

**THE ECONOMIC IMPACT OF
HOUSING INVESTMENT THROUGH THE
COMMUNITY PRESERVATION ACT IN BOSTON**

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EXECUTIVE SUMMARY

The housing industry in Massachusetts has come under some scrutiny over the last ten years. Issues of supply, demand, affordability, housing discrimination and economic impacts are of increasing interest to government officials, planners, and business leaders. There is an increasing need to provide affordable housing for the various populations within Boston, yet there is a decrease in the supply of affordable housing. There have been few efforts that comprehensively measure the impact of the housing industry on the economy. This study attempts to look at the need for affordable housing and the economic impacts of housing in the city of Boston. Its premise is that the economic impact of housing is significant and involves a multitude of factors, from the monetary effects of the construction process to the impact of personal incomes on the local economy.

The study uses the National Association of Home Builders (NAHB) local impact model to assess economic impacts. The highlights are summarized as follows:

Boston CPA impact

The estimated five-year metro-area impacts of building 1,500 single family homes and 1,500 multifamily homes in Boston, Massachusetts include:

- **\$312 million in local income,**
- **\$19.85 million in revenue for local government, and**
- **5,490 local jobs.**

These are **local impacts**, representing income and jobs for residents of the Boston PMSA, and taxes (and other sources of revenue, including permit fees) for all local jurisdictions within the PMSA. They are also **one-time impacts** that include both the direct and indirect impact of the construction activity itself, and the impact of local residents who earn money from the construction activity spending part of it within the metro area.

The additional, annually recurring impacts of building 1,500 single family homes and 1,500 multifamily homes in Boston over five years include:

- **\$279 million in local income,**
- **\$40.2 million in revenue for local governments, and**
- **5,265 local jobs.**

These are **ongoing, annual local impacts** that result from the new homes being occupied after five years, and the occupants paying taxes and otherwise participating in the local economy year after year.

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Introduction

Over the past ten years there has been extensive interest on the part of government officials, planners, and business leaders concerning how certain development activities influence the economy. Through the use of tools such as econometric models and fiscal impact assessments, one can readily note, for example, the impact of growth from the biotechnology industry on a specific region or the fiscal impacts of a new manufacturing plant on local services. And yet, we have noted very few efforts that comprehensively measure the impact of the housing industry on the economy. In Boston voters are set to decide this November on the Community Preservation Act which has the potential to significantly increase housing production in the city.

Community Preservation Act

If passed in November, the Community Preservation Act will mean some \$28 million for Boston in the next year and approximately \$115 million over the next five years. CPA is a state law, passed in 2000, that allows local communities in Massachusetts to assess a surcharge of up to 3% on the property tax to raise funds for affordable housing, open space, and historic preservation. The Commonwealth of Massachusetts will provide matching funds to each community which adopts the CPA. So far this year, 31 towns have passed CPA and another 13 will vote on the initiative in November. In Boston, voters will decide on a 2% surcharge that will cost the average homeowner \$17.74 per year and the typical small business owner less than \$10 per month.

By our estimates, Boston could build or substantially renovate up to 4,000 housing units, create dozens of new parks and playgrounds, and save at least 20 historic building in the first five years of the CPA.

Recent studies by MassINC and Northeastern University and the Greater Boston Chamber of Commerce have identified housing as a significant barrier to economic growth in the Boston region. According to a 1998 MassINC study, "Our state's high cost of living is a potential threat to the state's future economic growth and competitiveness. Housing prices and rents are the single biggest contributor to our state's higher cost of living"¹

Earlier this year, Bernard Cardinal Law stated at the annual meeting of the Massachusetts Housing Investment Corporation, "The success of any regional economy relies on the labor force. When middle and lower income workers are priced out of the housing market, the essential workforce has no place to live and the economy inevitably falters."

Cardinal Law also referred to a study, undertaken by the Center for Urban and Regional Policy at Northeastern University, that provided the first reliable quantification of the housing crisis in the metropolitan area within the greater Boston area. "According to the report, the central issue is production. It will be necessary to produce 78,300 new units for this area over the next five

1 ." The Road Ahead: Emerging Threats To Workers, Families And The Massachusetts Economy by Andrew Sum and Northeastern University's Center for Labor Market Studies

years. At the current production rate, we will have only 42,300 units. This means that there is a 36,000-unit shortfall between needed units and projected production.”

