

The Power of Residential Growth

How Increasing Baltimore's Population Strengthens Local Neighborhoods and Boosts the City Economy

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Table of Contents

1.	Introduction	5
1.1.	Purpose of Report	5
1.2.	Economic and Social Impact	5
1.3.	The Importance of Residents to the City’s Future Economic Development Successes	8
1.4.	Organization of Report	8
2.	The Case for Residential Growth Strategies.....	9
2.1.	Section Overview	9
2.2.	A Dynamic Competition for Residents	9
2.3.	Residential Growth Alleviates Present Fiscal Pressures	10
2.4.	An Analytical Approach to Quantifying the Impact of Residential Growth Strategies	11
3.	Economic Impact from New Residents	13
3.1.	Section Overview	13
3.2.	The Many Ways Residential Growth Creates Economic Impact.....	13
3.3.	Scale and Composition of New Households	14
3.4.	One-Time Economic Boost from New Construction and Major Rehabilitation.....	15
3.5.	New Households in the City Means New Spending in the City	17
3.6.	Economic Impact from Residential Growth – Sharing the key economic impact results	19
3.7.	Tax Revenue Impact from Residential Growth	20
3.8.	A More Vibrant City Economy	22
3.9.	Compared to What.....	24
4.	Return on Investment on Residential Growth Strategies	25
4.1.	Section Overview	25
4.2.	ROI as an Evaluative Framework.....	25
4.3.	Net New Expenditures (Service and Infrastructure Expenditures)	26
4.4.	Net New Expenditures (Education Expenditures).....	28
4.5.	Public Resources Invested/Foregone	29
4.6.	Is the ROI Sufficient	31
5.	Impacts on Existing Residents	33

5.1. Section Overview	33
5.2. Inclusive and Equitable Economic Development.....	33
5.3. Distribution of Economic Opportunity	34
5.4. Key Public Services Supported by Net New Tax Revenues.....	37
5.5. Public Access to Amenities	38
5.6. Gentrification and Displacement	39
5.7. Residential Growth from the Perspective of Existing Residents.....	40
6. Findings and Recommendations	41
6.1. Section Overview	41
6.2. Summation of Key Findings	41
6.3. Research Approach	42
6.4. Characteristics of Effective Efforts.....	44
6.5. Recommendations	52
6.6. What is at Stake	54
Appendix A: Distribution of Neighborhoods by Race and Income, 2000-2017	55
Appendix B: Economic and Tax Revenue Impact Methodology	56
Appendix C: Scale and Composition of New Households.....	58
Appendix D: Impacts from New Construction and Major Rehabilitation.....	61
Appendix E: Property Tax Base Increase Calculation	63
Appendix F: Public School Age Children Calculation	65
Appendix G: Positive Return on Investment in Tax Incentives to Induce New Residential Construction ..	67
Appendix H: Photo Credits.....	69
Appendix I: About Econsult Solutions, Inc.	70

1. Introduction

1.1. Purpose of Report

Econsult Solutions, Inc. was hired by Baltimore Development Corporation (BDC) to quantify the benefit of residential growth on the Baltimore and Maryland economies, to determine whether that benefit represents a positive impact on existing residents, and to make the case for efforts that will foster population growth in the city.

Residents are a major economic engine, supporting jobs in a variety of sectors and generating tax revenues for local and state governments. If executed properly, residential growth strategies have a high return on investment (ROI) in terms of public dollars spent and public gains achieved. This is particularly true for places like Baltimore, which have suffered decades of population decline but are now poised for growth and for the gains that come from it.

An important objective of the City of Baltimore, as expressed in the Comprehensive Economic Development Strategy (CEDS) it is currently working on in concert with BDC, is how to stimulate inclusive economic growth in the face of continued population decline, economic disinvestment, and racial inequality. Strategies that increase the number of people living in the city should be considered an important component of Baltimore's revival, because population growth is essential to economic growth and produces benefits that are broadly distributed.

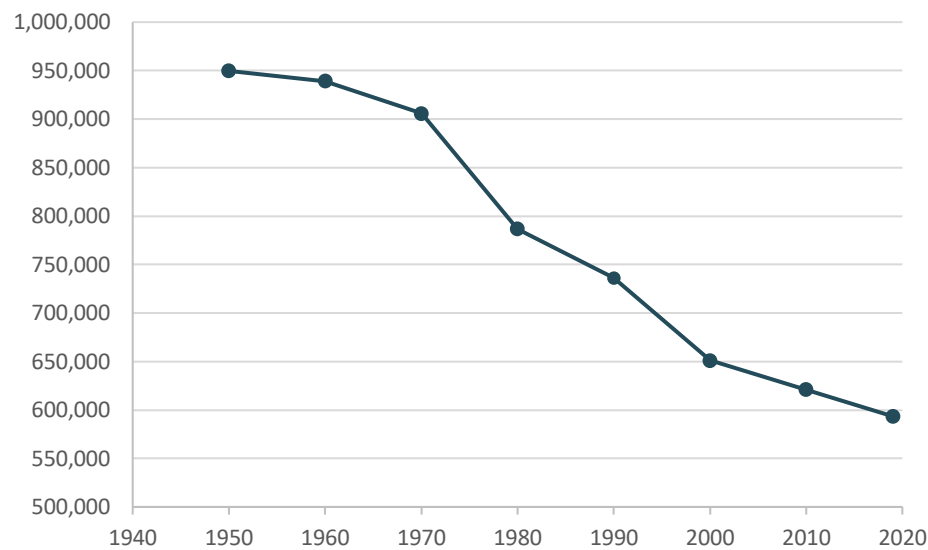
In light of the COVID-19 pandemic and measures taken to prevent the spread of the virus, it will be important to reassert the power of people in cities. In other words, it must be stated and proven that the factors that make cities unique – intensity and diversity of people in one place – will continue to drive regions. As Baltimore City government (the City) contemplates its own investments and seeks continued support from Annapolis, policymakers need to understand the primacy of residential growth strategies to securing a vibrant economy, a growing tax base, and a flourishing community.

1.2. Economic and Social Impact

Like many industry-dominated northeastern cities, Baltimore has a proud legacy of manufacturing that made the city an economic powerhouse in the first 200 years of our nation's history, but has long been undergoing a painful transition to a post-manufacturing economic structure. Once thriving factories from the first half of the 20th century have become abandoned buildings in the Baltimore cityscape. Baltimore's population peaked at 950,000 in 1950 but recently dipped under 600,000 in the most recent Census release (March 2020).¹

¹ The last time Baltimore's population was below 600,000 was before 1920, when it leaped by over 30 percent from 558,000 in 1910 to 734,000 in 1920.

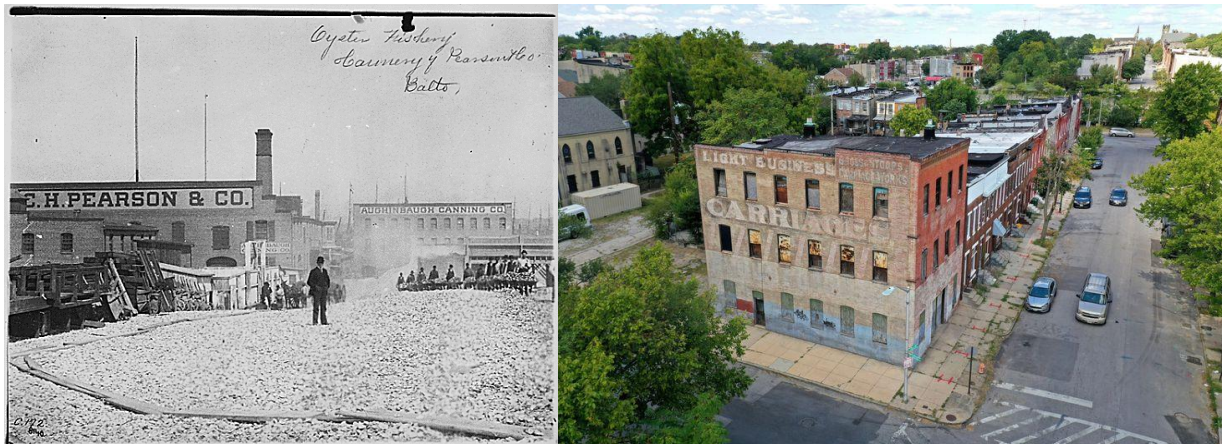
Figure 1.1: Baltimore City Population, 1950-2019



357,000

decline in Baltimore
population from 1950
to 2019 (70 years of
population loss)

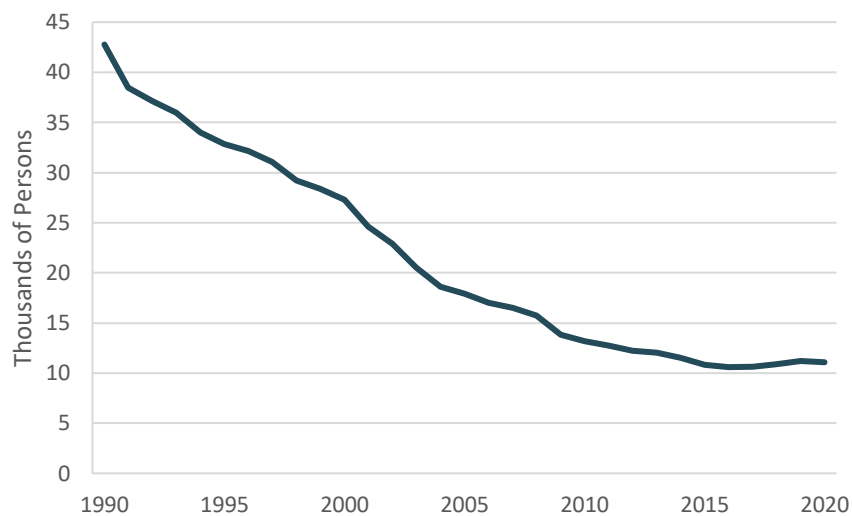
Source: U.S. Census Bureau (2020)



A booming manufacturing sector once employed tens of thousands of Baltimore residents, circulating labor income through the local economy. Today, many factories have been long abandoned and are having a blighting influence on their immediate neighborhoods.

Baltimore has always boasted a dynamic mix of economic activity, with global leaders and a vibrant small business community in multiple sectors. But now that we are squarely in a knowledge-based economy rather than a manufacturing-based one, Baltimore has lacked job creation and economic activity to offset what is now 70 years and counting of population decline, with attendant disinvestment throughout the city.

Figure 1.2: Manufacturing Employment in Baltimore, 1990-2020



74%

Decrease in annual
manufacturing
employment from
1990 to 2020

Source: Federal Reserve Economic Data (2020)

The pain of this long decline has not been equitably distributed, but rather the city is experiencing vast economic and social disparities that largely fall along racial lines. Institutional racism has produced disparities in resources, power, and opportunity for people of color. For example, a recent study reported the stark fact that the number of predominantly Black middle-class neighborhoods in Baltimore was cut in half from 31 in 2000 to 16 in 2017.² This describes a trend of Black middle-class neighborhoods becoming poorer neighborhoods over time due to the loss of the Black middle-class.

Against this backdrop of disinvestment and inequity, it is a critical time for Baltimore to become a place where everyone can thrive. The city contains all the fundamental components for revitalization and flourishing, but it needs to commit to a growth strategy that benefits all residents. This has become more apparent amid our current global pandemic, which is creating economic slowdown, high unemployment, and stressed public finances, all of which disproportionately affect Baltimore's most vulnerable households. Now is the time for Baltimore to assert its economic destiny as a destination of choice and a place of vibrancy, to strengthen its tax base and protect its viability as a live-work-play environment. By aggressively pursuing a residential growth strategy, it can achieve gains that touch all of the city's neighborhoods.

² In "Neighborhood Change in Baltimore 2000-2017," urban researcher Alan Mallach investigated population dynamics in Baltimore, and found that the number of low- and moderate-income Black neighborhoods (i.e. greater than 50 percent Black) increased, while the number of middle- and upper-middle-income Black neighborhoods decreased (there were no upper-income Black neighborhoods during this time period). Conversely, the number of predominantly white upper-middle- and upper-income neighborhoods increased during the same time span. See Appendix A for more information.

1.3. The Importance of Residents to the City's Future Economic Development Successes

With the City taking on the work of producing its latest CEDS and stating as an overarching theme for that report the notion of "inclusive economic growth," it is necessary to consider whether, why, and how to aggressively promote strategies that elevate the importance of retaining current residents and attracting new residents. Residents, of course, are the lifeblood of a city. They vote local politicians in and out of office, they are a city's property tax base, and they represent the main consumer base (and in some cases management and ownership) for the city's business community. A city's population levels are a reliable barometer for economic activity, fiscal health, and urban vitality.

For these reasons, Baltimore invests in resident attraction and retention. It does so through partnerships with resident promotion entities like Live Baltimore, through development incentives that encourage neighborhood investment, and other neighborhood stabilization efforts like blight removal and streetscape beautification.

This report was commissioned in part to explore and affirm the return on these investments in the form of a more robust local economy, a growing local tax base, and an enhanced perception of the city. In parallel, Live Baltimore, with support from the City of Baltimore, commissioned an analysis by Zimmerman/Volk Associates, Inc. (ZVA), to quantify the potential for real estate development in support of resident attraction and retention. This report relies heavily on the outputs from the ZVA analysis.

1.4. Organization of Report

We begin our report with the overall case for residential growth – its core purpose and how analytics and research can be deployed to gauge its impact (Section 2). We then use standard economic impact techniques to translate gains in population into their commensurate effect on the local and state economies. Impacts will be analyzed in the form of economic activity, consequent employment and labor income, and tax revenues generated by residential growth (Section 3).

To properly make the case for investment in residential growth strategies, one must frame these positive gains against any net new costs that residential growth might yield and against any public sector outlays needed to achieve that growth (Section 4). The overwhelming conclusion of this report, taken from this return on investment lens, is that residential growth strategies are worth pursuing.

However, in light of the wide and growing disparities in the city, it is only acceptable to consider residential growth strategies good if their benefit is equitably distributed. Hence, in this report, we consider not just the magnitude of economic gain, but also how that gain is distributed (Section 5). This report finds that the benefits of residential growth represent a net plus for existing residents, in the form of economic opportunities, critical public services, and enhanced amenities.

Nevertheless, it is important to note that whether residential growth produces gains, and whether those gains are equitably distributed, depends in large part on the efficacy of the strategies employed by City government to achieve it. Therefore, this report concludes with a synthesis of findings from peer cities, which yields a set of guidelines for the City to consider when implementing similar efforts (Section 6).

2. The Case for Residential Growth Strategies

2.1. Section Overview

Cities thrive because they are full of people. It is the concentration of people that supports the active trade of goods and services and creates a lively economy. It is the creative energy of people that produces art and culture and builds hubs of technology and research. The sheer volume of people in cities helps to support major transportation systems and large-scale health systems, providing access to essential services in the process. But perhaps most importantly, it is the frequency and ease of social interaction that helps tie a community together and ultimately shapes a place's character. For all these reasons, a city that loses population is drained of the energy that makes it go, whereas a city that gains population gains the dynamism it needs to be great.

Yet even as Baltimore has experienced the deep pain of decades of population loss, and especially as the city and the rest of the world struggle through a global pandemic that has necessitated severe social distancing, the case for residential growth must be affirmatively and decisively made. The following section provides the broad themes of this argument. It also sets up the subsequent sections of the report, which look at the economic impact of residential growth (Section 3), the return to the city from investment in residential growth (Section 4), the benefit of residential growth to existing residents (Section 5), and the strategies to undertake to achieve all of these gains (Section 6).

