Live Baltimore

Economic Impact of Residents

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1. Introduction

1.1. Purpose and Main Findings from Report

The City of Baltimore is in the midst of 70 years of population decline, which has had a devastating effect on the city economy and local tax base and has disproportionately adversely affected the city's most vulnerable neighborhoods. The purpose of this report is to assert the importance of committing to a comprehensive strategy for growing the city's population and doing so in a way that yields an equitable distribution of benefits.

The central premise of this report is that population growth is good for the local economy as a whole and for the city's existing households in particular. These positive impacts include:

1. Population growth creates economic activity through new construction and major renovation of residential units. For the years 2012-2021, that is responsible for a $507.4 million annual impact on the local economy, supporting 2,700 jobs and generating $1.9 million in local tax revenues each year. Amounts that will grow over time if the city grows in population.
2. Household spending is currently responsible for $12.0 billion in annual economic output in the city, supporting 59,300 jobs and generating $453.8 million in local tax revenues each year. These benefits will increase if the city adds households.
3. Population growth produces numerous gains that disproportionately go to the city's most disadvantaged households, including economic opportunities for local residents and businesses, reversal of the ruinous effects of disinvestment and blight, provision of desired public amenities, and funding for essential public services.



Investing in residential growth reaps a high return on public dollars. These investments achieve many of the policy objectives of local elected officials, including strengthening the local economy, lifting up the city's most vulnerable households, and strengthening the social fabric

of neighborhoods throughout Baltimore. And these investments have profound implications on the bottom line of City Government: the ratio of local tax revenue dollars generated by residential spending and residential construction/renovation to dollars invested by city government in resident attraction and retention marketing through Live Baltimore is nearly 1,300 to 1.

1.2. Overview of Report Structure and Methodology

This report contains four content sections, as follows:

- Section 2 – Impact from Investment in Housing. Public sector and industry data were used to estimate the present aggregate annual amount invested in residential units in the form of new construction and major renovation. Standard input-output modeling techniques were then deployed to translate that into the total economic impact associated with those investments, in the form of economic output and the employment, labor income, and local tax revenues supported by it.
- Section 3 – Impact from Resident Spending. Using publicly available information on population and household income levels, an aggregate annual household income amount was calculated for the city, and an input-output model constructed to determine how much of that household income was spent within the city and what multiplier effect that spending had in terms of creating local economic impact, supporting local jobs, and generating local tax revenues.
- Section 4 – Equity Considerations. This section provides an academic framework for positively comparing population growth and residential investment against the alternative of population loss and disinvestment. It then demonstrates that the many benefits of residential growth are disproportionately enjoyed by the city's neediest households.
- Section 5 – Return on Investment. This concluding section frames the significant economic and social impacts described throughout the report against the relatively small outlays made by City Government to support resident attraction and retention, and thus argues that additional investment is warranted for the increased economic, tax revenue, and public policy gains that will result.

This report was produced by Econsult Solutions, Inc. (ESI), a Philadelphia-based economic consulting firm with particular expertise in economic impact modeling and in the analysis of the economic and equity implications of urban growth. For more information, please visit www.econsultsolutions.com.

2. Impact from Investment in Housing

2.1. Key Findings

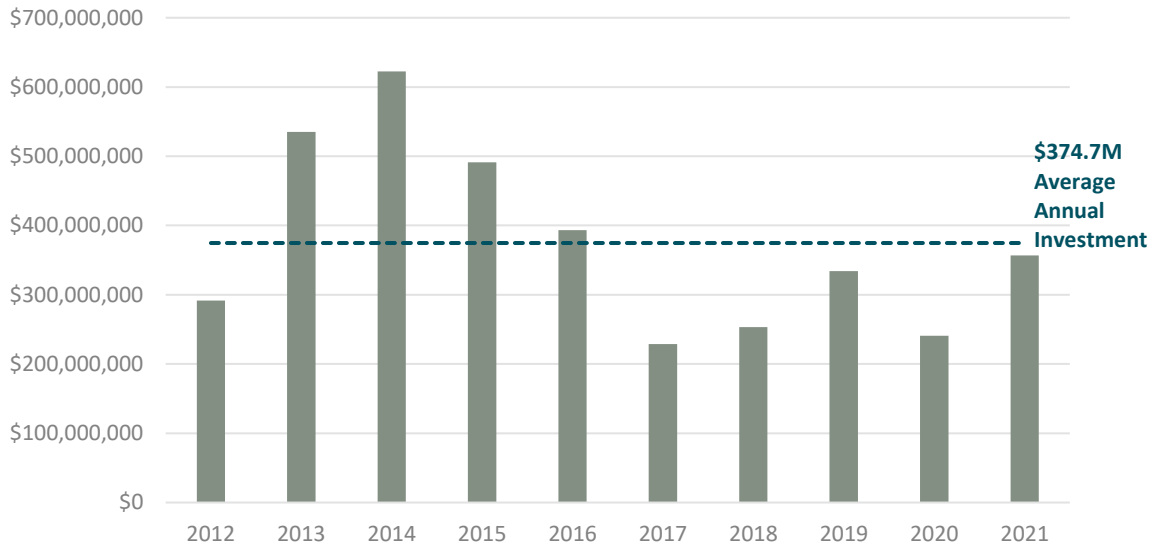
A city that is growing in population and economy sees healthy levels of investment in the form of new construction and major renovation of residential units to provide more and better housing options for existing residents and to support incoming residents. Conversely, a city that experiences sustained population loss and economic decline does not create many economic opportunities for the construction sector and does not offer many attractive housing choices for existing or new residents.

Presently, it is estimated that each year there is over $374 million in aggregate investment in new construction and major renovation of residential units in Baltimore. This yields a $507 million annual impact on the local economy, supporting 2,700 jobs and generating $1.9 million in local tax revenues. It is expected that as City Government invests in population growth over time, it will see more new construction and major renovation and a commensurate increase in local economic impact, local job creation, and local tax revenue generation.