And business leaders themselves are expressing concern about the housing crisis. The Greater Boston Chamber of Commerce *Leading Industries* report found that “Low vacancy rates - among the lowest in the country - and rising housing prices cause hardship for many. They make it difficult for young workers, workers moving to Boston, renters and elderly residents on fixed incomes to live in the region.”

Economic Impact of Housing

The housing industry is often seen in isolation from other economic generators such as manufacturing or service industries. In many communities housing, especially affordable housing, is seen as a fiscal drain on local government budgets. The economic impact of housing is commonly measured in a relatively simple way. How much property tax revenue will a unit of housing produce versus the amount of financial burden it will cause the local municipality in terms of services required and school costs? With average property taxes revenues amounting to \$2,000 annually for a home owner and costs for educating a child are approximately \$6,000 the assessment for most communities, inevitably shows that a unit of housing results in additional costs to the tax payers. While one can understand the popularity of this simple approach, it only tells part of the story. Little attention is paid to the fact that the economic impact of housing is significant and involves a multitude of factors, from the monetary effects of the construction process to the impact of personal incomes on the local economy. It is this part of the economic analysis that is little understood and forms the focal point of this study. This study, sponsored by the Massachusetts Affordable Housing Alliance (MAHA), a non profit housing coalition, uses the Local Impact of Homebuilding Model,¹ an econometric model developed by the National Association of Homebuilders, to assess the economic impact of housing in Boston.

Home building generates substantial local economic activity, including new income and jobs for residents, and additional revenue for local governments. The National Association of Home Builders has developed a model to estimate the economic benefits. The model captures the effect of the construction activity itself, the impact that occurs when income earned from construction activity is spent, and the impact that occurs when the new home is occupied.

The Housing Policy Department of the National Association of Home Builders has developed a model to estimate the local economic impact of building a home within the boundaries of a particular local market area. The model can be applied to either single family construction, multifamily construction, or a combination of the two. Although initially developed and calibrated for a typical metropolitan area using national averages, the model can be adapted to a specific local economy by replacing key housing market variables.

The model is divided into three phases. Phases I and II are one-time effects that occur as the result of construction activity. Phase III is an ongoing, annual effect that includes property tax payments and the result of the completed unit being occupied.

Phase I: Construction **The jobs, wages, and local taxes (including permit, utility connection, and impact fees) generated by the actual development, construction, and sale of the home.** These jobs include on-site and off-site construction work as well as jobs generated in retail and wholesale sales of components, transportation to the site, and the professional services required to build a home and deliver it to its final customer.

Phase II: Ripple Effect **The wages and profits for local area residents earned during the construction period are spent on other locally produced goods and services.** This generates additional income for local residents, which is spent on still more locally produced goods and services, and so on. This continuing recycling of income back into the community is usually called a “multiplier” or “ripple” effect.

Phase III: Ongoing, Annual Effect **The local jobs, income, and taxes generated as a result of the home being occupied.** A household moving into a new home generally spends about three-fifths of its income on goods and services sold in the local economy. A fraction of this will become income for local workers and local businesses proprietors. In a typical local area, the household will also pay 1.25 percent of its income to local governments in the form of taxes and user fees, and a fraction of this will become income for local government employees. This is the first step in another set of economic ripples that cause a permanent increase in the level of economic activity, jobs, wages, and local tax receipts.

The comprehensive nature of the NAHB model means that it must be applied to a local area large enough to include the places where construction workers live and spend their money, as well as the places where the new home occupants are likely to work, shop, and seek entertainment. This generally corresponds to the concept of a Metropolitan Statistical Area or Primary Metropolitan Statistical Area (PMSA), as defined by the U.S. Office of Management and Budget, based on local commuting patterns. Therefore, the impacts reported here are impacts that the home building activity in Boston has on the economy of the Boston PMSA, a metro area that consists of all or part of seven different counties in Massachusetts (Bristol, Essex, Middlesex, Norfolk, Plymouth, Suffolk, and Worcester) and one in New Hampshire (Rockingham). Below, wherever the term local (or metro area) impact is used, it refers to the impact felt throughout the entire PMSA.