2.2. A Dynamic Competition for Residents

All cities should be concerned about attracting new residents and retaining existing residents, to capitalize on the power of people and the efficiency of density. Cities that have seen steady population loss for 50+ years, with the attendant physical disinvestment and shrinkage of the tax base, must work even more aggressively to turn things around and create an environment for growth and prosperity.

Even amid a global pandemic that has struck high-density areas, cities remain a place of choice because density retains so many advantages, including cultural flourishing, economic efficiency, and environmental sustainability. Despite the devastating consequences of COVID-19, the concentration of people and activity in Baltimore has meant efficient distribution of critical services and continued efforts to apply science and innovation to solve this public health crisis and prepare for future ones.

In the near future, the city and the rest of the world will emerge from the effects of the novel coronavirus, and the vibrancy of places like Baltimore will serve as an engine for economic recovery, artistic expression, and social flourishing. From the bustling Morgan State campus to a Farmers Market in Abell, from Lake Montebello to a Ravens game, Baltimore's anchor institutions and unique amenities epitomize the essence and resilience of the city, and will lead the way to drawing in residents, workers, and visitors alike.

In fact, Baltimore may be particularly poised for growth when the economy emerges from the COVID shutdown, as it possesses all the accoutrements of a world-class city, but possesses a far lower cost of living than (but, importantly, is still quite proximate to) nearby big cities such as New York and

Washington, D.C. The prolonged work from home phase many knowledge workers currently find themselves in is likely to shift the balance away from high-cost employment hubs in favor of more affordable settings that are still accessible to those hubs and that can offer desired urban amenities and accessibility. Baltimore is well-positioned to capitalize on this opportunity and attract people interested in a high-amenity, low-cost urban setting located squarely in the heart of the Northeast corridor.



Baltimore is a big city that is full of places that attract a diversity of residents, commuters, and tourists. Clockwise from top left: Morgan State University, 32nd Street Farmers Market, Graffiti Alley, Belvedere Square.

Baltimore's efforts to survive this global pandemic and then to thrive after it takes place in a global competition for human capital and resources. This is a constant competition in which there is no lasting equilibrium: cities are either gaining population, and with it both the increase in resources and positive perception, or they are losing population, with an attendant decline in resources and reputation. People power is such that, even and perhaps especially in the wake of an extended period of severe social distancing, people will seek out and invest in places that are growing, and will flee from places that are shrinking.

2.3. Residential Growth Alleviates Present Fiscal Pressures

Municipal governments must adapt to the growth or contraction of the resident population, as it directly affects their tax bases and thus their ability to serve their populaces. Fundamentally, this is

either a virtuous cycle or a vicious cycle. Population growth grows the tax base and enables further investment, attracting even more people and further expanding the tax base. Or, population decline, such as what Baltimore has experienced for several decades, shrinks the tax base and results in further disinvestment. The phenomenon repels new residents and causes existing residents to leave, thus further winnowing the tax base.

As public service providers, governments face many fiscal challenges, especially in light of COVID-19. Residential growth is essential to face such challenges. First, the basic infrastructure of running a city is such that the bulk of municipal expenditures are fixed in nature, and thus are better spread over a larger population than a smaller one. Second, most city governments are currently experiencing rising costs, largely through increases in health care and pension costs that exceed inflation, which in the absence of growing the tax base necessitates service cuts or tax rate increases.

This makes policy efforts to attract new residents and retain existing residents essential. At present, the Baltimore City government is dealing with the consequences of 70 years of population decline: neighborhood disinvestment, fiscal distress, and negative perceptions. On top of all of that are the revenue loss and future uncertainty wrought by the present global pandemic. City government must respond with an aggressive assertion of the case for Baltimore as a place of prosperity and growth, and implement appropriate growth strategies in order to reverse the vicious cycle of population decline and disinvestment and move the city toward population increase and reinvestment.

2.4. An Analytical Approach to Quantifying the Impact of Residential Growth Strategies

As previously discussed, cities gain economic activity and tax base when their populations grow. This is because new households represent economic contributions and discretionary spending, which have attendant spillover effects on a wide range of industries. The effect of new households on a local economy, in terms of the magnitude and distribution of spillover economic activity, can be quantified using IMPLAN, an industry-standard economic input-output software model (see Appendix B for the methodology).

The following approach will examine the benefits of successful residential growth strategies in two parallel ways. First, Live Baltimore recently engaged Zimmerman/Volk Associates, Inc. (ZVA) to assess the city's potential to absorb new residential development in the form of new households moving from outside the city and from households moving from within the city. From this analysis, assumptions can be made about the number and characteristics of incoming households, from which estimates can be made of the resulting impact on the city economy and the City tax base.

Secondly, one can consider economic impacts on a "per 1,000 households gained" basis. These impacts can thus be scaled by any level of residential population increase over time, whether projected or actual. For results on a per 1,000 household basis, please see Appendix C, D, E, and G.

The next section describes these economic impact calculations and narrates the implications of those findings (Section 3). While those results stand on their own as a headline, they also need to be framed in a “return on investment” manner in order to properly assess the attractiveness of residential growth strategies (Section 4). Critically, it is instructive to consider whether for the benefits of residential growth are equitably distributed (Section 5), and to draw from the successes of other cities to develop guidelines for the City to implement residential growth strategies that benefit all Baltimore residents (Section 6).

3. Economic Impact from New Residents

3.1. Section Overview

Population growth is the critical component needed for the revival of Baltimore. The city has the capacity, infrastructure, and potential to welcome new residents into Baltimore's diverse communities. New residents benefit the Baltimore economy by moving into unoccupied houses, spurring equitable development across neighborhoods, using their purchasing power to benefit local businesses, contributing to the tax base of the city, and creating a more dynamic home for all Baltimore residents.

Residential growth infuses confidence in its residents, businesses, and government that their city is a place for people to thrive. Now is the time to counter the population loss, foster investment, and create a more equitable city. The following subsections quantify the benefits of residential growth by translating the gains in population into economic activity throughout the local and state economy. The resulting impact on the city economy and the City tax base is extraordinary: should the city achieve its potential for attracting new households over a period of five years, this report finds that the city will gain **26,500 new households during that time, resulting in \$2.37 billion in new annual household income that lives in Baltimore and yielding new household spending that supports 10,900 jobs and generates \$128 million per year in tax revenues to City government.**

3.2. The Many Ways Residential Growth Creates Economic Impact

Residential growth is good for a city because it activates so many aspects of a local economy, creating a virtuous cycle of social flourishing, economic activity, tax base expansion, and public investment. After 70+ years of population decline, it is time for Baltimore to set an aggressive course towards population growth, to unlock the many economic gains that result from it. New residents bring new investment to the city's housing stock. When incoming residents move into newly constructed units or renovated units, they provide an economic boost for the construction industry and related sectors. This activity puts local residents to work, creates business opportunities for local vendors, and creates a ripple effect of dollars circulating through the city economy.

New development and a growing population signal that a city is on the upswing, which in turn leads to even more economic activity. The city becomes a more desirable location for new businesses and new residents alike to move in, bringing their creative energy, physical labor, intellectual contributions, and purchasing power with them. A growing population also provides more confidence for existing businesses and existing residents to stay, to flourish, and to invest. This too represents an expansion in commercial activity, artistic expression, and physical investment. In both cases, the growing amount of businesses, residents, and activity in the city begets even more confidence, more social interactions, as well as a more diverse labor pool and richer commercial exchanges.

Population growth also increases the overall consumption in the city through residential spending on local goods and services. More people living in the city means more spending at local bodegas, barbershops, and bakeries. This increase in household spending circulates through the local economy, involving an entire supply chain of local merchants and vendors and supporting additional local

employment in a wide range of sectors.³ Importantly, all of these increases – in construction activity, businesses, residents, and attendant spending – grow various local and state tax bases. This provides additional funds for critical public services that benefit all residents and businesses.

3.3. Scale and Composition of New Households

As described in the prior section, residential growth in the city will create an immediate economic impact for the city. It is to be determined what the City's residential growth strategies can yield in terms of new households, but a recent study commissioned by Live Baltimore from Zimmerman/Volk Associates, Inc. (ZVA) is instructive.⁴ The purpose of the ZVA study was to determine the residential market potential of the city, from which extrapolations can be made about the scale and composition of new households the city has the potential to add.

Based on historical data trends, ZVA estimated the city's potential for adding households via construction or renovation of residential units. The low end of that estimated potential is about 5,300 households per year, which is to say that within five years the city could add 26,500 households.⁵ ZVA further categorized these new households into three groups – empty nesters and retirees, traditional and non-traditional families, and younger singles and couples – and noted that the profile of new households tends to skew towards smaller household sizes.⁶

³ See Appendix B for the economic Input-Output model theory and mechanics.

⁴ Zimmerman/Volk Associates, Inc. "An Analysis of Residential Market Potential," April 2020.

⁵ This is a small subset of all of the households moving around every year. ZVA estimates that about 44,300 households will move into a residential unit in the city each year, of which 42 percent or about 18,700 will be moving in from outside the city. However, at the same time, other households will be moving out of the city. Hence, it is reasonable to consider the city's potential for residential growth as being directly related to the addition of new residential units via construction or renovation. See Appendix C for more detail.

⁶ Historical migration patterns have shown that the average household size for households moving into Baltimore is 1.6, whereas average household size in the city is closer to 2.4. This is because ZVA predicts that 63 percent of households moving within or into the city will be younger couples and singles. A five-year gain of 26,500 households at 1.6 people per household works out to about 42,000 people, which would represent a 7 percent increase in city population, bringing the city population to 635,000. As a point of reference, the last time the city's population was at that level was prior to the last decennial Census count (Baltimore's population was 621,000 in 2010 and 651,000 in 2000. IRS, "SOI Tax Stats – Migration Data," accessed data for 2017 – 2018, <https://www.irs.gov/statistics/soi-tax-stats-migration-data>).

Figure 3.1: Income Distribution of Potential Households Moving into Baltimore Within Five Years⁷

AMI Level	Households	Distribution
<30% AMI	6,130	23%
30% to 60% AMI	5,121	19%
60% to 80% AMI	3,013	11%
80% to 100% AMI	3,232	12%
>100% AMI	9,003	34%
	26,500	100%

Source: Zimmerman/Volk Associates, Inc. (2020)

3.4. One-Time Economic Boost from New Construction and Major Rehabilitation

When new households move into the city, many move into existing unoccupied units, but some end up in newly built or recently renovated residential housing. This helps to grow the existing housing supply and supports the construction sector and related industries in the process. In addition to the direct benefits an increasing population and housing stock brings, this makes it more likely that existing residents will stay and continue to invest in their communities, either through opening businesses, civic/community service, or making home improvements. This type of personal investment further catalyzes the virtuous cycle of economic vitality and repopulation.

Figure 3.2 below shows ZVA's estimate of the distribution of housing type by new households of newly constructed or renovated housing. Based on this approach, the total demand for new/renovated housing from households that are new to the city will be about 26,500 units over the next five years. Using industry averages, we then estimated the cost of new construction and major rehabilitation by housing type. This yields an estimated \$3.6 billion in new construction and major renovation over the next five years (see Figure 3.3).⁸

⁷ The Area Median Income for the Baltimore-Columbia-Towson metro area is \$104,000. This comes from the U.S. Department of Housing and Urban Development.

⁸ See Appendix D for additional detail on the methodologies and calculations used to arrive at these estimates.

Figure 3.2: Housing Type Distribution (Among New/Renovated Units) of Potential Households Moving into Baltimore Within Five Years

	Distribution	Distribution of Households
Multifamily for Rent	74%	19,709
Multifamily for Sale	4%	1,141
Single Family Attached	12%	3,110
Single Family Detached	10%	2,540
	100%	26,500

Source: Zimmerman/Volk Associates, Inc. (2020), Econsult Solutions, Inc. (2020)

Figure 3.3: Aggregate Construction/Renovation Activity Represented by New/Renovated Housing from New Households Moving into Baltimore Within Five Years

	# Units	Average Cost/Unit	Aggregate Cost (\$M)
Multifamily for Rent	19,709	\$97,759	\$1,927
Multifamily for Sale	1,141	\$121,111	\$138
Single Family Attached	3,110	\$281,677	\$876
Single Family Detached	2,540	\$281,666	\$715
Total	26,500		\$3,656

Source: Zimmerman/Volk Associates, Inc. (2020), Econsult Solutions, Inc. (2020)

Direct construction activity puts construction workers and their professional service providers to work, who in turn spend a portion of their salaries and wages within the local and state economies. It also catalyzes the procurement of a wide range of goods and services, which translates into new economic opportunities for local and state vendors. From the upfront construction of these new and renovated units, the cumulative economic impact in Baltimore is \$5.2 billion, supporting 30,500 jobs, and \$1.5 billion in employee compensation, and the broader impact beyond Baltimore to the remainder of the state is even larger (see Figure 3.4).⁹

⁹ As the city of Baltimore is fully contained within the state of Maryland, the city impacts are included in the state impacts, and so the difference between the city and state impacts represents the amount of impact that occurs in the parts of the state outside the city. See Appendix D for additional detail on the methodologies and calculations used to arrive at these estimates.

Figure 3.4: Cumulative Economic Impact from Construction of New/Renovated Units for Potential Households Moving into Baltimore Within Five Years

	Baltimore	Maryland
Direct Impact (\$M)	\$3,656	\$3,656
Indirect and Induced Impacts (\$M)	\$1,538	\$2,559
Total Impact (\$M)	\$5,194	\$6,215
Employment (FTE) Supported¹⁰	30,500	35,600
Employee Compensation (\$M)	\$1,494	\$1,780

Source: IMPLAN (2015), Econsult Solutions, Inc. (2020)

3.5. New Households in the City Means New Spending in the City

New households contribute to the local economy in numerous ways, the most immediate of which is their spending power. New households in the city mean increased demand for an entire supply chain of goods and services in the city. We can utilize standard input-output model techniques to estimate the magnitude and composition of the spillover effect of this household spending, which is referred to as induced impact, on the Baltimore and Maryland economies.

Since the spending and saving patterns of a household earning \$40,000 per year is not the same as a household earning \$100,000, it is relevant to know how much in aggregate household income is being added to the city and what household income levels are represented. However, it is important to note that while households have different spending patterns based on their level of earnings, all households help to bolster the city and state's economies.

For example, while lower-income households have less disposable income, they are more likely to spend their earnings locally within the city. In total, the 26,500 new households moving into Baltimore are estimated to represent an estimated \$2.37 billion household income that is new to Baltimore (see Figure 3.5). This provides a significant boost to the local economy as many of those dollars go to local businesses in a wide range of industry sectors.¹¹

¹⁰ ESI's input-output model generates job estimates based on the term "job-years", or how many jobs will be supported each year. For instance, if a construction project takes two years, and IMPLAN estimates there are 100 employees, or more correctly "job-years" supported, over two years, that represents 50 annual jobs. Additionally, these can be a mix of a full and part-time employment. Consequently, job creation could feature more part-time jobs than full-time jobs. To account for this, IMPLAN has a multiplier to convert annual jobs to full-time equivalent jobs.

¹¹ See Appendix C for additional detail on the methodologies and calculations used to arrive at these estimates.