2.2. Estimated Amount of Aggregate Investment Represented by New Construction and Major Renovations

Using publicly available data and data from Baltimore City Government, an estimate of the average aggregate investment in new construction and major renovation of residential units each year was developed. Citywide permit data from the last ten years was inflation-adjusted to consistent dollar terms ($2021), aggregated, and then annualized to develop an estimate of total construction and major renovation activity each year. Land use data from the City was joined with the permit data and used to isolate the portion of total investment in construction and major renovation directed to residential units in the city each year (see Figure 2.1).

Figure 2.1: Investment in Residential Construction and Major Renovation, City of Baltimore ($2021)



Source: Baltimore City Department of Housing and Community Development (2021), Econsult Solutions (2021)

Additional variables from the City's permit data as well as public data on the city's housing stock from the U.S. Census Bureau were used to apportion annual investment in residential units into three categories: construction of new single-family residential structures, construction of new multifamily structures, and maintenance and repair construction of residential structures. This allocation step is taken to accurately model the economic impacts associated with this residential construction activity discussed subsequently.

2.3. Economic Impact from Investment in Housing

This present amount of aggregate new construction and major renovation activity circulates through the local economy in two ways:

- First, some of the goods and services needed for such projects are procured from local vendors, yielding economic opportunities for the local business sector and enabling those businesses to support and, in some cases, create jobs. In economic terms, this is referred to as "the indirect effect."
- Second, these projects pay out salaries and wages to various workers, who in turn spend a portion of their earnings within the local economy on things like groceries, gas, and rent. That circulation of spending supports additional local businesses and local jobs, and is referred to as "the induced effect."

Using standard input-output modeling techniques and multipliers to account for these two effects, it is estimated that present levels of new construction and major renovation produce a $507.4 million annual impact on the local economy, supporting 2,700 jobs and $158.8 million in

labor income (see Figure 2.2). The multiplier effects of these activities continue beyond city boundaries to support additional economic output and employment throughout the state, such that inclusive of the impacts in the other parts of the state, outside of Baltimore, the overall economic and employment impact is ever greater.

Figure 2.2– Estimated Annual Economic Impact from New Construction and Major Renovation of Residential Units in the City of Baltimore[1]

Economic Impact	Within the City of Baltimore Economy	Within the State of Maryland Economy
Direct Impact ($M)	$374.7	$374.7
Indirect and Induced Impact ($M)	$132.7	$273.9
Total Impact ($M)	$507.4	$648.6
Total Employment Supported (FTE)[2]	2,700	3,400
Total Labor Income Supported ($M)	$158.8	$195.4

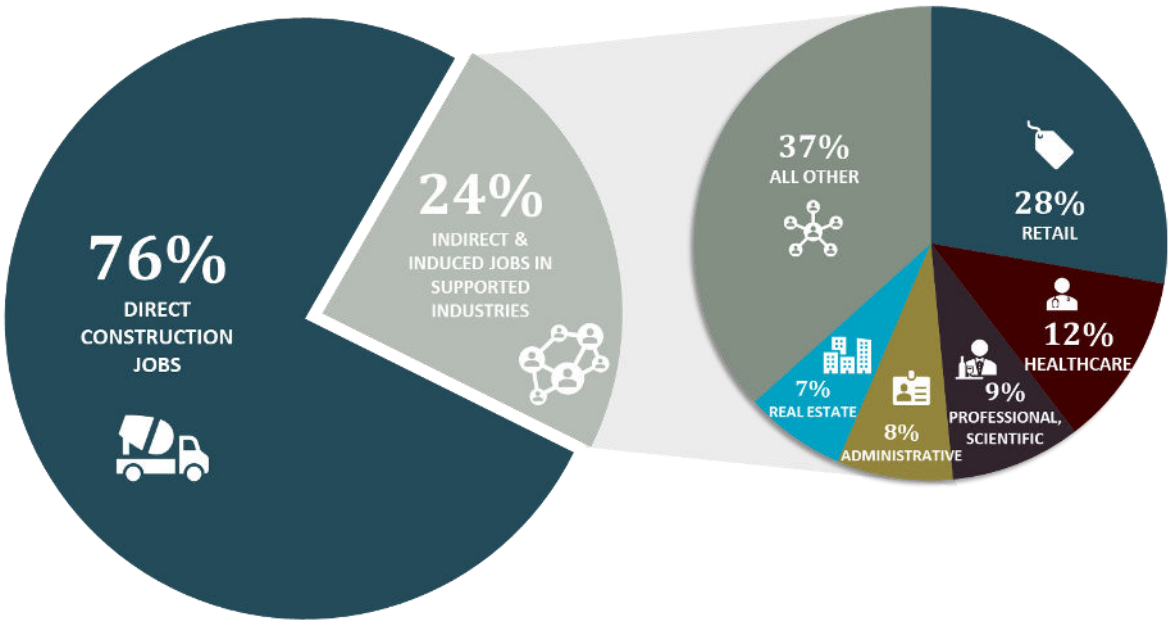
Source: IMPLAN (2019), Econsult Solutions (2021)

Although the construction industry sees the greatest positive economic impact from this activity, other sectors benefit too, reflecting the footprint of goods and services needed for such projects as well as the customary categories in which household spending of salaries and wages takes place. It is estimated that 24 percent of the local employment impact of this activity is spread across numerous sectors outside of construction, in particular retail trade; health care and social assistance; and professional, scientific, and technical services (see Figure 2.3).

[1] For economic impact results presented here and elsewhere in the report, because the city of Baltimore economy is wholly contained within the state of Maryland economy, the city of Baltimore economic impacts are included in the state of Maryland economic impacts, with the difference between the two representing the impact in the parts of the state outside the city.