The NAHB model produces impacts on income and employment in 16 industries and the local government, as well as detailed information about taxes and other types of local government revenue. The highlights are summarized as follows:

Single Family Construction

- ◆ The estimated one-time metro-area impacts of building 1,500 single family homes in Boston, Massachusetts include:
 - \$189 million in local income,
 - \$11.7 million in revenue for local governments, and
 - 3,375 local jobs.

These are **local impacts**, representing income and jobs for residents of the Boston PMSA, and taxes (and other sources of revenue, including permit fees) for all local jurisdictions within the PMSA. They are also **one-year impacts** that include both the direct and indirect impact of the construction activity itself, and the impact of local residents who earn money from the construction activity spending part of it within the metro area.

- ◆ The additional, annually recurring impacts of building 1,500 single family homes in Boston over five years include:
 - \$162 million in local income,
 - \$22.5 million in revenue for local governments, and
 - 3,060 local jobs.

These are **ongoing, annual local impacts** that result from the new homes being occupied, and the occupants paying taxes and otherwise participating in the local economy year after year.

- ◆ The single family impacts were calculated assuming that new single family homes built in the Boston PMSA have an average price of \$245,000; are built on a lot for which the average value of the raw land is \$49,100; require the builder and developer to pay an average of \$2,625 in impact, permit, and other fees to local governments; and incur an average property tax of \$2,592 per year.

Multifamily Construction

- The estimated one-year metro-area impacts of building 1,500 multifamily units in Boston include
- \$123 million in local income,
 - \$8.16 million in revenue for local governments, and
 - 2,115 local jobs.

These are **local impacts**, representing income and jobs for residents of the Boston metro area, and taxes (and other sources of revenue, including permit fees) for all local jurisdictions within the area. They are also **one-year impacts** that include both the direct and indirect impact of the construction activity itself, and the impact of local residents who earn money from the construction activity spending part of it within the Boston

PMSA.

- ◆ The additional, annually recurring impacts of building 1,500 multifamily units in Boston over five years include:
 - \$117 million in local income,
 - \$17.7 million in revenue for local governments, and
 - 2,205 local jobs.

These are **ongoing, annual local impacts** that result from the new homes being occupied, and the occupants paying taxes and otherwise participating in the local economy year after year.

- ◆ These multifamily impacts were calculated assuming that new multifamily units built in Boston each an average market value of \$180,000; embody an average raw land value of \$49,100; require the builder and developer to pay an average of \$1,975 in impact, permit, and other fees per unit to local governments; and incur an average annual property tax of \$1,904 per unit.

Housing, Open Space as a Factor in Business Location Decisions

Traditional factors, such as location, costs and access to qualified labor, continue to play an important role in business relocation. Increasingly, though, quality of life issues have emerged as a critical element in the site selection process. These issues include, among other things, good school systems, available affordable housing, opportunities for recreation, and low crime rates.

Employers are now concerned with where their employees want to live and work. As such, site selection is increasingly revolving around the optimal locations that will attract and retain the best and brightest workers. Technological advances have made it easier to determine the best location for businesses. Private firms that specialize in relocation strategies, such as Fluor Daniel Consulting and PPH Fantus, often perform a quality-of-life appraisal as a part of the comprehensive analysis of any geographic site under consideration.

In 1998, *Area Development Magazine* conducted its Annual Corporate Survey and asked its readers to rate the site selection factors of labor, transportation/telecommunications, finance, and quality-of-life factors.² Housing availability and costs ranked among the top five indicators under quality of life. Housing costs were crucial to 67.6% of corporate respondents and 66.1% felt that the availability of housing was an important criteria. Other top contenders included low crime rates, good health facilities and public school ratings.

Fantus Consulting³ lists the most critical site location needs of a typical business project as:

- Large management/technical/clerical pool at competitive costs
- Communications opportunities
- Commercial air services
- Good transportation access
- Office parks/space
- High quality of life

- Good housing mix (in terms of availability, affordability and type of housing)

Thus the availability and affordability of housing do impact the economic growth potential for a community. While rarely driving the site selection process, the quality-of-life factors offering the best "fit" to a relocating company often gain a competitive advantage for a particular community.