Figure 3.5: Income Distribution and Aggregate Income of Potential Households Moving into Baltimore Within Five Years

Household Income Level	Distribution	Households	Total Household Income (\$M)
Less than \$30k	23%	6,130	\$191
\$30 to \$40k	10%	2,561	\$133
\$40 to \$50k	10%	2,561	\$133
\$50 to \$70k	11%	3,013	\$212
\$70 to \$100k	12%	3,232	\$295
\$100 to \$150k	17%	4,502	\$702
More than \$150k	17%	4,502	\$702
	100%	26,500	\$2,369

Source: Zimmerman/Volk Associates, Inc. (2020), Econsult Solutions, Inc. (2020)



Additional household spending serves to support local businesses, such as retail shops, barbershops, restaurants, markets, and grocery stores.

3.6. Economic Impact from Residential Growth – Sharing the key economic impact results

Spending from new households provides a significant boost to industries throughout the city and state economies. Using standard input-output modeling techniques, the impact of spending by the 26,500 new households is estimated to be \$1.97 billion to Baltimore, supporting nearly 11,000 full-time jobs and \$655 million in employee compensation (see Figure 3.6).¹² Importantly, that impact is spread through a wide range of industry sectors, commensurate with the diversity of expenditures typical of a household (e.g. health care, retail, food) (see Figure 3.7). This is the crux of the economic impact return argument for residential growth strategies; the introduction of households and their spending power has a multiplier effect that ripples out to numerous industries and supports a variety of different types of jobs.

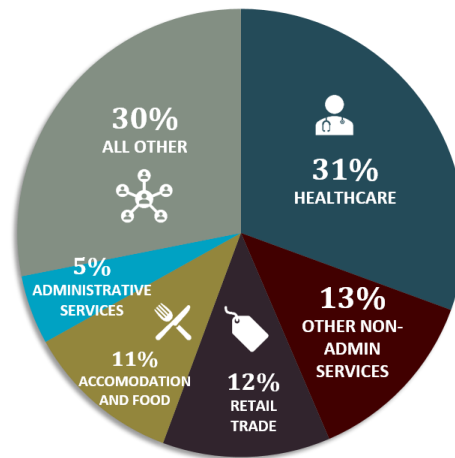
Figure 3.6: Annual Ongoing Economic Impact from Spending by Potential Households Moving into Baltimore Within Five Years

	Baltimore	Maryland
Direct Household Income (\$M)	\$2,369	\$2,369
Total Impact (\$M)	\$1,971	\$2,223
Employment (FTE) Supported	10,900	12,200
Employee Compensation (\$M)	\$655	\$729

Source: IMPLAN (2015), Econsult Solutions, Inc. (2020)

¹² Impact from household spending (\$2.37 billion per year) is less than net new household income in the city (\$2.37 billion) because households do not immediately spend all of their earnings. Rather, they spend a portion (and the rest is saved, invested, or paid in taxes). Of what is spent, not all of it is spent in the city, but some is spent elsewhere (outside the city, while on vacation, online). Of what is spent in the city, that is the amount that circulates through the local economy and produces a multiplier effect of economic impacts that affects local output and local employment.

Figure 3.7: Local Employment Distribution of Annual Ongoing Economic Impact from Spending by Potential Households Moving into Baltimore



Source: IMPLAN (2015), Econsult Solutions, Inc. (2020)

3.7. Tax Revenue Impact from Residential Growth

All of this economic activity grows various tax bases at the local and state level, generating revenue for those governments and therefore providing a fiscal return on any investments made to make that residential growth possible. This is another important part of the case for residential growth, for while population decline saps governments of tax revenues population gains generate tax revenues to fund critical public services.

If 26,500 households move into Baltimore in the next five years, they bring with them an aggregate \$2.37 billion in taxable personal income, which nets the City \$59 million and the State an additional \$88 million in personal income tax revenue per year by then (see Figure 3.8).¹³

¹³ The City of Baltimore and the State of Maryland are separate government jurisdictions and as such these tax revenue impact numbers are not overlapping.

Figure 3.8: Local and State Annual Personal Income Tax Revenue from New Income Represented by Potential Households Moving into Baltimore Within Five Years

	Baltimore	Maryland
Aggregate Income (\$M)	\$2,369	\$2,369
% Taxable Income ¹⁴	77.8%	77.8%
Taxable Income (\$M)	\$1,843	\$1,843
Effective Tax Rate	3.20%	4.76%
Total Income Tax Revenue (\$M)	\$59.015	\$87.7

Source: Baltimore City Department of Finance (2020), Econsult Solutions, Inc. (2020)

Furthermore, a significant portion of that aggregate household income is spent within the city and state, creating activity that grows various personal and business tax bases. Our tax revenue model estimates the consequence of that additional economic activity grows to \$8 million in annual tax revenues to the City of Baltimore and an additional \$83 million to the State of Maryland in five years (see Figure 3.9).

Figure 3.9: Annual Local and State Tax Revenue from New Spending Represented by Potential Households Moving into Baltimore Within Five Years

Tax Type	Baltimore	Maryland
Income (\$M)	\$7.8	\$28.9
Sales (\$M)	-	\$16.1
Business (\$M)	-	\$37.6
Total (\$M)	\$7.8	\$82.6

Source: City of Baltimore CAFR (2019), State of Maryland CAFR (2019), IMPLAN (2015), Econsult Solutions, Inc. (2020)

As new households move into the city, they also grow the local property tax base, either directly through homeownership or indirectly through rental housing. Based on available property data and relying on calculations performed by ZVA on the distribution of new households by household type and income level, the new property tax base represented by households moving into Baltimore over the next five years is \$3.75 billion, making the potential annual property tax impact from these new households \$60.8 million by then.¹⁶ This new infusion of property tax revenue into the City helps supports more public services, including parks and green space, schools, and quality of life amenities.

¹⁴ This ratio of household income to taxable income is based on FY20 information provided by the City's Department of Finance.

¹⁵ This increase in City income tax revenue from residential growth may be offset in part by a reduction in "Disparity Grant Aid" funding from the State, which is triggered by the increase in population and household income level in the city.

¹⁶ See Appendix E for additional detail on the methodologies and calculations used to arrive at these estimates.

Figure 3.10: Local Annual Property Tax Revenue Represented by Potential Households Moving into Baltimore Within Five Years

	# Units	Average Assessed Value	Average Effective Rate ¹⁷	Aggregated Assessed Value (\$M)	Property Tax (\$M)
Multifamily for Rent	19,709	\$132,462	1.52%	\$2,611	\$39.6
Multifamily for Sale	1,141	\$225,445	1.84%	\$257	\$4.7
Single Family Attached and Detached	5,650	\$156,015	1.86%	\$881	\$16.4
	26,500			\$3,749	\$60.8

Source: Baltimore City Department of Finance (2020), Econsult Solutions, Inc. (2020)

All told, the City stands to gain \$128 million per year (and the State an additional \$170 million per year) if the City is successful in reaching its potential of adding 26,500 new households within five years per the ZVA analysis.¹⁸ This works out to over \$11,000 in new City and State tax revenues per new household (see Figure 3.11).

Figure 3.11: Total Estimated Annual Impact from New Households Within Five Years

	Baltimore	Maryland ¹⁹
Personal Income Taxes Paid by New Households (\$M)	\$59.0	\$87.7
Tax Revenue Gain from New Household Spending (\$M)	\$7.8	\$82.6
Property Tax Revenue Impact from New Households (\$M)	\$60.8	-
Total (\$M)	\$127.5	\$170.3
Total per Household	\$4,800	\$6,400

Source: Baltimore City Department of Finance (2020), Econsult Solutions, Inc. (2020)

3.8. A More Vibrant City Economy

As demonstrated in the previous section, spending by new households will provide an immediate boost to the local economy by supporting critical anchor entities, such as restaurants, grocery stores, healthcare facilities, entertainment venues, and daycare centers. Consequently, this spending across households of all different income levels supports local jobs and grows the City's tax base. Yet, there is a

¹⁷ These rates represent the actual ratios and are based on FY20 information provided by the City's Department of Finance. They are below the full property tax rates for owner-occupied (2.248 percent) and 2.048 percent because they account for various tax credits such as development incentives. See Appendix E for more detail.

¹⁸ Note this does not include the tax revenue gains from any real estate development (new construction and major renovation) stimulated by residential growth.

¹⁹ This figure represents a gross amount to the State, as most households new to Baltimore may not be new to Maryland, the net new tax revenue impact is a subset of the figures reported for the State of Maryland.

broadier consequence of residential growth that should not be lost in the wake of these large upfront gains.

City economies thrive on a concentration and diversity of economic activity – and this activity is built upon the contributions of its people. Whether in business, science, culture, or service, each sector is bolstered by a density of human capital, infrastructure, and resources located in one place. In fact, providing numerous touchpoints for multiple actors and sectors to cross-pollinate – quickly, easily, and often, in planned and unplanned ways – is how innovation clusters form and how cities remain competitive. In today’s knowledge-based economy, a diverse economy is essential because human and financial capital is fluid and mobile. It seeks out places where high concentrations of activity are occurring and in turn will flee places in decline. Most importantly, population reversal also helps to support existing residents to remain in the city, which further catalyzes the virtuous cycle of investment, economic vitality, and repopulation.

Therefore, residential growth means more spending to merchants and vendors in communities throughout the city with significant spillover implications throughout the local economy. It also means that Baltimore will be more vibrant and its economy more resilient, because more participants have an exponential effect on the creative energy and commercial opportunity in the city. This means that entrepreneurial activity is more likely to flourish and artistic expression can thrive. As a big city, Baltimore already possesses all of the assets required of vibrant urban places – multi-modal transportation options, world-class research and medical institutions, and a rich ecosystem of large corporations and small businesses. It is poised to reverse decades of population decline and put in motion a residential growth strategy that unleashes the power of large concentrations of people to make a more prolific regional economy.



3.9. Compared to What

The positive economic benefits articulated in this section are substantial, but alone they cannot determine whether residential growth strategies are a worthy investment. It is important to consider not only how much positive economic impact new households will generate for Baltimore (in the form of new tax revenues), but also what are the fiscal impacts residents may impose upon City government (in the form of new public sector expenditures). Properly framing the economic impact results in “return on investment” terms is the subject of Section 4.

Furthermore, given the City’s present focus on equitable development, it is important to consider whether these gains are distributed in an inclusive manner throughout Baltimore. Specifically, do existing residents share in the benefits produced by residential growth? Or are existing residents disproportionately under-represented in participating in these gains? Section 5 explores whether residential growth is positive for existing residents.

4. Return on Investment on Residential Growth Strategies

4.1. Section Overview

The previous section concluded that if Baltimore achieves its potential in growing its population, it will yield a significant boost to the city economy, providing economic opportunities to local merchants and local residents, and generating a meaningful amount of local tax revenues to support a wide range of critical public services. This is a strong argument for pursuing residential growth strategies that will actualize these potential impacts. However, in fiscally constrained and otherwise uncertain times, it is necessary to subject decisions around public sector initiatives to more rigor before proceeding. It is useful to think of residential growth strategies in “return on investment” terms to determine whether the investments needed to achieve residential growth are warranted by the returns produced by that residential growth.

This section accounts for a number of additional considerations that are relevant to the ROI of residential growth strategies. First, new residents may yield more tax revenues for the City, however they will also represent increased City expenditures. Second, the City must invest real resources to achieve its residential growth strategies. This section concludes that **new residents are likely to result in an immaterial net new amount of City expenditures, and that public sector resources invested in residential growth produce a worthwhile return to the City.**

4.2. ROI as an Evaluative Framework

ROI is not just the purview of the private sector, but an essential framework for the public sector, although it looks different when applied by governments rather than businesses. Businesses consider operational decisions through an ROI framework to determine whether a potential outlay is likely to generate a sufficient financial payback to warrant the outlay. For example, will enhancements to a factory result in a sufficient increase in throughput that the resulting revenue gain is worth the cost of the enhancements?

In contrast, governments seek to achieve multiple desired outcomes for their citizens and therefore must decide how to best deploy scarce resources to produce those outcomes. Particularly in the present fiscally constrained times, outlays of public dollars require justification as generating a sufficient return. In a public sector context, this can mean financial outlays by a government entity that produce tax revenues back to that entity. It can also mean other public sector objectives that are not as directly connected to public finances, like equity, quality of life, and reputational enhancement. In the case of assessing residential growth strategies from an ROI standpoint, this requires first an understanding of all of the benefits of fostering population growth. An important set of benefits local governments seek is economic activity, job creation, and the tax revenue consequences thereof, which was covered in the previous section.

Three other considerations warrant further exploration in order to better understand the ROI of residential growth efforts in Baltimore. First is the extent to which residential growth, in addition to contributing to public finances by increasing City tax revenues, may also increase various city expenditure burdens which partially or fully offset the gains from more tax revenues (Section 4.3). Second is the amounts invested by the City to achieve residential growth (Section 4.4) and third is the manner in which residential growth affects existing residents and particularly the city's most vulnerable households (Section 5).

As with all municipal governments now, Baltimore City finds itself in a difficult and uncertain fiscal position, due to economic declines and revenue losses associated with COVID-19. This makes evaluating all efforts and outlays through an ROI framework all the more important. The overwhelming contention of this report is that residential growth is worth the investment. The remainder of this section provides critical elaboration on various aspects of the ROI of residential growth efforts.

4.3. Net New Expenditures (Service and Infrastructure Expenditures)

Residential growth grows the economic base in the city, resulting in new spending, new taxable income, and new property tax revenues. But do new households also represent new expenditure burdens for the City? Might those net new expenditures diminish or even dwarf any gains from residential growth? In considering residential growth strategies from a return on investment perspective, these questions are worth asking and answering.

It is true that new residents may yield new expenditures for the City in three main categories: service expenditures, infrastructure expenditures, and education expenditures. It is also true that different types of new households may impose different expenditure burdens on the City. For example, households with school-aged children may result in net new public education expenditures. However, a cursory²⁰ look at the City's current expenditures indicates that these expenditure burdens are probably exceedingly small, and any variations across household types are likely to be immaterial. Furthermore, any such net new expenditure burdens are dwarfed by the net new gains to various City tax revenue categories.

Recall that Baltimore's population peaked in the 1950 census at 950,000, and is now 37 percent lower at 593,000. A declining population over a long time horizon – in the case of Baltimore, 70 years and counting – leaves the city with plenty of room to grow its population without that population growth triggering a material increase in most municipal expenditures. That is because the vast majority of big-city expenditures are fixed in nature. Elected officials' salaries, investments in roads and bridges, outlays for police and fire vehicles, debt service – all these expenditures are essentially constant whether the city contains 600,000 residents or many more or many fewer. Indeed, an increase of even 26,500 new

²⁰ This report did not include in-depth work often associated with fiscal impact analyses, such as detailed reviews of personnel capacity levels and physical asset conditions.

households, which would represent a seven percent expansion in city population, would not likely materially increase the City's expenditure burden in most expenditure categories.²¹

Diving deeper into service expenditures, the main budgetary line item is public safety. Police and fire together make up 27 percent of the City budget (\$825 million out of \$3.07 billion) (see Figure 4.1). As noted above, population growth will not likely materially increase police and fire expenditures. To be sure, on the margins, more people may mean more service calls, which may necessitate more workers and/or more overtime pay. But most police and fire expenditures are fixed in nature, such as buildings, vehicles, equipment, and administration salaries. In fact, residential growth may lead to fewer service calls, as new construction and major renovation takes the place of disinvested buildings more prone to fire, and as occupied houses and blocks serve as a deterrent to crime. Going forward, the main cost drivers for these categories are likely to be above-inflation increases in health care and pension costs, not relatively small increases in the number of people that need to be served.