[2] Throughout this report, employment impact is expressed in full-time equivalent (FTE) jobs as the unit of measurement, reflecting the aggregation of all of the pieces of various jobs supported in industries throughout the city and state.

Figure 2.3 – Estimated Industry Distribution of Local Employment Impact from New Construction and Major Renovation of Residential Units in Baltimore



Source: IMPLAN (2019), Econsult Solutions (2021)

All of these economic impacts in turn expand various local and state tax bases, yielding tax revenues to the City of Baltimore and State of Maryland governments. It is estimated that at present, new construction and major renovation of residential units in Baltimore generates $1.9 million a year in tax revenues to the City and an additional $21.6 million a year in tax revenues to the State (see Figure 2.4).

Figure 2.4 – Estimated Annual Tax Revenue Impact from New Construction and Major Renovation of Residential Units in the City of Baltimore[3]

Tax Revenue Impact	To the City of Baltimore Government	To the State of Maryland Government
Personal Income Tax Revenues($M)	$1.9	$7.9
Sales Tax Revenues($M)	$0.0	$4.1
Business Tax Revenues($M)	$0.0	$9.6
Total Tax Revenues($M)	$1.9	$21.6

Source: IMPLAN (2019), Econsult Solutions (2021)

[3] For tax revenue impact results presented here and elsewhere in the report, because the City of Baltimore and the State of Maryland governments are distinct, the City of Baltimore and State of Maryland tax revenue impacts are separate.

If the City is able to achieve population growth, that will mean more new construction and major renovation, and in turn a commensurate increase in the economic, employment, and tax revenue impacts described in this section.

3. Impact from Resident Spending

3.1. Key Findings

Household spending is a major driver of local economies. In Baltimore, it is estimated that residents represent an aggregate $16.4 billion in annual household income. Some of that household income is spent back into the local economy in a wide range of normal household spending categories like food, entertainment, and transportation. This represents economic opportunity for local merchants and vendors, who in turn employ local residents, rely on local supply chains, and pay local taxes.

At present, it is estimated that resident spending produces an $8.2 billion impact on the local economy, supporting 40,700 jobs and generating $840.7 million in local tax revenues. This means one out of every eight jobs located in the city is supported by the spending of the city's residents. Of particular note, only a fraction of jobs are in the lower wage industries of Retail Trade or Accommodation and Food. This amount will grow over time if the city is successful in growing its population and in turn the amount of household income that lives in Baltimore.

3.2. Economic Impact from Resident Spending

Determining what the economic impact of resident spending is in Baltimore requires estimating the number of households in the city and the distribution of those households by income level. This is because households at different household income levels have different household spending profiles, in terms of how much they spend versus save and in which categories they spend.

Presently, there are about 240,000 households in Baltimore, about half of which have annual household incomes of less than $50,000 (see Figure 3.1). According to the most recently available data from the Maryland State Comptroller (as of 2019), households in Baltimore represent approximately $11.3 billion in taxable annual household income.[4]

[4] Comptroller of Maryland (2020), *Income Tax Summary Report - Tax Year 2019*. https://www.marylandtaxes.gov/reports/static-files/revenue/incometaxsummary/summary19.pdf.

Figure 3.1– Estimated Number of Households in Baltimore by Income Level[5]

Income Range	# Households	% Households
Less than $15k	41,845	18%
$15 to $30k	35,628	15%
$30 to $40k	21,662	9%
$40 to $50k	19,706	8%
$50 to $70k	31,181	13%
$70 to $100k	33,620	14%
$100 to $150k	29,172	12%
$150 to $200k	12,195	5%
Greater than $200k	14,108	6%
Total	239,116	100%

Source: US Census Bureau (2019), Econsult Solutions (2021)

Of that $11.3 billion in aggregate annual household income that resides in Baltimore, some is saved, and some is spent outside of Baltimore. But a good portion is spent back into the local economy in the form of typical household outlays such as rent, groceries, and gas. This represents economic opportunity for local businesses, supports local jobs, and generates local tax revenues. Importantly, these impacts are originated by household spending at all income levels, for while upper-income households make more money and therefore have more to spend, lower-income households tend to spend a higher proportion of their earnings and therefore generate a higher impact on the local economy relative to their household income levels.

It is estimated that present annual household income levels in Baltimore produce a $8.2 billion impact on the local economy, supporting 40,700 jobs and $2.6 billion in labor income (see Figure 3.2).[6] As there are about 326,000 jobs located in the city, that means that the equivalent of almost one out of every eight of those jobs is supported by the spending of the residents of the city.[7] The effects of this household spending continue to emanate beyond city borders to create positive impacts in parts of Maryland outside Baltimore, such that impacts within the state economy as a whole are even larger.

[5] Household income data is drawn from the US Census Bureau's American Community table S1901 and represents the sum of a household's reported wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income. The value of income "in kind" from food stamps, public housing subsidies, medical care, etc. is NOT included when determining total household income for this table.

[6] The modeling approach undertaken explicitly accounts for the spending patterns of households of different income levels in the city. Inputs to the model are developed based on the relative amount of aggregate household income in the city derived from households in different income bands. The input-output modeling software IMPLAN establishes these income groupings and accounts for the spending patterns of households at different income levels in the modeling of economic impacts.

[7] The US Bureau of Labor Statistics reports that as of the first quarter of 2021 there were 326,600 jobs located in the city of Baltimore. Resident spending supports pieces of jobs throughout the city, adding up to 40,700 full-time equivalent jobs.