Parks and open space create a high quality of life that often attract tax-paying businesses and residents to communities. In a recent survey for the National Park Service, corporate CEOs say quality of life for employees is the third-most important factor in locating a business, behind only access to domestic markets and availability of skilled labor.²

Open Space and Historic Preservation As Economic Engines

Recent examples show that open space increases property values and thereby improves the tax base for urban communities across the country. Post Office Square Park in Boston, Bryant Park in New York City, and Golden Gate Park in San Francisco have all boosted the value of surrounding properties while providing an elegant green focus to crowded commercial areas. Boston receives \$1 million a year for its ownership interest in the garage under Post Office Square Park and \$1 million in annual taxes. After the construction debt is paid, ownership of the garage and park will revert to the city.

Bryant Park spurred a rejuvenation of commercial activity along Sixth Avenue. Rents in the area are climbing and office space is hard to come by. In the next five years, revenues from park concessions will permit repayment of construction debt and make the park economically self-sufficient. At that point the park will not longer need city funds, although it will continue to feed the neighborhood's economy. Golden Gate Park increases the value of nearby property by amount of from \$500 million to \$1 billion, in the process generating \$5-\$10 million in annual property taxes.³

Studies have also found that historic preservation has significant positive economic impacts. In Rhode Island, the state's Director of Tourism estimates that half of the state's \$1.2 billion annual tourism industry is driven by travelers seeking cultural and historic attractions. In New Jersey, a statewide study found "heritage" travelers spend \$423 million annually including spending 60% more, staying longer, and spending 78% more in restaurants than other travelers.

A 1998 report from the Main Street Center of the National Trust for Historic Preservation summarized the tremendous benefits to historic preservation. Historic preservation has meant \$10.9 billion in total public and private investment; 47,000 net new businesses generated, 174,000 net new jobs created, 60,900 buildings rehabilitated, and \$35.43 reinvested in the local economy for every \$1 spent.

In Conclusion

Providing affordable housing is not only a social and moral obligation but, as can be seen from

² National Park Service, Rivers, Trails and Conservation Assistance Program, "Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors," 4th ed. (Washington, DC: National Park Service, 1995), 7-3.

³ "The Value of Parks," Testimony before the California Assembly Committee on Water, Parks, and Wildlife, May 18, 1993.

this study, it is economically viable as well. The housing industry provides jobs and incomes for residents and a tax base for communities. It brings in substantial direct revenue, aids balanced growth, and plays a significant role in attracting sustainable economic development to the state. The results of this study are important for three reasons. First, they show the need to move away from fiscal impact models as the only means to assess the influence of housing on local schools and service expenditures. Secondly, the study shows that the economic impact of single family and multifamily units can be quite significant and add wealth to the local community and, indeed, across the region. Finally, balanced growth—the availability of homes that match the character of the jobs—plays a significant role in attracting sustainable economic development.

DATA TABLES

Impact of Building 100 Single Family Homes in Boston, Massachusetts

SUMMARY

Total One-Year Impact: Sum of Phase I and Phase II:

Local Income	Local Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$12,638,000	\$2,354,000	\$10,284,000	\$780,000	225

Phase I: Direct and Indirect Impact of Construction Activity:

Local Income	Business Owners' Income	Local Wages and Salaries	Local Taxes ⁴	Local Jobs Supported
\$8,623,000	\$1,581,000	\$7,042,000	\$500,000	149

Phase II: Induced (Ripple) Effect of Spending the Income and Taxes from Phase I:

Local Income	Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$4,015,000	\$773,000	\$3,242,000	\$280,000	76

Phase III: Ongoing, Annual Effect that Occurs When New Homes are Occupied:

Local Income	Local Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$3,574,000	\$676,000	\$2,898,000	\$501,000	68

⁴ The term local taxes is used as a shorthand for local government revenue from all sources: taxes, fees, fines, revenue from government-owned enterprises, etc...

Impact of Building 100 single family Homes in Boston, MA
Phase I -- Direct and Indirect Impact of Construction Activity