Figure 4.1: Baltimore City's Operating Budget Over Time

	2011	2019	% Change
Population	620,442	593,490	-4%
City Budget (\$B)	\$2.26	\$3.07	+36%

Source: U.S. Census Bureau (2020), City of Baltimore (2020)

Just about all of the remainder of the City's operating budget behaves in the same way, in terms of being relatively fixed in nature and not subject to material upward changes in response to a population increase of a few percentage points. In fact, when it comes to infrastructure, another large part of the City budget, expenditures are even more fixed in nature. After all, the upfront and ongoing outlays associated with a road or a bridge do not materially change if the use of that road or bridge increases by a few percentage points. Historically budget increases for Public Works and Transportation, two of the City's largest operating budget line items (collectively 26 percent of the City budget), are driven largely by above-inflation increases in labor and materials, rather than population increases.

The same can be said for expenditure categories such as Parks & Recreation and Libraries (collectively three percent of the City budget). These facilities will be used more if there are more people, but their expenditures will not be materially affected by that greater usage. Other municipal government functions are even more fixed in nature: support categories such as Debt Service, General Services, Retiree Benefits, and Information Technology (which together represent nine percent of the City budget) are almost entirely fixed in nature, and thus would not increase even if the city's population increased by a lot. Health and human service expenditures do tend to be more variable in nature, in that the more people that need to be served, the more expenditures a city will incur. Even in this category, expenditures are largely fixed in nature, as a large portion of outlays are devoted to things like buildings, equipment, and management salaries. Health, Housing and Community Development, and Social

²¹ Per the ZVA report, the city's potential is about 26,500 new households within five years, which at an average household size for moving households of 1.6 yields about 42,400 new residents, which would be about a 7 percent increase in city population.

Services collectively represent 10 percent of the City budget, and a very small proportion of those outlays may go up if the city's population increases.

4.4. Net New Expenditures (Education Expenditures)

The final major municipal expenditure category to account for is education, which must be considered differently than service expenditures and infrastructural expenditures because of the nature of the relationship between the City and its public school district, Baltimore City Public Schools (BCPS). Specifically, BCPS does not collect any property taxes directly, but rather receives a per-pupil payment from the City each year. Hence, on the margins, it is possible for BCPS to absorb each new student with little to no increase in operating expenditures. However, from the City's perspective, each new student represents a new expenditure obligation to BCPS in the form of the agreed upon per-pupil payment, which in the most recent academic year was about \$17,500.

From the perspective of the City, each new public school student represents a net outlay of about \$3,700.²² According to historical ratios, and accounting for the fact that new households in the city will likely be disproportionately childless ones (singles, couples, empty nesters), it is conservatively estimated that each new household will be the equivalent of about 0.2 new public school students.²³ Hence, each new household will represent a net outlay to BCPS from the City of \$3,700 per student times 0.2 students per household, or about \$740. This is considerably less than the \$4,800 in tax revenue gain the City will see from each new household, making each new household a net positive for the City's finances.²⁴

From the perspective of BCPS, historical trends and the relatively fixed nature of operating expenditures suggest that even relatively large population increases will not materially affect expenditure levels. As noted, each new household will be the equivalent of about 0.2 new public school students. Recall that the ZVA analysis considers the city to have the potential to add about 26,500 new households within five years. Achieving that goal would mean about 5,300 new students, or about 400 new students per grade, spread out over a system that has almost 200 elementary, middle, and high schools, or the equivalent of maybe three to five new students per grade per school. In most cases, such an increase can easily be absorbed, since currently the vast majority of schools are dealing with under-enrollment rather than over-enrollment.²⁵

²² "Overview of Maryland Local Governments," January 2019, *Department of Legislative Services*, <http://dls.maryland.gov/pubs/prod/InterGovMatters/LocFinTaxRte/Overview-of-Maryland-Local-Governments-2019.pdf>.

²³ See Appendix F for additional detail on the methodological approach and data source used to obtain this estimate.

²⁴ The State supplements City funding, so as the City gets more populous/wealthy, the State supplement declines, which partially offsets the increase to the City in income tax revenues. Similarly, with BCPS funding, the total amount spent per pupil is about \$17,500, which the City contributes about \$3,700 of the \$17,500. The State contributes to a majority of this expenditure, so as the City gets more populous/wealthy, the State supplement declines, which results in less State funding to BCPS (which partially offsets the increase in City funding to BCPS).

²⁵ It is also important to note that Baltimore Public Schools has seven percent fewer K-12 students now than a decade ago, although it has also closed schools during that time. This suggests that from a facility capacity standpoint, the system may encounter constraints (e.g. overcrowding in some school buildings necessitating investments to add building capacity on site and/or relocations of students to other school buildings that are under capacity), but that from an administrative and instructional standpoint, the system has room to grow enrollment without hitting any capacity constraints (i.e. much of the administrative and instructional infrastructure is in place to serve a system with more students in it).

It is possible that these new students are not evenly distributed across grades or across parts of the city. Indeed, it is likely that the very locations that are already experiencing population growth (and therefore some enrollment pressure in those schools) are the ones where a disproportionate number of new households with school-age children will choose to move.²⁶ Nevertheless, even if this is the case, the effect on operating expenditures is relatively muted. Much of Baltimore Public Schools' operating budget is fixed in nature – central administration, facilities, support staff – and recent enrollment declines suggest that adding students going forward will not trigger proportionate administrative cost increases.²⁷ In terms of instructional costs, there may be a small number of schools that have to add a teacher or two (for example, if 72 kindergarten students across three classes now becomes 80 kindergarten students across four classes, that necessitates hiring another teacher), but any such net new expenditure is covered by the increase in payment to BCPS from the City.

When considering the potential revenue gains associated with residential growth, it is necessary to simultaneously consider the potential expenditure burdens new residents may impose, particularly education expenditures but also service and infrastructure expenditures. But, in the case of Baltimore, it is not likely that these net new expenditures are material, and they are certainly compensated for by the influx of tax revenues represented by new households. This holds true across households of varying compositions and needs since the structure of municipal government expenditures accommodates a diverse array of services at a low marginal cost.

4.5. Public Resources Invested/Foregone

Considering residential growth strategies from an ROI standpoint requires understanding the returns from such strategies, which must account for both the net new gains to the city economy and City tax base from residential growth as well as any net new expenditures imposed upon City government. Understanding residential growth strategies from an ROI lens also requires accounting for the investments made by City government to produce those gains. Four types of outlays in particular are considered below.

First, the City invests in Live Baltimore, the city's main driver of new resident attraction efforts and current resident retention. Live Baltimore aggressively promotes Baltimore as a residential location of choice. Its iconic "I ♥ City Life" campaign is a source of immense civic pride in Baltimore, and its resources on the city's 250+ neighborhoods are an important reference for prospective new residents and existing renters looking to buy a home. These efforts facilitate residential growth in every part of the city, resulting in all of the impacts highlighted in this report. The City's FY 2020 contribution was about \$585,000, which represents about half of Live Baltimore's annual operating budget. Recall that each new household generates the City \$4,800 in new tax revenues (and another \$6,400 more in new State tax revenues). Considering that Live Baltimore directly and indirectly influences many households

²⁶ Given that the ZVA study speaks not only to overall citywide potential for residential growth but how that growth might be distributed throughout the city, it is possible to do a follow-up analysis that matches up where new households may be added with which schools are under or over capacity.

²⁷ See previous footnote regarding administrative capacity versus facility capacity.

that then choose to move into the city, it is clear this is an effective use of City dollars. To strengthen the city's brand, engage with households interested in considering Baltimore as a residential location, and facilitate their moving into the city are efforts worth investing in for the return they reap in the form of new households and the economic impact produced by them. To be more specific, giving Live Baltimore "credit" for at least 120 or so new households (out of the tens of thousands of households that it influences to move into the city every year) would yield City tax revenues in excess of the City's current annual financial contribution.

Second, the City invests in a wide range of neighborhood stabilization and quality of life initiatives, mostly through the Department and Housing and Community Development (DHCD). DHCD's FY 2020 budget was about \$84 million, up from \$62 million in FY 2019. These funds support critical programs that bolster residential growth and neighborhood investment, including affordable housing, code enforcement, and weatherization. They also support over 80 nonprofit organizations through CDBG funds for community development work, including the marketing of capital projects and specific neighborhoods. These efforts acknowledge the importance of residents to the vitality, economy, and tax base of the city, and are an investment in the city's existing residents and their quality of life, even as they also ensure a conducive climate for attracting new residents.

It is important to note that much of these City investments are in response to the city's now 70+ year decline in population and attendant tax base. Decades of disinvestment and population decline create an excess supply of unoccupied housing, leading to both property value and wealth decline in Baltimore's vulnerable neighborhoods. Urban decay requires significant intervention to reverse, in the form of aggressively addressing blight, providing homeowners with resources to keep up their properties, and subsidizing affordable housing options. As the city gains population, with the attendant economic boost that that represents, more neighborhood stabilization and community reinvestment can come from non-public sources. This could be residents parlaying new job opportunities into a down payment on a home, individual homeowners improving their homes, real estate developers deploying private capital on projects that have public benefit of which all strengthen community fabric and grow the City's tax base.

Third, the City currently has a number of development incentive programs intended to induce new development to enhance the city's residential real estate market and grow its population. For example, the Newly Constructed Dwelling Property Tax Credit (NCDPTC) offers a partial abatement on property taxes for five years. This is an incentive level calibrated with the typical financial infeasibility of residential development projects in mind. As such, it often tips sites and projects towards feasibility, resulting in investment of private dollars into new construction and major renovation and thus serving as a major driver for residential growth. While this report does not provide a deep evaluation of the efficacy of present incentive programs in Baltimore, a high-level review of the NPCDPTC concludes that

it is a net plus for the City even at very low inducement levels, suggesting that it (and similar incentive tools at the City's disposal) are still a useful part of the City's residential growth strategy.²⁸

Fourth, residential growth strategies at a local level have implications at the state level. As with all big cities and their counterpart states, Baltimore and Maryland have a shared destiny and thus thrive best when in a symbiotic and collaborative relationship. The City receives significant financial support from the State, in the form of State dollars invested in the City as well as federal dollars that pass through State government. In turn, the city is a major engine for the state economy and significant generator of tax revenues to State government. As evidenced in this report, residential growth is something the City and State both stand to gain from (the State stands to gain \$170 million per year if the city is able to reach its goal of adding 26,500 new households within five years) and is therefore something the City and State should mutually invest in and work together towards. Seen from this perspective, State aid to the City, which aids in stabilizing neighborhoods and creating a conducive climate for residential growth, holds the promise for significant return to the State in the form of economic activity, job creation, and tax revenue generation.

Residential growth is a strategy that entails a deep and coordinated undertaking from multiple parts of multiple levels of government. It is useful to consider this effort, and the resources associated with, as an investment in Baltimore as a residential location of choice, which provides high quality of life to existing residents and which is attractive for new residents. The successful implementation of a residential growth strategy produces just that outcome, creating stable neighborhoods, a thriving middle-class, a strong tax base, and a vibrant economy that supports businesses of all sizes in a wide range of sectors. This report has established that the return on that investment has a significant impact on the local and state economy, a large number of jobs supported, and a meaningful amount of tax revenues for City and State government, which warrants the investments currently being made to achieve those benefits.

4.6. Is the ROI Sufficient

Considering all of the aforementioned factors of net new tax revenues and expenditures, the question remains: is the return sufficient to justify continued investment in residential growth strategies?

The resounding conclusion of this section is that residential growth strategies are worth the investment. The economic and tax revenue impacts articulated in Section 3 are promising, especially for a city government that desperately needs to generate funds to support critical public services. The likely outcome of population increase is an immaterial increase in City expenditures, since the nature of most City expenditures is that even very large population increases do not require commensurate increases in service cost, infrastructure investment, or public education outlays.

²⁸ Specifically, our analysis indicates that if 15 percent or more of the residential units that capitalized on the NPDCPTC were induced by the incentive (and would not have otherwise been built and occupied), the City is better off financially. See Appendix G for additional detail on the analysis of NPDCPTC.

The different ways the City currently invests in residential growth, seen in this light, are justified. These investments include outlays for new resident attraction, primarily through Live Baltimore and other nonprofits; City investments in neighborhood stabilization efforts; development incentives the City uses to induce real estate investment; and State funding for various City initiatives. Together, these efforts have the effect of creating the conditions for the city to grow its population, producing a return that is far superior to the experience of the past 70 years of population decline, in which out-migration and disinvestment created a vicious cycle of blight, abandonment, and fiscal distress. An important consideration in evaluating residential growth strategies through an ROI lens is not just minding return relative to investment, but asking who that return benefits. This is the subject of the next section.

5. Impacts on Existing Residents

5.1. Section Overview

The City of Baltimore desires to grow in an inclusive and equitable fashion, with a particular focus on how growth impacts current residents. Therefore, it is necessary to not only know how much economic benefit residential growth produces (Section 3) and how that benefit compares to the outlays required to achieve that growth (Section 4), but whether the ultimate impact of growth positively impacts existing residents. This section highlights a number of significant positive benefits for existing residents:

- Additional employment for local residents and procurement opportunities for local businesses through an increase in economic activity supported by new household spending
- Additional tax revenue to City government to fund essential public services
- Resources to support desired public amenities that improve neighborhood quality of life, such as aesthetic enhancements, transportation infrastructure, community facilities, and commercial activity nodes

It must be noted that growth can also have negative impacts, particularly on vulnerable households susceptible to the negative effects of gentrification and displacement. This section acknowledges those fears and expounds on a way forward that mitigates against those pressures, which serves as a useful lead-in to the preferred recommendations for equitable growth strategies (Section 6).

5.2. Inclusive and Equitable Economic Development

This report was produced in parallel with the city's development of its latest Comprehensive Economic Development Strategy (CEDS), for which Baltimore Development Corporation (BDC) is a major author and driver. A key foundational tenet of the City's CEDS is the importance of equitable development, or growth that benefits all residents.

To leave certain segments of the existing population behind in pursuit of development of growth is neither inclusive nor equitable in nature. As dynamic places, cities must necessarily cultivate development of the built environment to replace aging stock, maintain economic competitiveness, and remain places for all residents. Sadly, most cities in the US fall into one of two categories: significant development whose benefits have been unevenly distributed and whose growth has actually resulted in adverse outcomes for their most vulnerable households, or significant disinvestment that has created a vicious cycle of urban blight and suburban flight.

In contrast, Baltimore desires to be a city that is thriving for all residents, with a particular focus on the city's most marginalized and disadvantaged populations. To do so, in this current CEDS report the City should craft a strategy that taps into the value of both existing residents and new residents, forging a collective economic prosperity that involves and benefits all residents.