Figure 3.2 – Estimated Annual Economic Impact from Household Spending by Residents of the City of Baltimore

Economic Impact	Within the City of Baltimore Economy	Within the State of Maryland Economy
Direct Household Income ($B)	$11.3	$11.3
Total Impact ($B)	$8.2	$10.2
Total Employment Supported (FTE) [8]	40,700	50,200
Total Labor Income Supported ($B)	$2.6	$3.1

Source: IMPLAN (2019), Econsult Solutions (2021)

As noted above, household spending that is retained in the local economy supports a wide range of industry sectors, befitting the many categories in which households spend money locally. This in turn supports jobs in a broad range of industry sectors, particularly health care and social assistance, retail trade, and accommodation and food services (see Figure 3.3). As compared to the breakdown of all local employment citywide, spending by local households disproportionately supports employment in these industry sectors (see Figures 3.3 and 3.4) which yields many jobs that are more broadly accessible to all city residents (as indicated by the distribution of the residential location of employees in these sectors, which can be seen in Figures 4.1 to 4.3 of this report).[9]

[8] Throughout this report, employment impact is expressed in full-time equivalent (FTE) jobs as the unit of measurement, reflecting the aggregation of all of the pieces of various jobs supported in industries throughout the city and state.

[9] Figures 3.3 and 3.4 show the distribution of employment across the ten industry sectors which had the greatest relative share of employment. Employment in all additional sectors (beyond the top ten) is aggregated and captured in "All Other." In Appendix 6.2, a full sector breakdown of the employment impact summarized in Figure 3.3 and of overall local employment in Baltimore summarized Figure 3.4 are provided.

Figure 3.3 – Estimated Industry Distribution of Local Employment Impact from Household Spending by Residents of the City of Baltimore

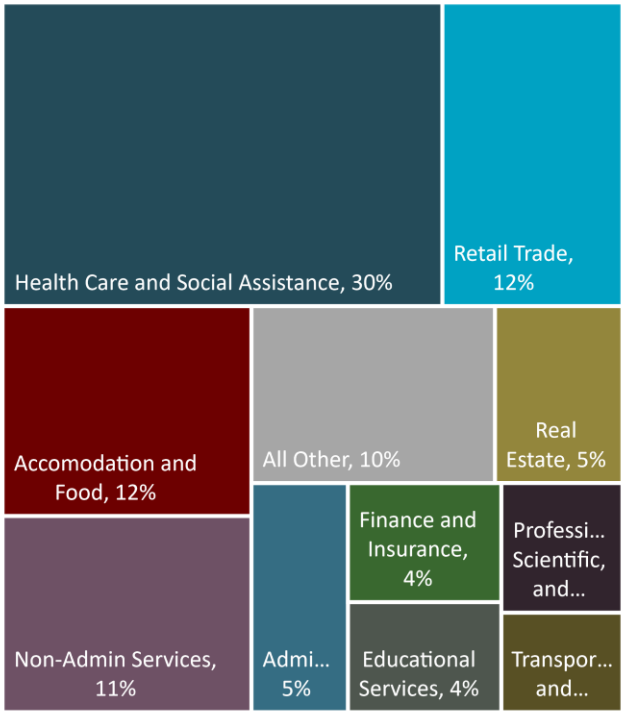
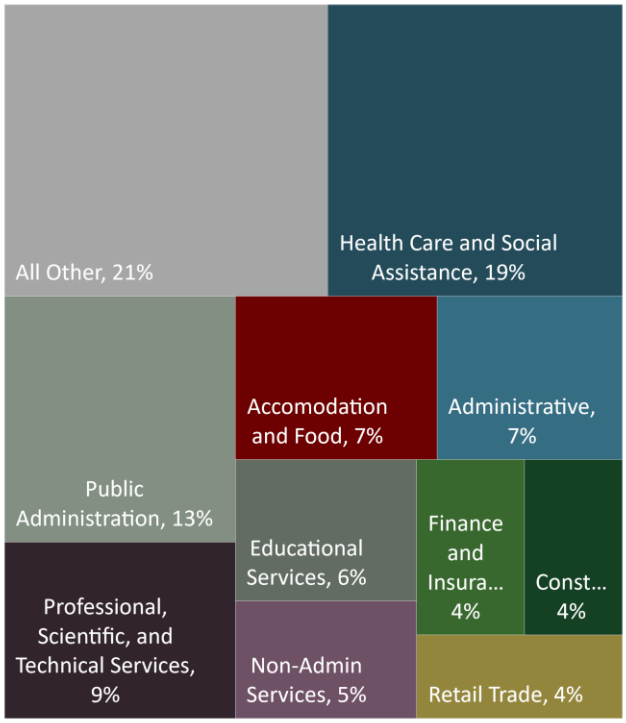


Figure 3.4 – Estimated Industry Distribution of all Local Employment in the City of Baltimore



Source: IMPLAN (2019), Econsult Solutions (2021)

3.3. Tax Revenue Impact from Resident Spending

City residents also represent a significant amount of tax revenues for the City of Baltimore and State of Maryland governments. This comes from at least three sources. First, Baltimore residents directly pay personal income taxes to the City and the State. Second, Baltimore residents directly pay local property taxes which benefit the City as well as Baltimore Public Schools. Third, Baltimore residents spend money in the city and state, creating economic opportunity that results in various local and state tax revenues.

To begin with and as noted above, it is estimated that in the aggregate, Baltimore households represent approximately $11.3 billion in taxable personal income. In FY 2019, the Maryland State Comptroller reported that the City of Baltimore netted $347 million in local personal income taxes and the State of Maryland netted an additional $516 million in state personal income taxes from Baltimore households. (see Figure 3.5).[10]

[10] Comptroller of Maryland (2020), *Income Tax Summary Report - Tax Year 2019*. https://www.marylandtaxes.gov/reports/static-files/revenue/incometaxsummary/summary19.pdf.