A. Local Income and Jobs by Industry

<i>Industry</i>	<i>Local Income</i>	<i>Local Business Owners' Income</i>	<i>Local Wages and Salaries</i>	<i>Wages & Salaries per Full-time Job</i>	<i>Number of Local Jobs Supported</i>
Construction	\$6,742,000	\$1,187,000	\$5,555,000	\$48,000	115
Manufacturing	\$5,000	\$0	\$5,000	\$56,000	0
Transportation	\$12,000	\$1,000	\$11,000	\$48,000	0
Communications	\$31,000	\$6,000	\$26,000	\$83,000	0
Utilities	\$14,000	\$0	\$13,000	\$77,000	0
Wholesale and Retail Trade	\$914,000	\$108,000	\$806,000	\$38,000	21
Finance and Insurance	\$104,000	\$14,000	\$89,000	\$60,000	1
Real Estate	\$46,000	\$22,000	\$25,000	\$47,000	1
Personal & Repair Services	\$36,000	\$16,000	\$20,000	\$39,000	1
Services to dwellings / buildings	\$10,000	\$4,000	\$7,000	\$44,000	0
Business & Professional Services	\$545,000	\$186,000	\$359,000	\$58,000	6
Eating and drinking places	\$13,000	\$2,000	\$11,000	\$46,000	0
Automobile Repair & Service	\$24,000	\$11,000	\$14,000	\$35,000	0
Entertainment Services	\$4,000	\$1,000	\$3,000	\$44,000	0
Health, Educ. & Social Services	\$0	\$0	\$0	\$52,000	0
Local Government	\$2,000	\$0	\$2,000	\$54,000	0
Other	\$122,000	\$24,000	\$98,000	\$41,000	2
Total	\$8,623,000	\$1,581,000	\$7,042,000	\$47,000	149

Note: Business & professional services include architectural and engineering services. The "Other" category consists mostly of landscaping services, and the production of greenhouse and nursery products.

B. Local Government General Revenue by Type

TAXES:		USER FEES & CHARGES:	
Business Property Taxes	\$83,000	Residential Permit / Impact	\$263,000
Residential Property Taxes	\$0	Utilities & Other Govt. Enterprises	\$95,000
General Sales Taxes	\$0	Hospital Charges	\$9,000
Specific Excise Taxes	\$1,000	Transportation Charges	\$1,000
Income Taxes	\$0	Education Charges	\$9,000
License Taxes	\$0	Other Fees and Charges	\$35,000
Other Taxes	\$3,000	TOTAL FEES & CHARGES	\$411,000
TOTAL TAXES	\$88,000	TOTAL GENERAL REVENUE	\$500,000

Impact of Building 100 single family Homes in Boston, MA
Phase II - Induced Effect of Spending Income and Tax Revenue from Phase I

▪ **A. Local Income and Jobs by Industry**

<i>Industry</i>	<i>Local Income</i>	<i>Local Business Owners' Income</i>	<i>Local Wages and Salaries</i>	<i>Wages & Salaries per Full-time Job</i>	<i>Number of Local Jobs Supported</i>
Construction	\$250,000	\$55,000	\$196,000	\$48,000	4
Manufacturing	\$20,000	\$1,000	\$18,000	\$56,000	0
Transportation	\$51,000	\$2,000	\$49,000	\$48,000	1
Communications	\$115,000	\$22,000	\$92,000	\$83,000	1
Utilities	\$65,000	\$1,000	\$65,000	\$77,000	1
Wholesale and Retail Trade	\$875,000	\$117,000	\$757,000	\$30,000	25
Finance and Insurance	\$363,000	\$46,000	\$317,000	\$60,000	5
Real Estate	\$259,000	\$121,000	\$138,000	\$47,000	3
Personal & Repair Services	\$177,000	\$59,000	\$119,000	\$30,000	4
Services to dwellings / buildings	\$32,000	\$11,000	\$21,000	\$44,000	0
Business & Professional Services	\$326,000	\$103,000	\$222,000	\$56,000	4
Eating and drinking places	\$165,000	\$28,000	\$137,000	\$46,000	3
Automobile Repair & Service	\$151,000	\$54,000	\$97,000	\$35,000	3
Entertainment Services	\$63,000	\$16,000	\$48,000	\$42,000	1
Health, Education, & Social Services	\$774,000	\$132,000	\$642,000	\$48,000	13
Local Government	\$291,000	\$0	\$291,000	\$51,000	6
Other	\$38,000	\$4,000	\$34,000	\$31,000	1
Total	\$4,015,000	\$773,000	\$3,242,000	\$42,000	76

Note: Business & professional services include architectural and engineering services. The "Other" category consists mostly of landscaping services, and the production of greenhouse and nursery products.