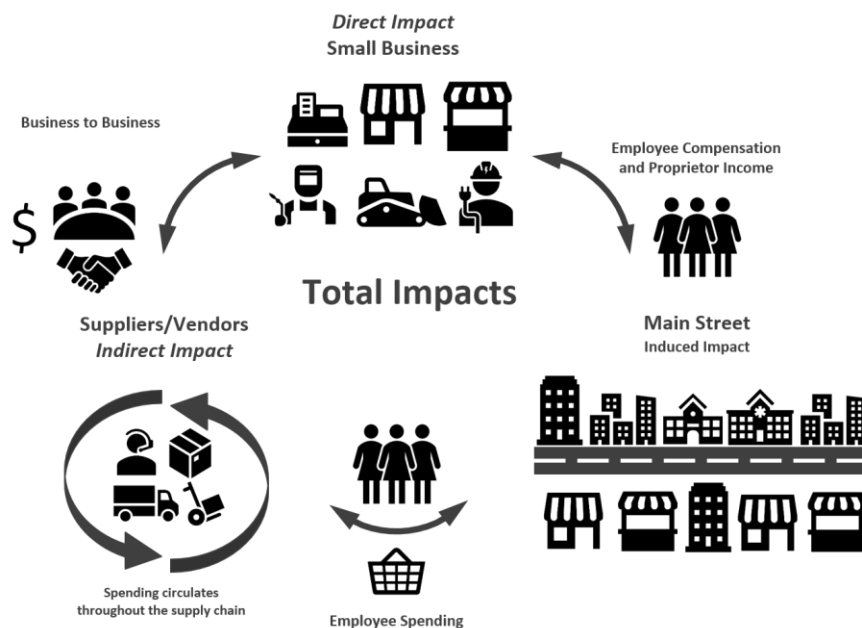
Thus, it is imperative to confirm that the positive economic benefits produced for the city from new residents, as described in previous chapters, do in fact represent a good outcome for existing residents. This is the essence of equitable development: growth that includes and benefits all residents.

5.3. Distribution of Economic Opportunity

As shown in Section 3, new residents bring in new investment and spending into the city. Residential growth translates into new business for the construction industry and related sectors, in the form of new construction and major renovation projects. Then, as new residents move into the city, this will bolster the local economy through additional household spending across households of all income levels which represents new business for a wide range of local services and industries. If the city can achieve its potential of adding 26,500 new households, it will result in a \$2.37 billion increase in household income with the related spending supporting 11,000 jobs. These jobs will be spread throughout various industries befitting the typical kinds of expenditures of households, which includes healthcare, retail, accommodation and food services, and administrative services. The jobs supported by this new household spending in all of these industry sectors are a direct benefit to residents of neighborhoods throughout the city who hold those jobs.

As an illustrative example, a new household yields new spending to local businesses: corner stores, restaurants, florists, accounting firms, hair salons, and dry cleaners. These businesses are often owned by local residents and employ people who are local residents. This is the multiplier effect of new household spending in Baltimore: new economic opportunities for local business owners selling the goods and services and for local residents in the form of jobs that are created or supported by the new household spending.

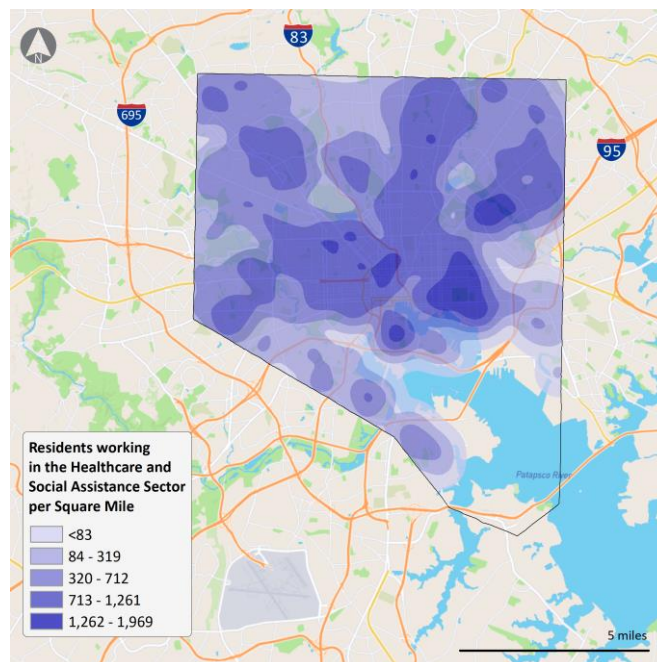
Figure 5.1: Household Spending Circulates Through the Local Economy



Source: Econsult Solutions, Inc. (2020)

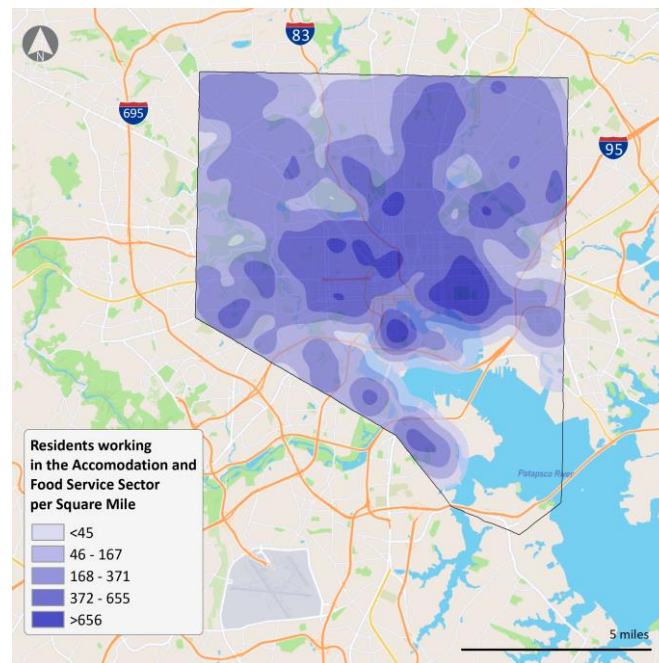
Residential growth and new household spending represents a diversity of new economic opportunities that also benefit existing residents throughout the city. As shown in Section 3.6, more than half (54 percent) of the industries affected by new household spending are in the healthcare, retail, and accommodation and food industries. Data from the Longitudinal Employer Household Dynamics show that the residential locations of workers who are in these respective industries are widely distributed across Baltimore, and spending by new households will support the jobs of residents in every neighborhood in the city (see Figures 5.2 to 5.4).

Figure 5.2: Residential Location of Healthcare and Social Assistance Workers



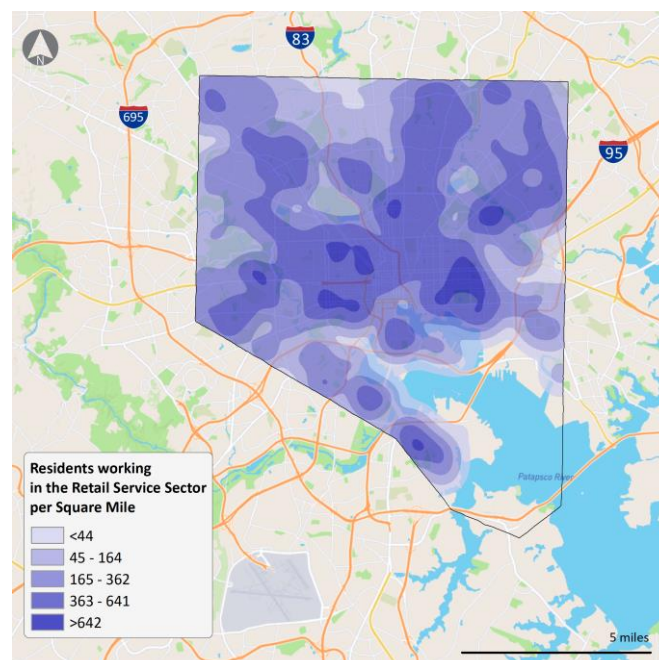
Source: US Census Longitudinal Employer Households Dynamics (2017), ESRI ArcMap (2020), Mapbox (2020), Econsult Solutions, Inc. (2020), Baltimore Development Corporation (2020)

Figure 5.3: Residential Location of Accommodation and Food Workers



Source: US Census Longitudinal Employer Households Dynamics (2017), ESRI ArcMap (2020), Mapbox (2020), Econsult Solutions, Inc. (2020), Baltimore Development Corporation (2020)

Figure 5.4: Residential Location of Retail Workers



Source: US Census Longitudinal Employer Households Dynamics (2017), ESRI ArcMap (2020), Mapbox (2020), Econsult Solutions, Inc. (2020), Baltimore Development Corporation (2020)

5.4. Key Public Services Supported by Net New Tax Revenues

An important benefit of residential growth is that the resulting increase in tax revenues (from economic activity and from an expanded property tax base) yields critical public dollars that get deployed to a number of essential public services. Indeed, this is a fundamental argument for residential growth in cities that have historically experienced population decline. Due to the relatively fixed nature of most municipal operating expenditures, a declining population meant fewer financial resources without a commensurate decline in expenditure burden. The resulting fiscal distress created painful pressures to raise tax rates and/or cut public services, further exacerbating the downward spiral. Conversely, a growing population brings in new financial resources without a commensurate increase in expenditure burden. The resulting fiscal alleviation improves the City's fiscal position and credit rating, and gives it room to contemplate investments that enhance the reputation of the city and benefit all of its residents.

It is important to follow where these new dollars go, because it is an important part of how the economic benefit of new residents is disproportionately enjoyed by existing residents. For the tax revenues associated with residential growth – an expanded property tax base, more income tax payers, more economic activity growing other local tax bases – go into the City's general fund and are then redistributed to all city residents in the form of essential public services. New residents mean new tax revenues for the City, and new tax revenues for the City fund things like public safety, social services, and public schools – as well as street cleaning, public spaces, and neighborhood stabilization efforts – that benefit all city residents. In fact, these gains are of particular relevance to the city's lowest-income and most vulnerable households, as they are most likely to benefit from more funding for health and human services, public education, and from investments that yield clean streets and safe public spaces and stable neighborhoods. Recognizing the power of municipal spending, Baltimore's Department of Planning conducts an annual analysis to ensure that funds distributed through the Capital Improvement Plan (CIP) do not contribute or exacerbate existing inequities.²⁹



Examples of public services include public parks and street cleaning.

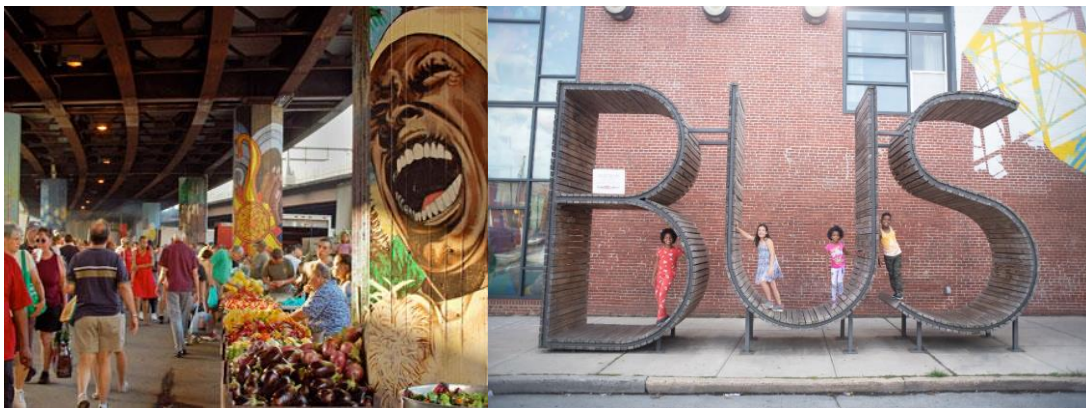
²⁹ FY21 Capital Improvement Program Equity Analysis, Baltimore Department of Housing, June 2020

5.5. Public Access to Amenities

An important consequence of residential growth is that more people in a location increases both the demand for various amenities and the supply of resources to bring those amenities to fruition. Four common examples of such amenities, which are freely available to the public and which are more likely to be available if residential growth occurs, are:

1. Recreational and aesthetic enhancements such as streetscape improvements, neighborhood beautifications, and green space.
2. Transportation infrastructure such as transit stops, bus routes, and walking paths.
3. Community-serving resources such as recreation centers, farmer's markets, and day care facilities.
4. Commercial developments such as grocery stores, retail corridors, and entertainment hubs.

Importantly, many of these amenities share two critical characteristics of relevance to the notion that existing residents will benefit when residential growth occurs. First, many of these amenities are non-rival and non-excludable goods. “Non-rival” means that one person’s enjoyment of a good does not diminish another person’s enjoyment, so for example, one person benefitting from access to a new set of shops does not diminish another person’s access to that same new set of shops. “Non-excludable” means that no one can be prevented from accessing a good, so for example a park is available to all. In this manner, the arrival of new amenities is responsive to the new demand represented by incoming residents but is no less available to and beneficial for existing residents.



Public amenities such as the Baltimore Food Market & Bazaar and Mmmm's Bus stop sculpture are non-rival and non-excludable goods.

Second, many of these amenities will not only respond to the demand preferences of incoming residents but will also be desirable to existing residents. An example of particular local relevance is grocery stores, since many Baltimore residents lack access to fresh food. For example, Baltimore City's Food Environment report revealed that 23.5 percent of citizens live in a Healthy Food Priority Area, formerly known as a food desert. In light of this stark data point, it is of great relevance that recent developments such as the Center/West development and the Johns Hopkins East Baltimore Development Initiative

(EBDI) are bringing much needed grocery stores to Baltimore neighborhoods.³⁰ The successful grocery stores added in recent years are part of larger mixed-use projects that contribute to placemaking efforts by increasing the density and quantity of local retail environments.

5.6. Gentrification and Displacement

The challenge of urban renaissance, as experienced in many cities making comebacks after decades of decline, is that the growth desired for so long and finally achieved may set into motion gentrification and displacement pressures which negatively impact existing residents. The fear is that outside investments alter the historic fabric of neighborhoods, creating new demand that creates upward pressure on house values and property taxes, forcing out some of the city's most economically challenged households. Often there is a racial element to this dynamic, which exacerbates existing inequalities and also taps into past race-based structural prejudices that created those inequalities in the first place. These are legitimate concerns in Baltimore and in other cities, which the City must grapple with in determining whether and how to pursue residential growth strategies.

As the city desires to pursue a strategy of equitable development, it is clear that accepting the decades-long trajectory of decline, blight, and disinvestment is untenable. Wholesale opposition of development due to the possibility of uneven distribution of benefits or adverse consequences to existing residents only serves to further entrench structural inequities in the city. Meanwhile, making it easier to add housing supply in response to rising housing demand is critical to easing affordability pressures, since the result of a stagnant or declining housing supply in the face of increased housing demand is soaring prices and displacement pressures. However difficult it is to consider how to pursue development that benefits all and mitigates against negative effects on the city's most vulnerable households, it must be deemed the preferred approach.