Figure 3.5 – Annual Local and State Personal Income Tax Revenue from Households in Baltimore City

Aggregate Taxable Income	Net Local Personal Income Taxes Paid to City of Baltimore	Net State Personal Income Taxes Paid to State of Maryland
$11.3 billion	$347.4 million	$516.3 million

Source: Comptroller of Maryland (2020)

Furthermore, a significant portion of that aggregate household income is spent back into the local and state economy, supporting economic activity in the city and state (see Figure 3.2 above). This economic activity in turn supports various local and state tax bases. It is estimated that at present, household spending by Baltimore residents generates economic activity that yields over $30 million a year in tax revenues to the City and nearly $373 million a year in tax revenues to the State (see Figure 3.6).[11]

Figure 3.6 – Estimated Annual Tax Revenue Impact from Household Spending by Residents of the City of Baltimore

Tax Revenue Impact	To the City of Baltimore Government	To the State of Maryland Government
Personal Income Tax Revenues($M)	$30.5	$123.4
Sales Tax Revenues($M)	$0	$74.7
Business Tax Revenues($M)	$0	$174.6
Total Tax Revenues	$30.5	$372.7

Source: IMPLAN (2019), Econsult Solutions (2021), Maryland Department of Finance (2020)

Households in the city also support the local property tax base, either directly through homeownership or indirectly through rental housing. Based on available property tax data, it is estimated that city residents represent almost $500 million in annual local property tax revenues to support the City of Baltimore. (see Figure 3.7).

Figure 3.7 – Local Annual Property Tax Revenue from Households in Baltimore City

Aggregate Local Property Tax Revenues Collected	Estimated Residential Share[12]	Aggregate Local Property Taxes Paid by Residents
$887.5 million	56%	$493.3 million

[11] All of the portion of the local tax revenues that is personal income taxes is already accounted for in the figure above which covered local personal income taxes directly paid by local residents. Hence, some of the local personal income taxes directly paid by local residents was generated as a result of household spending supporting employment for and labor income to local residents. But state tax revenues generated by local household spending in other tax categories, such as sales tax revenues and business tax revenues, represent additional state tax revenues over and above those directly paid by local residents. As for state personal income tax revenues generated by local household spending, some of that is already accounted for in the figure above which covered state personal income taxes directly paid by local residents, but some of that represents state personal income taxes directly paid by non-Baltimore residents in the state and therefore is additional to the amount of state personal income taxes directly paid by local residents.

[12] Based on share of property tax base that is residential.

Source: Baltimore City Department of Finance (2020), Maryland Department of Assessments and Taxation (2018), Econsult Solutions, Inc. (2021)

All told, this sums to nearly $841 million in local tax revenues generated and over $765 million in state tax revenues generated by Baltimore residents, either from personal income taxes directly paid by those households, sales and business tax revenues generated by spending by these households, or property taxes paid by these households (see Figure 3.8).

Figure 3.8 – Aggregate Local and State Tax Revenues Generated by Local Residents ($M)

	To the City of Baltimore Government	To the State of Maryland Government
Local and State Personal Income Taxes Directly Paid by Baltimore Residents($M)	$347.4	$516.3
State Sales and Business Tax Revenues Generated from Spending by Baltimore Residents($M)	$0	$249.2
Local Property Taxes Directly Paid by Baltimore Residents($M)	$493.3	$0
Total	**$840.7**	**$765.5**

Source: Econsult Solutions (2021), Comptroller of Maryland (2020), Maryland Department of Finance (2020), Maryland Department of Assessments and Taxation (2018), IMPLAN (2019)

Of course, population growth will increase the number of households residing in Baltimore and therefore the amount of household income living in the city and the amount of household spending that occurs in the city. Hence, investments by the City to grow the residential population would yield larger economic impacts, resulting in more economic activity, more jobs supported, and more tax revenues generated.

4. Equity Considerations

4.1. Key Findings

While it is useful to understand the present economic impact from residents in Baltimore, it is also necessary to understand whether the distribution of these positive gains is equitable or not. It is not very satisfying if the city is seeing economic benefits, but those benefits are not being enjoyed by the city's neediest households. Rather, it is very important to City leaders that economic gains are distributed in ways that address present inequities.

Fortunately, the economic impact of population growth behaves in this way. A city that desires equitable distribution of economic benefits should greatly prefer investment over disinvestment and population gain over population loss. The purpose of this section is to explain that because of how cities function, population increases produce gains that disproportionately benefit a city's most vulnerable households, whereas population declines produce pains that are disproportionately borne by those households.

4.2. Investment Vs Disinvestment

Cities are structured, physically and fiscally, such that population gains are generally good for local quality of life, a local economy, and a local tax base. This is particularly true for older cities in the northeastern United States that have historically had higher population levels and therefore possess legacy infrastructure to support population levels much higher than present levels.

In fast-growing and far-flung suburban settings, population increases can yield more downsides than upsides, in the form of added traffic congestion and the added costs of building new physical and service infrastructure to accommodate higher population levels. Roads may need to be built, utility infrastructure may need to be extended to new sites, and new schools may need to be built to accommodate the overflow of school-aged children.

In contrast, in dense urban settings like Baltimore, the physical and service infrastructure already exists to support higher population levels. Increases in the number of workers commuting to the downtown core can be absorbed by existing transit capacity, neighborhoods can get denser in population without the need for major utility infrastructure investment, and many school buildings have excess capacity to take in enrollment increases.

Hence, in urban settings such as Baltimore, when the population grows, the commensurate increase in revenues (e.g. from property and income taxes) far exceeds any marginal increase in expenditures (e.g. provision of public services, investment in public infrastructure). This is true for all kinds of household income levels and not just upper-income households that may pay

more in taxes. While lower-income households will pay less in taxes, on the margins the net increase in public expenditures to serve them is likely to be very small if not effectively zero. Cities are also where residential density begets enhanced social exchange and cultural expression, so population growth produces quality of life benefits as well as fiscal benefits.

In contrast, population decline is destructive for cities and is especially bad for less resourced households. Population decline hollows out a local tax base without any commensurate reduction in public expenditures, creating municipal budget deficits and necessitating painful choices around tax increases and service cuts, which disproportionately affect households who rely on public resources. Population decline also creates a vicious cycle of disinvestment, blight, and further population loss, in the process negatively impacting the very households that have the least mobility and fewest choices to mitigate against these negative impacts.