B. Local Government General Revenue by Type

TAXES:		USER FEES & CHARGES:	
Business Property Taxes	\$161,000	Residential Permit / Impact Fees	\$0
Residential Property Taxes	\$0	Utilities & Other Govt. Enterprises	\$77,000
General Sales Taxes	\$0	Hospital Charges	\$4,000
Specific Excise Taxes	\$3,000	Transportation Charges	\$0
Income Taxes	\$0	Education Charges	\$4,000
License Taxes	\$0	Other Fees and Charges	\$24,000
Other Taxes	\$6,000	TOTAL FEES & CHARGES	\$110,000
TOTAL TAXES	\$170,000	TOTAL GENERAL REVENUE	\$280,000

Impact of Building 100 single family Homes in Boston, MA
Phase III -- ongoing, annual Effect that Occurs As New Homes are Occupied

Local Income and Jobs by Industry

<i>Industry</i>	<i>Local Income</i>	<i>Local Business Owners' Income</i>	<i>Local Wages and Salaries</i>	<i>Wages & Salaries per Full-time Job</i>	<i>Number of Local Jobs Supported</i>
Construction	\$192,000	\$42,000	\$150,000	\$48,000	3
Manufacturing	\$16,000	\$1,000	\$15,000	\$56,000	0
Transportation	\$29,000	\$2,000	\$27,000	\$48,000	1
Communications	\$100,000	\$20,000	\$80,000	\$83,000	1
Utilities	\$62,000	\$1,000	\$61,000	\$77,000	1
Wholesale and Retail Trade	\$800,000	\$108,000	\$693,000	\$30,000	23
Finance and Insurance	\$520,000	\$72,000	\$448,000	\$60,000	8
Real Estate	\$142,000	\$66,000	\$75,000	\$47,000	2
Personal & Repair Services	\$146,000	\$49,000	\$96,000	\$30,000	3
Services to dwellings / buildings	\$24,000	\$8,000	\$16,000	\$44,000	0
Business & Professional Services	\$330,000	\$104,000	\$225,000	\$56,000	4
Eating and drinking places	\$143,000	\$24,000	\$119,000	\$46,000	3
Automobile Repair & Service	\$137,000	\$51,000	\$87,000	\$35,000	2
Entertainment Services	\$91,000	\$21,000	\$69,000	\$40,000	2
Health, Education, & Social Services	\$595,000	\$102,000	\$493,000	\$46,000	11
Local Government	\$202,000	\$0	\$202,000	\$51,000	4
Other	\$45,000	\$5,000	\$40,000	\$31,000	1
Total	\$3,574,000	\$676,000	\$2,898,000	\$42,000	68

Note: Business & professional services include architectural and engineering services. The "Other" category consists mostly of landscaping services, and the production of greenhouse and nursery products.

▪ **B. Local Government General Revenue by Type**

TAXES:		USER FEES & CHARGES:	
Business Property Taxes	\$128,000	Residential Permit / Impact Fees	\$0
Residential Property Taxes	\$207,000	Utilities & Other Govt. Enterprises	\$126,000
General Sales Taxes	\$0	Hospital Charges	\$9,000
Specific Excise Taxes	\$2,000	Transportation Charges	\$0
Income Taxes	\$0	Education Charges	\$4,000
License Taxes	\$0	Other Fees and Charges	\$21,000
Other Taxes	\$5,000	TOTAL FEES & CHARGES	\$159,000
TOTAL TAXES	\$342,000	TOTAL GENERAL REVENUE	\$501,000

Impact of Building 100 Multifamily Units in Boston, Massachusetts

SUMMARY

Total One-Year Impact: Sum of Phase I and Phase II:

Local Income	Local Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$8,159,000	\$1,586,000	\$6,573,000	\$544,000	141

Phase I: Direct and Indirect Impact of Construction Activity:

Local Income	Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$5,540,000	\$1,085,000	\$4,455,000	\$362,000	92

Phase II: Induced (Ripple) Effect of Spending the Income and Taxes from Phase I:

Local Income	Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$2,619,000	\$501,000	\$2,118,000	\$182,000	50

Phase III: Ongoing, Annual Effect that Occurs When New Homes are Occupied:

Local Income	Local Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$2,573,000	\$551,000	\$2,022,000	\$393,000	49

¹The term local taxes is used as a shorthand for local government revenue from all sources: taxes, fees, fines, revenue from government-owned enterprises, etc...