The state of the local real estate market is of relevance to avoiding gentrification and displacement, and here local governments have some levers at their disposal. In the case of Baltimore, there has been significant research on its fluctuating real estate market. Since 2005, the City of Baltimore has engaged Reinvestment Fund to conduct several Market Value Analysis (MVA) reports in order to understand where there is market strength at very small geographic levels. This helps the City to anticipate places of potential distress in order to pinpoint appropriate interventions, as well as to identify areas of rising demand where additional supply can be encouraged to prevent upward price pressure.³¹ The City has also paid close attention to a recent study by Alan Mallach, which argues that Baltimore's predominantly Black neighborhoods are more affected by blight and disinvestment than gentrification. The persistent depopulation in predominantly Black neighborhoods is weakening housing demand, creating an excess

³⁰ The Center/West mixed-use development opened its first phase in Fall 2019 and plans to open a grocery store in its second phase of development. The development is located in the 9th City Council district, which has the highest percentage of residents living in a Healthy Food Priority Area in Baltimore, at 56 percent. The EBDI life-science hub has plans to build a grocery store in the 12th city council district, which has 28 percent of residents living in a Healthy Food Priority Area. Gail Kalinoski, "\$800M Baltimore Development Reaches Milestone," Multi-Housing News, November 2019; Hallie Miller, "East Baltimore redevelopment project moves forward as construction begins," Baltimore Sun, November 2019; Baltimore City's Food Environment: 2018 Report, Johns Hopkins Center for a Livable Future.

supply of vacant houses, and decreasing household wealth, further exacerbating racial inequities within Baltimore.

The steady loss of working class and middle-class households, with the resulting gap between affluent and poor neighborhoods highlights the need to both attract new residents and retain those who have the economic mobility to leave if desired. Left unchecked, the attendant disinvestment and abandonment in those neglected neighborhoods is devastating to the city. It is therefore imperative for the City to strategically utilize both people-based and place-based interventions to manage how and where to focus its residential growth efforts, to reverse decades of disinvestment and to do so in ways that benefit all residents.

5.7. Residential Growth from the Perspective of Existing Residents

It is fair to subject residential growth strategies to a rigorous screen concerning its effect on current residents. New residential development can be great for existing residents when it brings economic opportunity, enhanced amenities, and improved quality of life. However, it can also be problematic for existing residents when it leads to inequitable distribution of economic opportunity, rising costs, displacement, and painful reminders of past systemic injustices. Both outcomes are possible, so it matters how residential growth is pursued.

It is unacceptable to assume residential growth is automatically beneficial without considering how such strategies may exacerbate past inequities and otherwise harm existing residents. It is also unacceptable to simply eschew revitalization and in doing so condemn neighborhoods to continued disinvestment and decline. Instead, the City must promote residential growth strategies that consider existing residents, effect positive change, and minimize the negative effects of gentrification and development. In other words, it is incumbent upon the City to determine how to grow equitably in a way that is mindful of where investment is deployed and who is reaping the benefits.

6. Findings and Recommendations

6.1. Section Overview

The purpose of this section is to summarize the key findings from this report, from which recommendations can be advanced that place the City in the best position possible to successfully achieve residential growth and the intended benefits. The analyses in this report, and a review of impactful initiatives in other cities similar to Baltimore that have attempted to implement residential growth plans, lead us to the following five guidelines when contemplating strategic efforts going forward:

1. Incentives are still needed and can be used tactically to stimulate residential growth with equitable results.
2. Resources that help existing homeowners have a high return on investment in stabilizing neighborhoods and otherwise creating the conditions for residential growth.
3. The City must continue to be aggressive and multi-faceted in its blight remediation efforts.
4. Residential growth is ultimately a multi-faceted place-making effort involving all parts of municipal government and benefitting from a broad coalition of willing partners.
5. The city is a product just like any other and as such benefits from sustained active branding and promotion efforts to connect with prospective new residents and advance the city's strongest characteristics.

6.2. Summation of Key Findings

As noted at the outset of this report, the city finds itself at a potential inflection point after 70 years and counting of population decline with attendant disinvestment, blight, and inequality. As other northeastern cities have been able to complete their painful transitions into a post-industrial economy, reverse population losses, and attract new residents, Baltimore continues to lose population, dipping under 600,000 earlier this year for the first time in over a century.

Residential growth is not just a matter of perception and psychology; it also represents a huge boost to the local economy. Based on ZVA's assessment of the city's potential to absorb new households within a five-year time period, our analysis estimates that the consequence of reaching that potential is \$2.37 billion in new household income residing in the city, yielding household spending that supports 10,900 jobs in the city as well as \$128 million in tax revenues for City government within five years (see Figure 6.1).

Figure 6.1: Economic and Tax Revenue Impact from Potential Households Moving into Baltimore Within Five Years

	Baltimore	Maryland
Net New Household Income Residing in Baltimore (\$M)	\$2,369	\$2,369
Jobs Supported	10,900	12,200
Tax Revenues Generated (\$M)	\$128	\$170

Source: IMPLAN (2015), Econsult Solutions, Inc. (2020)

Because of the city's long downward slide in population, adding these new households will incur a relatively insubstantial increase in municipal cost burden. This is due to the largely fixed nature of such expenditures and thus the ability to absorb residential growth without commensurate cost expansion. The net new impact to City government from residential growth is therefore quite large, justifying the many different ways it spurs residential growth, from new resident attraction promotion initiatives to neighborhood stabilization program to various development incentives.

Furthermore, over time residential growth creates its own momentum, as an increased tax base enables further private investments that enhance the attractiveness of the city to new residents. More populated blocks also strengthen the stability of neighborhoods, drawing in even more new residents, inducing existing residents to stay and invest, and reducing municipal expenditures associated with the existence of blight, such as police, fire, and sanitation.

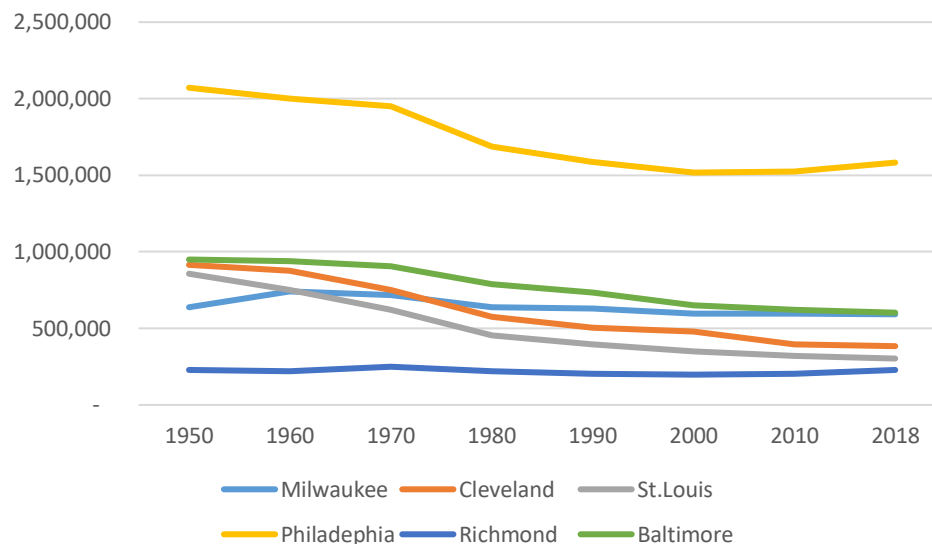
Importantly, this virtuous cycle of growth, investment, and stability disproportionately benefits existing residents. Expanded economic activity represents employment opportunities for local residents and business opportunities for local merchants. A larger tax base funds critical public services, of particular relevance to the city's poorest and most vulnerable households. In addition, increased density yields desired amenities – aesthetic enhancements, transportation infrastructure, community-serving resources, and commercial corridors – that are accessible to existing residents.

With new development comes the specter of gentrification and displacement, a valid fear given that the memory of past structural discrimination is still fresh and other recovering cities wrestle with the consequences of upward pricing pressure and affordability concerns. It must be noted, though, that however difficult it is to envision a path forward for development that does not induce negative impacts on existing residents, it is even worse to preemptively push away growth opportunities and further entrench the devastating consequences of decline and disinvestment. Hence, this report concludes with a careful look at guidelines for the City to consider when deciding if and how to pursue residential growth.

6.3. Research Approach

As all cities seek to grow and to do so in thoughtful ways, it is instructive to look at residential growth strategies implemented by other municipal governments. When doing so, it is important to identify the right peer group of cities and the right categories of interventions in order to derive relevant lessons that are transferable to Baltimore. With this in mind, the following cities were identified as a peer group of cities for further study: Cleveland, Milwaukee, Richmond, Philadelphia, and St. Louis (see Figure 6.2).

Figure 6.2: City Population Comparison, 1950-2018



Source: US Census (2020)

Figure 6.3: City Economic and Demographic Comparison, 1950-2019

	Black %	White %	Median Household Income	% of Residents in Poverty	% Owner-Occupied	Median House Value
Baltimore	62.5%	30.4%	\$48,840	21.8%	47.3%	\$156,400
Milwaukee	38.8%	44.6%	\$40,036	26.6%	41.8%	\$118,000
Cleveland	49.6%	39.8%	\$29,008	34.6%	41.3%	\$68,500
St. Louis	46.9%	46.2%	\$41,107	24.2%	43.4%	\$131,900
Philadelphia	42.3%	41.2%	\$43,744	24.9%	53.0%	\$156,800
Richmond	47.8%	46.9%	\$45,117	22.3%	42.2%	\$220,700

Source: US Census (2019)

Research on successful efforts in these cities quickly sorted itself into the categories below, compelling additional research attention to better understand these initiatives and derive lessons from their successful implementation, and further underscoring the relevance of this taxonomy of residential growth strategies. Ultimately, the categorizations below are consistent with what was deemed constructive towards the kind of growth Baltimore currently seeks (see Figure 6.4).

Figure 6.4: Categorization of Residential Growth Strategies



6.4. Characteristics of Effective Efforts

In the great and constant competition for residents, and the economic, social, and cultural prosperity that they represent, Baltimore is well suited to implement a successful growth strategy. The research and analysis that went into this report yields a number of fruitful strategies from other cities, many of which Baltimore is already doing well and all of which Baltimore is poised to productively pursue.

Development Incentives

Though controversial in the city and elsewhere, development incentives should continue to be an important part of Baltimore’s residential growth strategy toolkit going forward. Incentives make a presently less competitive residential location more competitive by helping more projects “pencil out,” thus stimulating development and building up the city’s long-term tax base. The challenge for cities, dynamic as they are in people flow and real estate markets, is to calibrate development incentives so as to properly induce interest without either giving away too much or stoking runaway displacement pressures. The example of the following cities is instructive here.

Development Incentives:



- Philadelphia's Ten-Year Tax Abatement
- Richmond's Partial Tax Abatement Program

The City of Philadelphia's Ten-Year Tax Abatement is one of the most all-encompassing property tax abatements in the US. Implemented in two steps in the late 1990's, at the culmination of a 50-year slide in population with attendant disinvestment, the abatement program is a 10-year 100 percent abatement on incremental property taxes, and applies as of right to all new construction and major rehabilitation projects throughout the city. It is credited with spurring development not only in the city's downtown core but in downtown-adjacent neighborhoods and beyond. The resulting development boom demonstrates its efficacy in overcoming the otherwise debilitating combination of low rents, high construction costs, and high tax burden. Now that it has been on the books for over 20 years, it has resulted in a significant expansion in the city's tax base as abated parcels are now back on the tax rolls at their full and higher assessment levels. Instructively, as the city has turned the corner on post-manufacturing transition and disinvestment, and has now experienced an extended period of population increase and real estate investment, the public discourse around the program has evolved to balance its efficacy with concerns over gentrification. As a result, in late 2019 Philadelphia City Council approved changes to the program, adjusting the abatement from a full 100 percent over 10 years to a sliding scale (100 percent in Year 1, 90 percent in Year 2, etc.), a change that will take effect in 2021. This suggests that the abatement at its current level served a purpose that now needs to be adjusted in the face of stronger markets and growing equity concerns, and thus is being wound down to a less generous version befitting those influences.

The City of Richmond's Partial Tax Abatement Program represents a similar adjustment from previously more generous levels of development incentive. As the city has seen a reversal of decades of population decline and is now growing in population, in early 2020 Richmond City Council replaced the existing tax exemption for new and rehabilitated properties with a program that places more requirements on projects to qualify for the exemption. Specifically, to qualify, projects must have a minimum of 30 percent of units accessible to households making no more than 60 percent of the region's area median income ("accessible" being defined as a rent level that cannot exceed 30 percent of income levels for such households). These changes are in line with the City's general push to increase the availability of income-designated housing. Based on a study by Virginia Commonwealth University's Center for Urban and Regional Analysis, spurring development no longer needed to be the primary objective and that the City should instead concentrate on creating affordable housing.

As with Philadelphia (and unlike Baltimore), Richmond is already gaining in population, so the timing of these adjustments to its main development incentive is connected to that fact. Though Baltimore currently has at its disposal a number of development incentive programs at the local and state level (particularly its High-Performance Newly Constructed Dwellings Property Tax Credit and its Vacant Dwelling Property Tax Credit), Philadelphia's is currently more generous than any of them, and is now being wound down to a lower level after over 20 years of successfully inducing new development and creating sufficient momentum to support new development with less incentives needed. Meanwhile, Richmond's phase-down is explicitly connected to ensuring that new development comes with additions in affordable units in order to blunt upward price pressures that might otherwise adversely affected lower-income households. This suggests an overall trajectory for Baltimore, to contemplate a future in which existing development incentives can be wound down once markets are healthier and the debilitating effects of disinvestment have been replaced by the virtuous cycle of residential growth and reinvestment, and to do so in ways that compel private markets to add new supply at multiple price points.

Supports for Existing Homeowners

An important way to elevate existing residents is to provide programs that directly support their ability to stay in, keep up, and enhance their homes. Supports for existing homeowners acknowledge the power of existing residents to be an economic force in a city, as they are just as important to a city through their spending and through their economic, social, and civic contributions as new residents. Supports for existing homeowners also have the important effect of stabilizing neighborhoods that might otherwise decline, and stimulating the kind of internal reinvestment that healthy cities require in order to create the conditions for new development and in-migration of new households. The following cities have found success with targeted initiatives that have accomplished these important purposes.



Supports for Existing Homeowners:

- Philadelphia's Basic Systems Repair Program
- St. Louis' Senior Home Repair and Chore Program

The City of Philadelphia has a Basic Systems Repair Program that provides free repairs in response to electrical, plumbing, heating, structural, and roofing emergencies faced by low- and middle-income households. These are exactly the types of repairs – unforeseen and potentially high in cost – that are all too frequent and debilitating for households facing financial constraints. In the absence of this backstop program, households are forced into difficult choices that are costly to household members as well as to the city as a whole: homes go unrepaired, creating safety and health concerns; households sacrifice food

and health expenses, yielding devastating outcomes especially for children and the elderly; or households experience homelessness. Notably, historically more than half of the contractors used to do these repairs have been women- and minority-owned firms, often from the same communities as the households. This targeted assistance has made an outsized difference not only for benefitting households but also in stabilizing blocks and neighborhoods that might otherwise tip towards a cycle of blight, abandonment, and crime.

The City of St. Louis has a similar program but targeted to seniors. The Senior Home Repair and Chore Program provides elderly and disabled households with minor home repairs and basic home modifications, as well as household chore assistance. This comes in the form of contracted services as well as volunteer assistance. This population is a particularly vulnerable one, often impaired in being to do or afford such tasks due to health issues or income constraints, making the alternative to providing this help a particularly devastating cycle of neglect, structural deterioration, and instability.

