821.0

Source: HR&A Advisors, Inc.; IMPLAN

Ongoing Economic Impacts

Category	Total Employment (FTE Jobs)	Total Compensation (\$ Millions)	Total Economic Output (\$ Millions)
Project Operations	80	\$3.0	\$15.0
Resident Spending	400	\$22.0	\$68.0
Total	480	\$25.0	\$83.0

Source: HR&A Advisors, Inc.; IMPLAN

One-Time Fiscal Impacts

Tax	Revenue (\$ Millions)
State Individual Income Tax	\$7.0
State Corporation Business Tax	\$1.9
State Sales Tax	\$7.1
Local Property Tax	\$13.2
Total	\$29.2

Source: HR&A Advisors, Inc.; IMPLAN

Ongoing Fiscal Impacts

Tax	Revenue (\$ Millions)
State Individual Income Tax	\$1.3
State Corporation Business Tax	\$0.4
State Sales Tax	\$1.3
Local Property Tax	\$2.0
Total	\$5.0

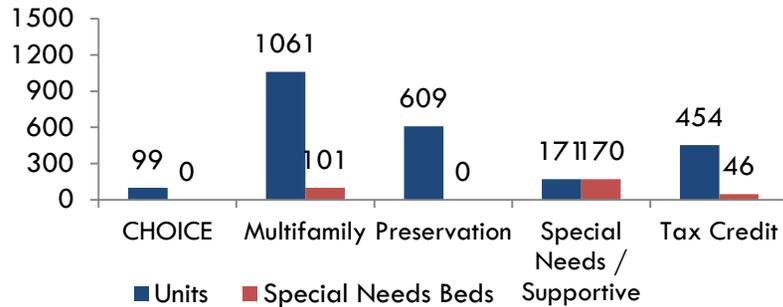
Source: HR&A Advisors, Inc.; IMPLAN

IMPACTS BY YEAR: 2012 INVESTMENTS

NJHMFA Investments, Funding, and Weatherization Activity

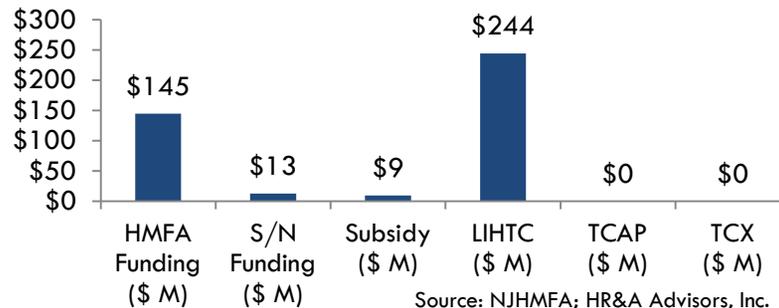
- 64 projects
- 2,394 units and 317 special needs beds
- \$494 million total development costs
- \$411 million funding facilitated by NJHMFA
- 83.2 percent of total development costs funded
- 5,483 units weatherized
- \$25 million weatherization costs

NJHMFA Production by Program



Source: NJHMFA; HR&A Advisors, Inc.

NJHMFA Funding Sources



Source: NJHMFA; HR&A Advisors, Inc.

One-Time Economic Impacts

Economic Impact	Employment (FTE Jobs)	Compensation (\$ Millions)	Economic Output (\$ Millions)
Direct	2,300	\$101.0	\$413.0
Indirect and Induced	2,300	\$126.0	\$394.0
Total	4,600	\$227.0	\$807.0

Source: HR&A Advisors, Inc.; IMPLAN

Ongoing Economic Impacts

Source	Total Employment (FTE Jobs)	Total Compensation (\$ Millions)	Total Economic Output (\$ Millions)
Project Operations	100	\$4.0	\$19.0
Resident Spending	480	\$26.0	\$80.0
Total	580	\$30.0	\$99.0

Source: HR&A Advisors, Inc.; IMPLAN

One-Time Fiscal Impacts

Tax	Revenue (\$ Millions)
State Individual Income Tax	\$7.0
State Corporation Business Tax	\$1.9
State Sales Tax	\$6.9
Local Property Tax	\$12.8
Total	\$28.6

Source: HR&A Advisors, Inc.; IMPLAN

Ongoing Fiscal Impacts

Tax	Revenue (\$ Millions)
State Individual Income Tax	\$1.5
State Corporation Business Tax	\$0.4
State Sales Tax	\$1.5
Local Property Tax	\$2.5
Total	\$5.9

Source: HR&A Advisors, Inc.; IMPLAN