Impact of Building 100 Multifamily Homes in Boston, MA
Phase I -- Direct and Indirect Impact of Construction Activity

A. Local Income and Jobs by Industry

Industry	Local Income	Local Business Owners' Income	Local Wages and Salaries	Wages & Salaries per Full-time Job	Number of Local Jobs Supported
Construction	\$4,301,000	\$838,000	\$3,464,000	\$48,000	71
Manufacturing	\$3,000	\$0	\$3,000	\$56,000	0
Transportation	\$4,000	\$0	\$3,000	\$48,000	0
Communications	\$13,000	\$2,000	\$11,000	\$83,000	0
Utilities	\$5,000	\$0	\$5,000	\$77,000	0
Wholesale and Retail Trade	\$466,000	\$56,000	\$410,000	\$37,000	11
Finance and Insurance	\$67,000	\$10,000	\$57,000	\$59,000	1
Real Estate	\$22,000	\$10,000	\$12,000	\$47,000	0
Personal & Repair Services	\$14,000	\$6,000	\$8,000	\$38,000	0
Services to dwellings / buildings	\$4,000	\$1,000	\$3,000	\$44,000	0
Business & Professional Services	\$606,000	\$153,000	\$453,000	\$70,000	7
Eating and drinking places	\$6,000	\$1,000	\$5,000	\$46,000	0
Automobile Repair & Service	\$10,000	\$4,000	\$6,000	\$35,000	0
Entertainment Services	\$1,000	\$0	\$1,000	\$43,000	0
Health, Educ. & Social Services	\$0	\$0	\$0	\$52,000	0
Local Government	\$1,000	\$0	\$1,000	\$54,000	0
Other	\$17,000	\$2,000	\$15,000	\$30,000	1
Total	\$5,540,000	\$1,085,000	\$4,455,000	\$49,000	92

Note: Business & professional services include architectural and engineering services. The "Other" category consists mostly of landscaping services, and the production of greenhouse and nursery products.

▪ **B. Local Government General Revenue by Type**

TAXES:		USER FEES & CHARGES:	
Business Property Taxes	\$68,000	Residential Permit / Impact	\$198,000
Residential Property Taxes	\$0	Utilities & Other Govt. Enterprises	\$56,000
General Sales Taxes	\$0	Hospital Charges	\$6,000
Specific Excise Taxes	\$1,000	Transportation Charges	\$1,000
Income Taxes	\$0	Education Charges	\$5,000
License Taxes	\$0	Other Fees and Charges	\$23,000
Other Taxes	\$3,000	TOTAL FEES & CHARGES	\$289,000
TOTAL TAXES	\$72,000	TOTAL GENERAL REVENUE	\$362,000

Impact of Building 100 Multifamily Homes in Boston, MA
Phase II - Induced Effect of Spending Income and Tax Revenue from Phase I

A. Local Income and Jobs by Industry

Industry	Local Income	Local Business Owners' Income	Local Wages and Salaries	Wages & Salaries per Full-time Job	Number of Local Jobs Supported
Construction	\$165,000	\$36,000	\$129,000	\$48,000	3
Manufacturing	\$13,000	\$1,000	\$12,000	\$56,000	0
Transportation	\$33,000	\$2,000	\$32,000	\$48,000	1
Communications	\$74,000	\$15,000	\$60,000	\$83,000	1
Utilities	\$42,000	\$0	\$42,000	\$77,000	1
Wholesale and Retail Trade	\$565,000	\$76,000	\$489,000	\$30,000	16
Finance and Insurance	\$235,000	\$30,000	\$205,000	\$60,000	3
Real Estate	\$168,000	\$78,000	\$89,000	\$47,000	2
Personal & Repair Services	\$115,000	\$38,000	\$77,000	\$30,000	3
Services to dwellings / buildings	\$21,000	\$7,000	\$14,000	\$44,000	0
Business & Professional Services	\$212,000	\$67,000	\$145,000	\$56,000	3
Eating and drinking places	\$106,000	\$18,000	\$89,000	\$46,000	2
Automobile Repair & Service	\$98,000	\$35,000	\$63,000	\$35,000	2
Entertainment Services	\$41,000	\$10,000	\$31,000	\$42,000	1
Health, Education, & Social Services	\$500,000	\$85,000	\$415,000	\$48,000	9
Local Government	\$208,000	\$0	\$208,000	\$51,000	4
Other	\$25,000	\$3,000	\$22,000	\$31,000	1
Total	\$2,619,000	\$501,000	\$2,118,000	\$43,000	50

Note: Business & professional services include architectural and engineering services. The "Other" category consists mostly of landscaping services, and the production of greenhouse and nursery products.