As noted above, these tactical investments in existing homeowners are part of a city's protective strategy over the blocks and neighborhoods that make up its residential market. They are a strong message to its existing residents that their quality of life and physical presence is important to the wellbeing of the city. It is a high-yield way to ensure that residential neighborhoods do not slip into vicious cycles that are hard to eliminate. In that sense, and in light of the strategies discussed below around anti-blight interventions, these supports for existing homeowners are the preventative medicine that a city can take upfront to avoid costlier problems ongoing. Baltimore currently has a robust toolkit of resources for existing homeowners to invest in their houses (primarily through favorable loan terms for rehabilitation work such as the Healthy Neighborhoods Home Renovation Loan program), and should consider some of the targeted supports mentioned above to focus scarce resources where they can have an outsized effect on households and neighborhoods.

Anti-Blight Tools

The vicious cycle of depopulation and disinvestment is at its most visceral when it leads to neighborhood blight. Abandonment and vacancy breed further signs of disinvestment – graffiti, illegal dumping, crime, physical deterioration – that are powerful “billboards” of the state of a neighborhood and city. Decades of employment decline and population loss due to macro-economic shifts have produced far too much blight in Baltimore, crippling the city's ability to inspire confidence in existing residents to stay and invest and in new residents to move in and contribute. Reversing population decline and creating a virtuous cycle of residential growth and investment and optimism and economic expansion require aggressive and competent approaches to blight remediation. Local government toolkits in this space have

proliferated over the years, as many cities have been forced to address the same daunting challenges as Baltimore. These cities' efforts warrant attention and replication.

Anti-Blight Tools:

- Richmond's Neighborhoods in Bloom
- Milwaukee's Community Improvement Projects

Coming out of decades of decline and disinvestment, the City of Richmond is ever vigilant against the constant specter of blight. A proactive intervention in its anti-blight toolkit is its Neighborhoods in Bloom (NiB) initiative, in which the City works with not-for-profit partners to rehabilitate abandoned houses and convert vacant lots into new residential units, as well as assist current homeowners with household repairs and provide first-time homebuyer counseling. NiB targets its efforts in six neighborhoods that suffer from high crime rates, high poverty levels, low homeownership rates, high vacancy and abandonment levels, and deteriorated housing structures. It monitors these efforts to confirm that progress is being made, and so it can know when a critical mass of public attention and investment has been assembled so as to give way to healthier markets that can attract private development and private lending. So far, this targeted approach has had its intended effect, in that neighborhoods receiving these interventions have reversed their property value decline and are now outperforming citywide averages: according to a recent study, targeted neighborhoods grew by 10 percent more than the city as a whole.³²

The City of Milwaukee takes a similar approach but rather than predetermining areas of need seeks out places where sufficient civic organizing momentum has been built up to maximize the effect of public sector participation. Its Community Improvement Projects are dollar-for-dollar grants that the City invests in initiatives that engage community members and demonstrate a plan for neighborhood improvement and blight remediation. In this way, the strongest felt needs – community members reacting to the debilitating effects of disinvestment and desiring to marshal resources to reverse it – are determined in a grassroots manner, and the resulting resources and attention fall to places that have demonstrated willingness and effort in translating it into meaningful neighborhood-level change.

Of course, Baltimore has its own portfolio of anti-blight efforts, effectively coordinated under its “Vacants to Value” initiative, which already contains many of the tools in the growing anti-blight toolkit that cities recovering from a post-industrial economy deploy against blight, such as streamlined disposition of City-owned properties, aggressive demolition and remediation of severely distressed blocks, and strategic investment in high-vacancy blocks adjacent to strong housing markets. The two

³² Carolina Reid, *Neighborhoods in Bloom: Measuring the Impact of Targeted Community Investments*, 2006.

examples above present a useful pair of case studies – one in which resources are invested based on top-down prioritization, and one in which they flow organically through grassroots efforts – to consider when determining how to continue to take an aggressive approach to reverse disinvestment at the block and neighborhood level within the broader lens of pursuing residential growth.

Inter-Disciplinary and Public/Private Initiatives

Ultimately, the task of winning a single new household, let alone forging a comprehensive residential growth strategy, requires an inter-disciplinary effort involving many municipal government departments intersecting across multiple city characteristics: real estate markets and amenities and transportation and services and jobs and health. As such, it also requires the active cultivation and leveraging of partnerships with a wide range of entities in the city. In this effort, city government holds an important vision-setting and partner convening role, and should actively fulfill that role to bring to bear the organizations with their collective missions and resources in order to make the city a place where more people want to live and thrive. These cities' inter-disciplinary and public-private efforts hold lessons for Baltimore to similarly thrive.

Interdisciplinary and public/private initiatives:



- Milwaukee's Strong Neighborhoods Plan
- Cleveland's Neighborhood Transformation Initiative

Strong Neighborhoods Plan is an attempt by Tom Barrett, mayor of the City of Milwaukee, to marshal the full attention of city government to stabilize and elevate the city's neighborhoods. Such an initiative is borne of the reality that what makes for strong neighborhoods cannot be the purview of just one municipal department. Even individual issues that concern city neighborhoods require an inter-disciplinary response, let alone the myriad of issues that make up neighborhood vitality. In the case of Strong Neighborhoods, vacancy and abandonment is a perennial issue that demands aggressive and multi-faceted attention, so Strong Neighborhoods is a vehicle for City government to marshal the participation of such disparate departments as Neighborhood Services, Police, Fire, Public Works, City Development, and Treasury. These overarching mayor-driven initiatives are emblematic of the kind of leadership and structure needed to deploy the complexity of a municipal bureaucracy to so critical a task as residential growth.

Similarly, Mayor Frank Jackson of Cleveland has utilized Neighborhood Transformation Initiative (NTI) to bring together city departments such as Economic Development, Community Development, City Planning, and Building & Housing to build household wealth and stabilize residential neighborhoods. Importantly, NTI inspires partnerships beyond collaboration across departments within city government. For example, the Clark-Fulton/MetroHealth EcoDistrict is a joint effort of MetroHealth System, the [City of Cleveland](#), [Metro West Community Development Organization](#), and the [Cleveland](#)

Foundation. This initiative synced up municipal resources lined up behind Mayor Jackson’s leadership as well as a \$1 billion campus enhancement by MetroHealth in ways that benefitted the surrounding communities, including the addition of a 12-acre public park expressly designed to afford green space and recreational access for the immediate neighborhood. Amid concerns of gentrification in the predominantly low-income, Hispanic community, local officials partnered with community organizations and MetroHealth to create a comprehensive master plan to better address challenges facing the Clark-Fulton community. The plan will shape neighborhood development and the future allocation of NTI funds by addressing housing, community benefits, economic mobility, community health, and transportation. The first public meeting for the 15-month project aims to encourage civic participation in shaping the community plan. As described by Councilwoman Jasmin Santana, in whose councilmanic district the EcoDistrict is located, “This will be a highly-coordinated and inclusive effort to chart a new direction for the Clark-Fulton neighborhood. EcoDistricts represent a thorough new process to create healthy, vibrant sustainable communities that greatly improve the lives of current residents, attract new residents and businesses and support sustainable development.”³³

The City of Baltimore has successfully implemented similar inter-departmental and public/private collaborations that tackle persistent neighborhood challenges in a comprehensive and collaborative manner. This includes such initiatives as LINCS (Leveraging Investments in Neighborhood Corridors), under the previous mayor, which made targeted investments to stabilize neighborhood corridors, and Clean and Safe, under the current mayor, which taps into the strength and will of community organizations throughout the city to address crime and cleanliness issues at the neighborhood level. In all of these efforts, success hinges on the ability of leadership to project an inspiring objective and to marshal action from a wide range of courses inside and outside of municipal government to effect change. Residential growth entails such a comprehensive and coordinated approach, and the examples highlighted in this sub-section are instructive for Baltimore to determine how to marshal a similar collaborative spirit for the same desired ends.

City Marketing/Branding Efforts

Cities compete fiercely for economic activity, including new households and the occupational contribution, cultural creativity, and discretionary spending they represent. In addition, a city is a product, and as such, it benefits from promotional efforts to connect with prospective residents and advance the city’s strongest characteristics. Successful cities understand the importance of welcoming new households through branding efforts with targeted resources and information to create a welcoming environment that then yields a virtuous cycle of enhanced reputation, more arrivals, and greater investment.

³³ ‘National Organization Honors Local Collaborative Efforts to Transform Clark-Fulton Neighborhood’, The Metro Health System, December 2019



City Marketing/Branding Efforts:

- Global Cleveland

A city that desires to grow must be a welcoming city. What is less obvious is how a city can become more welcoming. The City of Cleveland took up this challenge through an initiative called Global Cleveland. This is a comprehensive hub of resources focused on attracting, connecting, and welcoming international newcomers. This is a critically important audience for city marketing and branding efforts, because these households can be significant contributors to a city's economy, cultural vitality, and civic fabric. They are often also households that face additional hurdles beyond the usual challenges of learning and navigating through a new city: language barriers, credentialing mismatches between their country of origin and the US, and a lack of social networks to facilitate professional advancement and personal connection. Global Cleveland offers programming that connects newcomers to existing residents, facilitating industry-specific professional groups, and supporting paths to citizenship. The initiative also elevates the advocacy voice for international newcomers as contributing members to a community. As a result, the NAE Most Welcoming Cities Index, a ranking of immigration policies and socioeconomic outcomes, moved the city of Cleveland up 50 spots from #64 in 2018 to #14 in 2019. This sort of reputational enhancement can have a dramatic effect on new resident attraction, particularly among tight-knit immigrant communities where word-of-mouth and social connections can turn a small group of satisfied residents into successive waves of new residents forming a large and growing sub-community within a city.

This report has, intentionally, been agnostic about what kinds of households are added to the Baltimore city population, in part because regardless of the household the addition is generally a net plus for the city. Nevertheless, efforts the city takes to invest in residential growth will invariably consider if particular household types warrant special attention. The results achieved by Global Cleveland illustrate a set of interventions that have been successful in attracting immigrant households, and in turn the beneficial effect those newly arriving households have had on local economic vitality and neighborhood fabric. Baltimore may want to consider extending its resident attraction efforts in a similar manner as Global Cleveland, first identifying households of interest, and then mixing branding efforts with targeted resources to cater to specific household types.

An assessment of city marketing efforts would not be complete without recognition of the residential attraction and retention efforts of Live Baltimore. The multi-faceted approach Live Baltimore takes – information, incentives, and engagement in an accessible interface – sets it apart from other similar organizations around the country. Live Baltimore has been particularly innovative and successful in this regard. For example, its “I ♥ City Life” campaign has gained traction well beyond its initial purposes and has been claimed by the city as a point of pride. These sorts of promotional efforts, when coordinated with actual resources and services catered to new residents, can have a powerful effect on a city's

reputation among prospective households, thus creating the conditions to stimulate relocation, reinvestment, and further attraction.

6.5. Recommendations

The many benefits from residential growth, as articulated in this report, are a motivating force for determining how to achieve such growth. And the complexity of whether and how these benefits accrue to existing residents in an equitable manner demands a careful look at how to pursue such growth. The purpose of this section has been to mine the findings from this report to inform an exploration of the kinds of interventions city governments have undertaken that have been successful in actualizing residential growth and in ensuring that the attendant benefits have resulted in satisfactory ways. The programs, results, and lessons from other cities similar to Baltimore have been instructive in developing the following guidelines for Baltimore to adhere to going forward in persevering in the work of residential growth:

1. **Incentives are still needed and can be used tactically to stimulate residential growth with equitable results.** The examples of Philadelphia and Richmond are instructive for Baltimore. Both cities struggled through a painful post-manufacturing transition, like Baltimore. But, unlike Baltimore, both cities have largely completed that transition, insofar that population declines have been arrested and population levels are now higher. In both cities, weak markets necessitated development inducements, and programs were structured that yielded sufficient inducement to stimulate residential development and grow the local population. Notably, in both cities development incentives have now been subject to reevaluation and are at least partially being wound down, befitting the conclusion that incentives at their former level may have served their purpose and now lower levels of incentive are more appropriate. The relative weakness of the Baltimore market and the historical trajectory of continued population decline suggests that incentives are still appropriate and should be deployed strategically to induce residential growth and achieve equitable benefits. The trajectory of incentive levels in cities like Philadelphia and Richmond suggests that Baltimore should think ahead to the day when incentives are reduced and eventually wound down, and consider what would trigger such a discussion.
2. **Resources that help existing homeowners have a high return on investment in stabilizing neighborhoods and otherwise creating the conditions for residential growth.** Cities tend to fixate on new residents, since those are the households in play, which cities hope to win, enjoying the benefits of the increased tax base in the process. But existing residents warrant cities' attention. A city's residents represent the foundation of a city's community fabric, tax base, and economic vitality. A city's residents are also on the front lines of the city's reputation, its aesthetic look, and the stability of its neighborhoods. Furthermore, existing residents have an important role to play in a city's residential growth strategy. First, residential growth requires not just attracting more new residents than it previously had, but also retaining more existing residents than it previously had. Taking care of existing residents is therefore an important part of growing a city's population. Second, it is existing residents that create the conditions at the

neighborhood and block level that confirms the decisions of prospective new residents considering a new city to live in. All cities studied for this report, and especially Philadelphia and St. Louis, had numerous and diverse initiatives that invested real resources in helping existing residents to maintain and improve their homes, enhancing the very blocks and neighborhoods that prospective new residents will choose into.

3. **The City must continue to be aggressive and multi-faceted in its blight remediation efforts.** Notably, and related to the point above, investments in existing residents and their residences represent a critical preventative and protective layer against the destructive effects of blight. Decades of depopulation and disinvestment have made blight a persistent issue that dogs blocks and neighborhoods, demands a disproportionate amount of attention and resources by City government, and casts a pall over the city's reputation to households that might otherwise consider relocating to Baltimore. Blight is a symptom of the depopulation and disinvestment Baltimore has suffered for 70 years and counting. For the city to reverse those trends, blight must be aggressively addressed and rooted out, and to do that a tactical and multi-faceted approach is warranted. The remediation efforts of Richmond and St. Louis are of particular relevance to Baltimore, and may represent areas of further exploration to continue to enhance the City's toolkit for blight remediation, especially since one is a more top-down approach that targets interventions to neighborhoods based on measurable indicators of distress, while the other is a more bottom-up approach that seeks out communities that have built up sufficient organizing momentum to effectively deploy public sector resources for neighborhood enhancement.
4. **Residential growth is ultimately a multi-faceted place-making effort involving all parts of municipal government and benefitting from a broad coalition of willing partners.** Like most substantive challenges facing municipal governments, residential growth cannot be contained within one department or one initiative. In a sense, there is not a part of city government that is not related to advancing a city's residential growth strategy. Yet big city government administrations are inherently complex bureaucracies that are predisposed to siloing a particular function into a particular department. This is why efforts in cities like Cleveland and Milwaukee are so remarkable and instructive. In both cases, broad pronouncements served as both motivation and mechanism under which to organize the disparate yet related efforts of multiple city departments and private entities, to the end of profound neighborhood enhancement.
5. **The city is a product just like any other, and as such, it benefits from sustained active branding and promotion efforts to connect with prospective new residents.** The City benefits from the sustained efforts to market Baltimore as a new residential location to prospective households. This report has demonstrated the value of residential growth to the city's economic resilience, neighborhood strength, and cultural expression. What City government should do from here is continue to invest in this work, building from the overall efforts of Live Baltimore and other

organizations, and contemplating targeted efforts that enhance the city's reputation and attractiveness to particular household types of interest.