Population gains do pose equity concerns, in that it is very easy for benefits to be distributed in ways that do not line up with present need. But at least with population gain comes the possibility and in many cases likelihood of equitable distribution of benefits. With population loss come certain pains, which are sure to be disproportionately borne by the households least resourced to bear them. The way cities are structured, it is far better, if pursuing equitable gains, to work towards population growth than population decline.

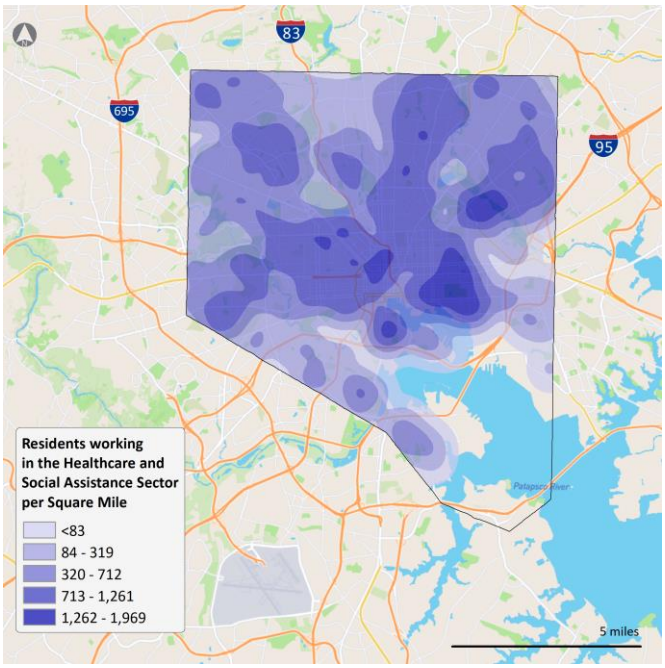
4.3. Equitable Benefits

Having established the philosophical case for population growth producing equitable gains in a city like Baltimore, this report now turns to more practical considerations. Investing in resident attraction and retention such that the city reverses 70 years of population decline and begins to grow again will produce three benefits that are of relevance to the city's existing households and especially to the most vulnerable of those households.

First, as discussed in the previous two sections, investment in housing and resident spending both yield economic opportunities for local businesses in the form of procurement of various goods and services, as well as economic opportunities for local residents in the form of jobs supported. As shown in the data visualizations of the industry distribution of employment impact, these activities create economic gains in a wide range of industry sectors that represent direct economic opportunity for local businesses and local residents. Construction and renovation projects create contract opportunities for local businesses and job opportunities for local residents. And, residential spending supports economic activity and employment in sectors represented by businesses and residents throughout the city, such as retail, hospitality, and health care. Hence, the economic impacts described in the previous two sections positively touch businesses and residents throughout the city by creating contract and employment opportunities in a diverse range of sectors and spanning a wide range of contract and salary levels. As highlighted in section 3.2, health care and social assistance, retail trade, and

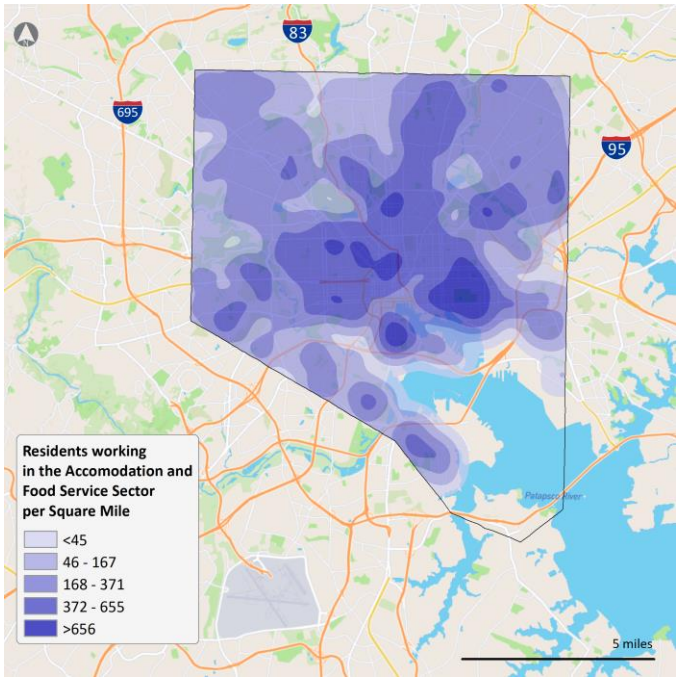
accommodation and food services represent the largest shares of employment supported by household spending by residents. The residential locations of workers in these respective industries span widely across Baltimore, ensuring every neighborhood in the city enjoys the benefits of household spending (see figures 4.1 to 4.3).

Figure 4.1: Residential Location of Healthcare and Social Assistance Workers



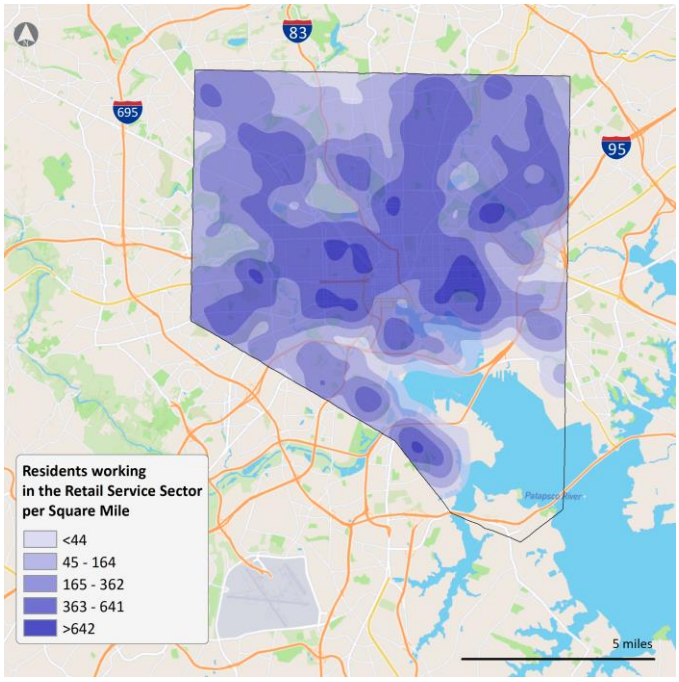
Source: US Census Longitudinal Employer Households Dynamics (2018), Econsult Solutions, Inc. (2021)