B. Local Government General Revenue by Type

TAXES:		USER FEES & CHARGES:	
Business Property Taxes	\$104,000	Residential Permit / Impact Fees	\$0
Residential Property Taxes	\$0	Utilities & Other Govt. Enterprises	\$51,000
General Sales Taxes	\$0	Hospital Charges	\$3,000
Specific Excise Taxes	\$2,000	Transportation Charges	\$0
Income Taxes	\$0	Education Charges	\$3,000
License Taxes	\$0	Other Fees and Charges	\$16,000
Other Taxes	\$4,000	TOTAL FEES & CHARGES	\$72,000
TOTAL TAXES	\$110,000	TOTAL GENERAL REVENUE	\$182,000

Impact of Building 100 Multifamily Homes in Boston, MA
Phase III -- ongoing, annual Effect that Occurs As New Homes are Occupied

A. Local Income and Jobs by Industry

Industry	Local Income	Local Business Owners' Income	Local Wages and Salaries	Wages & Salaries per Full-time Job	Number of Local Jobs Supported
Construction	\$125,000	\$28,000	\$97,000	\$48,000	2
Manufacturing	\$11,000	\$1,000	\$10,000	\$56,000	0
Transportation	\$24,000	\$1,000	\$22,000	\$48,000	0
Communications	\$77,000	\$15,000	\$62,000	\$83,000	1
Utilities	\$27,000	\$0	\$27,000	\$77,000	0
Wholesale and Retail Trade	\$610,000	\$82,000	\$528,000	\$30,000	18
Finance and Insurance	\$179,000	\$19,000	\$160,000	\$62,000	3
Real Estate	\$314,000	\$147,000	\$167,000	\$47,000	4
Personal & Repair Services	\$110,000	\$34,000	\$76,000	\$30,000	3
Services to dwellings / buildings	\$29,000	\$10,000	\$19,000	\$44,000	0
Business & Professional Services	\$203,000	\$64,000	\$140,000	\$57,000	2
Eating and drinking places	\$133,000	\$22,000	\$111,000	\$46,000	2
Automobile Repair & Service	\$114,000	\$41,000	\$73,000	\$35,000	2
Entertainment Services	\$75,000	\$19,000	\$56,000	\$42,000	1
Health, Education, & Social Services	\$359,000	\$65,000	\$294,000	\$48,000	6
Local Government	\$166,000	\$0	\$166,000	\$51,000	3
Other	\$16,000	\$2,000	\$15,000	\$31,000	0
Total	\$2,573,000	\$551,000	\$2,022,000	\$41,000	49

Note: Business & professional services include architectural and engineering services. The "Other" category consists mostly of landscaping services, and the production of greenhouse and nursery products.

B. Local Government General Revenue by Type

TAXES:		USER FEES & CHARGES:	
Business Property Taxes	\$146,000	Residential Permit / Impact	\$0
Residential Property Taxes	\$138,000	Utilities & Other Govt. Enterprises	\$73,000
General Sales Taxes	\$0	Hospital Charges	\$6,000
Specific Excise Taxes	\$2,000	Transportation Charges	\$0
Income Taxes	\$0	Education Charges	\$3,000
License Taxes	\$0	Other Fees and Charges	\$18,000
Other Taxes	\$6,000	TOTAL FEES & CHARGES	\$100,000
TOTAL TAXES	\$292,000	TOTAL GENERAL REVENUE	\$393,000

¹ The Housing Policy Department at the National Home Builders Association is responsible for creating, documenting and running the “Local Impact Homebuilding Model” for this study. NAHB is located in Washington DC.

² Geraldine Gambale (Ed), “1998 Annual Corporate Survey”, *Area Development Magazine*_(1998) Online, <http://www.area-development.com/survey98/serve1.htm>

³ Fantus Consulting is the oldest and largest consulting practice specializing in corporate site selection and economic development consulting. For more information visit their web site at <http://www.Fantus.com/index.htm>