Figure 4.2: Residential Location of Accommodation and Food Workers



Source: US Census Longitudinal Employer Households Dynamics (2018), Econsult Solutions, Inc. (2021)

Figure 4.3: Residential Location of Retail Workers



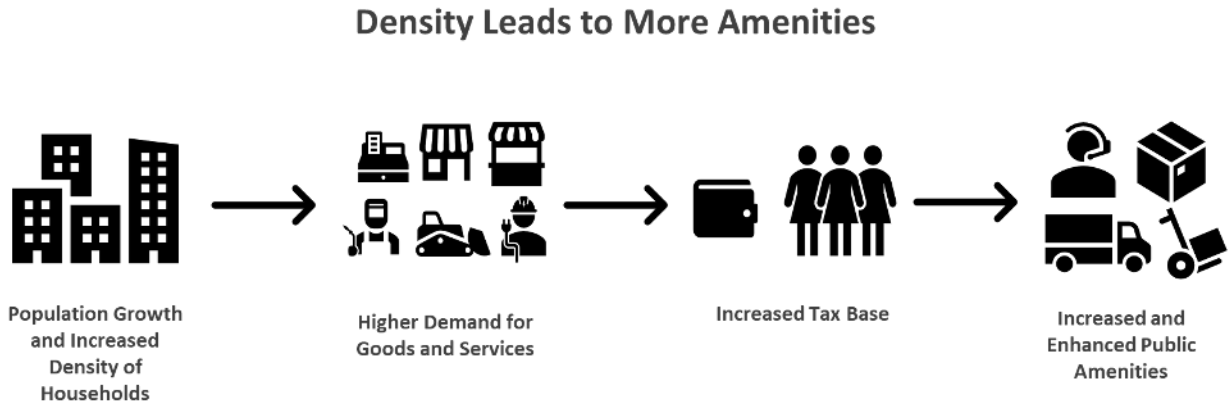
Source: US Census Longitudinal Employer Households Dynamics (2018), Econsult Solutions, Inc. (2021)

Second, population growth yields net fiscal gains that fund many public services that are particularly critical to less-resourced households. As noted earlier in this section, the way cities

like Baltimore work is that population gains grow City Government revenues without much in the way of commensurate increases in City Government expenditures. This means more funds for critical public services like green space, schools, and recreation centers. Households in Baltimore that cannot afford to pay for private versions of those resources therefore stand to gain the most when City Government has more funds to invest in publicly available versions of those resources.



Third, and related to the previous point, increased density of households makes more possible the arrival of desired amenities that can be enjoyed by all. Transportation infrastructure, shopping plazas, and parks are all examples of amenities that all people enjoy and that all people can freely access. Population gains create the conditions where these things can be added and enhanced. As discussed, a growing tax base provides the funds for public sector investments, while private sector investments occur when there is a proven marketplace to support those investments, such as a retail center or a housing development with publicly available green space. In contrast, population declines make providing and sustaining such resources much more difficult. A shrinking tax base means cuts in funding to maintain existing amenities and insufficient funds to contemplate new amenities. Meanwhile, private sector investments get deployed to places with high demand, passing over places where growth is not happening.



The equitable distribution of such benefits is not a given. A robust residential market can lead to economic opportunities for local residents and businesses, but whether it actually does or not depends in part on putting forth the effort to encourage and measure equitable distribution of economic opportunity. Similarly, population growth can yield funds and generate demand to support public and private sector investment in desired services and amenities. Whether that actually happens or not depends in part on whether the effort is made to create processes to ensure local participation and community benefit.

Nevertheless, population growth puts a city in a position to generate equitable benefits. In contrast, population decline, especially over a long period of time, ensures that a city will see very few benefits and bear many costs, and the distribution of that dearth of benefits and that cost burden will be disproportionately felt by the city's least resourced households, who will suffer from a lack of economic opportunities, a vicious cycle of disinvestment, blight, depopulation, and insufficient supply of key public services like schools, recreational space, and shopping options. Hence, for economic and policy purposes, the City of Baltimore should prefer population gain over population loss, investing in the former and working to make sure the resulting benefits are equitably distributed.

5. Return on Investment in Resident Attraction/ Retention

5.1. Economic and Fiscal Considerations

One way city governments must evaluate public investments is in enabling economic vitality, in the form of commercial activities and job levels, and fiscal sustainability, in the form of tax revenue generation that exceeds service provision expenditure. From this lens, investing in residential growth produces a compelling return for the City of Baltimore.

In fiscal year 2020, the City currently invested $652,000 in Live Baltimore, the primary entity in the city that works on resident attraction and retention.[13] As this report demonstrates, investment in residential units plus the household spending of residents generates an economic impact far in excess of that annual investment in Live Baltimore (see Figure 5.1 and Figure 5.2). For example, the total annual tax revenue gain to the City of Baltimore from these two categories is nearly 1,300 times the annual investment made by the City in Live Baltimore.

Figure 5.1– Estimated Annual Economic Impact from New Construction and Major Renovation of Residential Units in the City of Baltimore and from Household Spending by Residents of the City of Baltimore

Economic Impact within City of Baltimore Economy	From Construction and Major Renovation of Residential Units	From Household Spending by Residents	Total
Direct Impact ($M)	$374.7	$0	$374.7
Indirect and Induced Impact ($M)	$132.7	$8,210.1	$8,342.7
Total Impact($M)	$507.4	$8,210.1	$8,717.4
Total Employment Supported (FTE)[14]	2,700	40,700	43,400
Total Labor Income Supported ($M)	$158.8	$2,565	$2,723.4

Source: IMPLAN (2019), Econsult Solutions (2021)

[13] Live Baltimore (2020), Live Baltimore's Annual Report – Fiscal Year 2020. https://livebaltimore.com/wp-content/uploads/2021/02/Live-Baltimore_FY20_Annual-Report.pdf.

[14] Throughout this report, employment impact is expressed in full-time equivalent (FTE) jobs as the unit of measurement, reflecting the aggregation of all of the pieces of various jobs supported in industries throughout the city and state.

Figure 5.2 – Estimated Annual Tax Revenue Impact from New Construction and Major Renovation of Residential Units in the City of Baltimore and from Household Spending by Residents of the City of Baltimore ($M)

Tax Revenue Impact to City of Baltimore Government	From Construction and Major Renovation of Residential Units	From Household Spending by Residents	Total
Personal Income Tax Revenues($M)	$1.9	$347.4	$349.3
Property Tax Revenues($M)	$0	$493.3	$493.3
Total Tax Revenues	**$1.9**	**$840.7**	**$842.6**

Source: Econsult Solutions (2021), Comptroller of Maryland (2020), Maryland Department of Finance (2020), Maryland Department of Assessments and Taxation (2018), IMPLAN (2019)

5.2. Public Policy Considerations

City governments do not just evaluate outlays based on how much they will return in tax revenues. Another way city governments must evaluate public investments is in achieving desired policy objectives, such as equity, quality of life, and brand reputation.

In all of these regards, the City has much to gain when it supports the primary entity in Baltimore that works on resident attraction and retention marketing. Population gains turn the city's image to the outside world to being a place of commercial dynamism and social vibrancy, rather than of stagnancy and decline. Quality of life improves across the city as blight is replaced with investment, improving the aesthetic of the areas being developed and generating funds to support physical investments in neighborhoods throughout the city. And, as noted above, population growth puts into motion many beneficial impacts that are disproportionately enjoyed by the city's most vulnerable households, enabling the city to avoid the less desirable extremes of continued blight on the one hand and rampant disparity on the other.

After 70 years of population decline and an attendant vicious cycle of disinvestment and blight, Baltimore is ready to grow again, and to do so in ways that are equitable in nature. Residential growth is an important driver of this new trajectory. City government should respond with investments of time and resources to catalyze and guide this growth, for the good of the city as a whole and with eye to lifting up the city's most vulnerable households and neighborhoods.

6. Appendix

6.1. About Econsult Solutions, Inc.

This report was produced by Econsult Solutions, Inc. ("ESI"). ESI is a Philadelphia-based economic consulting firm that provides businesses and public policy makers with economic consulting services in urban economics, real estate economics, transportation, public infrastructure, development, public policy and finance, community and neighborhood development, planning, as well as expert witness services for litigation support. Its principals are nationally recognized experts in urban development, real estate, government and public policy, planning, transportation, non-profit management, business strategy and administration, as well as litigation and commercial damages. Staff members have outstanding professional and academic credentials, including active positions at the university level, wide experience at the highest levels of the public policy process and extensive consulting experience.

6.2. Chapter 3 Supplemental Tables

Figure 6.1: Estimated Industry Distribution of Local Employment Impact from Household Spending by Residents of the City of Baltimore

NAICS Code	NAICS	Share of Employment
62	Health Care and Social Assistance	30%
44-45	Retail Trade	12%
72	Accommodation and Food Services	12%
81	Other Services (except Public Administration)	11%
53	Real Estate and Rental and Leasing	5%
56	Administrative and Support and Waste Management and Remediation Services	5%
52	Finance and Insurance	4%
61	Educational Services	4%
54	Professional, Scientific, and Technical Services	4%
48	Transportation and Warehousing	3%
71	Arts, Entertainment, and Recreation	2%
42	Wholesale Trade	2%
49	Transportation and Warehousing	2%
51	Information	1%
55	Management of Companies and Enterprises	1%
23	Construction	1%
92	Public Administration	1%
22	Utilities	0%
31	Manufacturing	0%
32	Manufacturing	0%
21	Mining, Quarrying, and Oil and Gas Extraction	0%
11	Agriculture, Forestry, Fishing and Hunting	0%
33	Manufacturing	0%

Source: IMPLAN (2019), Econsult Solutions (2021)

Figure 6.2: Estimated Industry Distribution of All Local Employment in the City of Baltimore

NAICS Code	NAICS	Share of Employment
62	Health Care and Social Assistance	19%
92	Public Administration	13%
54	Professional, Scientific, and Technical Services	9%
72	Accommodation and Food Services	7%
56	Administrative and Support and Waste Management and Remediation Services	7%
61	Educational Services	6%
81	Other Services (except Public Administration)	5%
52	Finance and Insurance	4%
23	Construction	4%
44-45	Retail Trade	4%
53	Real Estate and Rental and Leasing	4%
48	Transportation and Warehousing	3%
49	Transportation and Warehousing	3%
71	Arts, Entertainment, and Recreation	3%
42	Wholesale Trade	2%
51	Information	1%
55	Management of Companies and Enterprises	1%
32	Manufacturing	1%
31	Manufacturing	1%
22	Utilities	1%
33	Manufacturing	1%
21	Mining, Quarrying, and Oil and Gas Extraction	0%
11	Agriculture, Forestry, Fishing and Hunting	0%

Source: IMPLAN (2019), Econsult Solutions (2021)

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