A recurring theme in this exploration of best practices in other cities is the remarkable level at which Baltimore is already carrying out many of these practices. This suggests that the will, the capability, and the experience is there to see through a successful residential growth strategy. The findings of this report confirm that these practices should be continued, for sustained efforts in these directions will yield the desired results in the city and the resulting benefits for the city.

6.6. What is at Stake

After decades of population loss, Baltimore is at a critical juncture and is currently falling behind other cities in the competition for residents, businesses, and investment. It would be devastating to the city if it completely missed out on the national movement of people moving back into urban cores across the country. As nearby cities have benefited from this trend and have reversed decades-long population declines in the process, Baltimore continues to lose population and is now under 600,000. Should disinvestment continue, that would further entrench and even accelerate racial and geographical inequities that continue to plague the city.

But in times of distress, there is also great opportunity. Baltimore has a chance to revitalize in a manner that benefits both existing and future residents, to forge a path that stimulates growth and that ensures that the achievement of and benefit from that growth is inclusive of all residents. To do so, the City must enthusiastically embrace a growth strategy that believes in the power of residential growth to produce benefits to the city as a whole, and that therefore attracts new residents and retains current residents in the process. City government and its partners must play their role in targeting incentives, programs, and marketing to promote equitable growth. By doing its part, the public sector will draw in new residents and businesses, and encourage existing residents and businesses to commit to invest in the city's future.

With a laser focus on people power – the extraordinary gains that are produced to the city and all its residents from population growth – Baltimore can strengthen the backbone of the city's economy and simultaneously revitalize its local neighborhoods, ensuring that the future of Baltimore will be bright for current and future residents alike.

Appendix A: Distribution of Neighborhoods by Race and Income, 2000-2017

Figure A.1: Predominately Black Neighborhoods, 2000-2017

Predominantly Black Neighborhoods	2000	2010	2017
Low Income	20	22	26
Moderate Income	59	63	62
Middle Income	31	27	16
Upper Middle Income	2	1	0
Upper Income	0	0	0
Total	112	113	104

Source: The Abell Foundation (2019)

Figure A.2: Predominately White Neighborhoods, 2000-2017

Predominantly White Neighborhoods	2000	2010	2017
Low Income	0	1	0
Moderate Income	11	9	9
Middle Income	29	17	13
Upper Middle Income	5	9	8
Upper Income	6	12	17
Total	51	48	47

Source: The Abell Foundation (2019)³⁴

³⁴ Mallach, Alan, "Neighborhood Change in Baltimore 2000-2017: The Effects of Race and Income," The Abell Foundation, 2019

Appendix B: Economic and Tax Revenue Impact Methodology

Economic impact estimates are generated by utilizing input-output models to translate an initial amount of direct economic activity into the total amount of economic activity that it supports, which includes multiple waves of spillover impacts generated by spending on goods and services and by spending of labor income by employees. This section summarizes the methodologies and tools used to construct, use, and interpret the input-output models needed to estimate this project's economic impact.

Input-Output Model Theory

In an inter-connected economy, every dollar spent generates two spillover impacts:

- First, some amount of the proportion of that expenditure that goes to the purchase of goods and services gets circulated back into an economy when those goods and services are purchased from local vendors. This represents what is called the “indirect effect,” and reflects the fact that local purchases of goods and services support local vendors, who in turn require additional purchasing with their own set of vendors.
- Second, some amount of the proportion of that expenditure that goes to labor income gets circulated back into an economy when those employees spend some of their earnings on various goods and services. This represents what is called the “induced effect,” and reflects the fact that some of those goods and services will be purchased from local vendors, further stimulating a local economy.

The role of input-output models is to determine the linkages across industries in order to model out the magnitude and composition of spillover impact to all industries of a dollar spent in any one industry. Thus, the total economic impact is the sum of its own direct economic footprint plus the indirect and induced effects generated by that direct footprint.

Input-Output Model Mechanics

To model the impacts resulting from the direct expenditures, Econsult Solutions, Inc. developed a customized economic impact model using the IMPLAN input/output modeling system. IMPLAN represents an industry standard approach to assess the economic and job creation impacts of economic development projects, the creation of new businesses, and public policy changes within its surrounding area. IMPLAN has developed a social accounting matrix (SAM) that accounts for the flow of commodities through economics. From this matrix, IMPLAN also determines the regional purchase coefficient (RPC), the proportion of local supply that satisfies local demand. These values not only establish the types of goods and services supported by an industry or institution, but also the level in which they are acquired locally. This assessment determines the multiplier basis for the local and regional models created in the IMPLAN modeling system. IMPLAN takes the multipliers and divides them into 536 industry categories in accordance to the North American Industrial Classification System (NAICS) codes.

The IMPLAN modeling system also allows for customization of its inputs which alters multiplier outputs. Where necessary, certain institutions may have different levels of demand for commodities. When this occurs, an “analysis-by-parts” (ABP) approach is taken. This allows the user to model the impacts of direct economic activity related to an institution or industry with greater accuracy. Where inputs are unknown, IMPLAN is able to estimate other inputs based on the level of employment, earnings, or output by an industry or institution.

Employment and Employee Compensation Supported

IMPLAN generates job estimates based on the term “job-years”, or how many jobs will be supported each year. For instance, if a construction project takes two years, and IMPLAN estimates there are 100 employees, or more correctly “job-years” supported, over two years, that represents 50 annual jobs. Additionally, these can be a mix of a full and part-time employment. Consequently, job creation could feature more part-time jobs than full-time jobs. To account for this, IMPLAN has a multiplier to convert annual jobs to full-time equivalent jobs. Income to direct, indirect, and induced jobs is calculated as employee compensation. This includes wage and salary, all benefits (e.g., health, retirement) and payroll taxes (both sides of social security, unemployment taxes, etc.). Therefore, IMPLAN’s measure of income estimates gross pay opposed to just strictly wages.

Tax Revenue Impact

The economic impacts in turn produce one-time or ongoing increases in various tax bases, which yield temporary or permanent increases in various tax revenues. To estimate these increases, Econsult Solutions, Inc. created a tax revenue impact model to translate total economic impacts into their commensurate tax revenue gains. These tax revenue gains only account for a subset of the total tax revenue generation that an institution or industry may have on the economy.

The tax revenue impacts generated are income, sales, and businesses tax revenues to the City of Baltimore and State of Maryland. The sales and businesses taxes were not calculated for the City of Baltimore since these taxes are not collected by the City. The personal income tax was calculated using the effective rates at the city and state levels. Sales and businesses were calculated using historical data from Baltimore and Maryland’s Comprehensive Annual Financial Reports. We also estimated property taxes from new residents, which is explained in further detail in Appendix H.

Appendix C: Scale and Composition of New Households

Methodology

To estimate the costs from the demand of new housing, we used data from ZVA's *An Analysis of the Residential Market Potential* to determine the number of households that will be new to the City based on the demand for new/renovated housing. ZVA estimates this potential amount to be about 5,300 households per year for the next five years, which is a total of 26,500 new households within a five-year period (see Figure A.3 below).

It is likely that actual residential growth potential exceeds this estimate of the city's ability to absorb new residential units through construction and renovation. Since the city currently has relatively high vacancy rates for residential, that means there are available residential units for households interested in moving into the city, over and above the new residential units being added from construction and renovation. To be conservative, no allowance is made for any residential growth of this type.

Note that not all of these newly constructed or renovated residential units need be occupied by households new to the city in order for them to represent residential growth within the city. ZVA estimates that 42 percent will be occupied by households moving in from outside the city. But the 58 percent of households moving into one of these units from within the city opens up an existing residential unit that can be occupied by a household moving in from outside the city. Indeed, historically there is a strong relationship between residential unit growth and population growth. Hence, it seems reasonable to attribute the full 5,300 household figure as the city's potential for residential growth on an annual basis.

Figure A.3: Annual Average Number of Households with the Potential to Move Within/To Baltimore City each Year for the Next Five Years

	All New Households	Capture Rate (lowest range) ³⁵	Number of New/Renovated Units ³⁶
Multifamily for Rent	26,252	15%	3,940
Multifamily for Sale	3,040	8%	230
Single Family Attached	8,282	7.5%	620
Single Family Detached	6,761	7.5%	510
	44,335		5,300

Source: Zimmerman/Volk Associates, Inc. (2020)

³⁵ ZVA provided a range of capture; ESI used the lowest capture rate in order to calculate the number of households new to Baltimore.

³⁶ These figures are rounded to the nearest tens.

ZVA also estimated the distribution of households by Area Median Income levels.³⁷ Since household income levels from AMI are based on household size, ESI used the household income levels based on a household size of 4 from HUD to serve as the average income at each AMI level. As ZVA provided ranges of the AMI levels, ESI then used the midpoint of these household income levels. We then took the midpoint of these income levels and the income level distribution to arrive at an aggregate estimated household income of \$2.37 billion.

Figure A.4: Income Distribution and Aggregate Income of Potential Households Moving into Baltimore Within Five Years

AMI Level	Distribution	Households	Midpoint Income Level	Aggregate Household Income (\$M)
<30% AMI	23%	6,130	\$31,200	\$191
30% to 60% AMI	19%	5,121	\$52,000	\$266
60% to 80% AMI	11%	3,013	\$70,450	\$212
80% to 100% AMI	12%	3,232	\$91,250	\$295
>100% AMI	34%	9,003	\$156,000	\$1,405
	100%	26,500		\$2,369

Source: Zimmerman/Volk Associates, Inc. (2020), Econsult Solutions, Inc. (2020)

When we scale this to the impact of 1,000 new households moving into Baltimore, we scale the same inputs that were described, above which gets us to an estimated increase in household income of \$89 million. The estimated impact is \$74 million in Baltimore, generating 410 jobs and \$25 million in employee compensation per 1,000 new households.

³⁷ The Area Median Income is from the US Housing of Urban Development and Housing's is the FY2020 AMI for the Baltimore metropolitan area.

Figure A.5: Income Distribution and Aggregate Income of 1,000 Households Moving into Baltimore

AMI Level	Midpoint Income Level	Distribution	Households	Aggregate Household Income (\$M)
<30% AMI	\$31,200	23%	231	\$7
30% to 60% AMI	\$52,000	19%	193	\$10
60% to 80% AMI	\$70,450	11%	114	\$8
80% to 100% AMI	\$91,250	12%	122	\$11
>100% AMI	\$156,000	34%	340	\$53
		100%	1,000	\$89

Source: Zimmerman/Volk Associates, Inc. (2020), Econsult Solutions, Inc. (2020)

Figure A.6: Annual Ongoing Economic Impact from 1,000 Households Moving into Baltimore

	Baltimore	Maryland
Direct Household Income (\$M)	\$89	\$89
Total Impact (\$M)	\$74	\$84
Employment (FTE) Supported	410	460
Employee Compensation (\$M)	\$25	\$28

Source: Zimmerman/Volk Associates, Inc. (2020), Econsult Solutions, Inc. (2020)

Appendix D: Impacts from New Construction and Major Rehabilitation

Methodology

To estimate the costs from the demand of new housing, we used capture rates assumed from ZVA to estimate the number of new/renovated housing units associated with the migration of new households moving into Baltimore. ZVA provided a range of capture rates, and we used the lowest of this range to determine an estimated number of units, which is annually, about 5,300 new/renovated units (see Figure A.7 below). When multiplied to calculate a period of five years, this yields 26,500 new households over a period of five years.

Figure A.7: Housing Type Distribution (Among New/Renovated Units) of Potential Households Moving into Baltimore Each Year

Housing Type	All New Households	Capture Rate	Annual Number: New/Renovated Units	Distribution of New/Renovated Units	Five-Year Period: New/Renovated Units
Multifamily for Rent	26,252	15%	3,940	74%	19,709
Multifamily for Sale	3,040	8%	230	4%	1,141
Single Family Attached	8,282	7.5%	620	12%	3,110
Single Family Detached	6,761	7.5%	510	10%	2,540
	44,335		5,300		26,500

Source: Zimmeran/Volk Associates, Inc. (2020), Econsult Solutions, Inc. (2020)

In order to determine the aggregate cost generated from construction of new/renovated housing units, ESI compiled a variety of industry average estimates to determine the cost of building the unit by housing type and construction. These averages were applied to the respective housing type by an average square footage of the unit.

Figure A.8: Average Square Footage and Cost per Square Foot for New/Renovated Housing in Baltimore

Housing Type	New Construction - Cost PSF	Major Rehabilitation - Cost PSF	Average Size by Square Feet
Multifamily for Rent	\$143	\$114	822
Multifamily for Sale	\$125	\$100	1,161
Single Family Attached	\$225	\$180	1,500
Single Family Detached	\$225	\$180	1,500

Source: Econsult Solutions, Inc. (2020), Four Twelve (2020), Fixr (2020), MultifamilyLoans (2020), Rent Café (2020), Lending Tree (2019)

Before the average costs are applied, we then determined that approximately 80 percent of these new/renovated housing units will be renovated units, using historical permit data from another large northeastern city.³⁸ The average cost and average square footage of the respective unit types were then multiplied to get an estimated aggregated cost of \$3.66 billion in construction costs.

Figure A.9: Aggregate Construction/Renovation Activity Represented by New/Renovated Housing from New Households Moving into Baltimore Within Five Years

	New/Renovated Housing Units - Households New to the City	New Construction	Major Rehabilitation	Estimated Costs for New Construction (\$M)	Estimated Costs for Major Rehabilitation (\$M)	Total Cost (\$M)
Multifamily for Rent	19,709	3,408	16,301	\$399	\$1,528	\$1,927
Multifamily for Sale	1,141	197	944	\$29	\$110	\$138
Single Family Attached	3,110	538	2,572	\$182	\$694	\$876
Single Family Detached	2,540	439	2,101	\$148	\$567	\$715
	26,500	4,582	21,918			\$3,656

Source: Econsult Solutions, Inc. (2020)

When we scale this to the impact of 1,000 new households moving into Baltimore, we scale the same inputs that were described, above which gets us to an estimated construction and rehabilitation outlay of \$138 million (recall that not all new households represent a new or renovated unit, so this cost is just for the subset that do). The estimated impact is \$196 million in Baltimore, generating 1,150 jobs and \$56 million in employee compensation per 1,000 new households.

Figure A.10: Cumulative Economic Impact from Construction of New/Renovated Units for 1,000 Households Moving into Baltimore

	Baltimore	Maryland
Direct Impact (\$M)	\$138	\$138
Indirect and Induced Impacts (\$M)	\$58	\$97
Total Impact (\$M)	\$196	\$234
Employment (FTE) Supported	1,150	1,340
Employee Compensation (\$M)	\$56	\$67

Source: IMPLAN (2015), Econsult Solutions, Inc. (2020)

³⁸ In the absence of availability of direct data from Baltimore, Philadelphia permit data were used as a comparable to determining the split of new/renovated housing units.

Appendix E: Property Tax Base Increase Calculation

Methodology

To estimate the property tax base increase represented by new households moving into Baltimore, we used data from ZVA's *An Analysis of the Residential Market Potential* that provide the pricing of these units by housing type and housing tenure. The figure below shows the distribution of housing type of new households migrating into Baltimore.

Figure A.11: Housing Type Distribution of Potential Households Moving into Baltimore within Five Years

Housing Type	Distribution of New/Renovated Units	Five-Year Period: New/Renovated Units
Multifamily for Rent	74%	19,709
Multifamily for Sale	4%	1,141
Single Family Attached	12%	3,110
Single Family Detached	10%	2,540
		26,500

Source: Zimmerman/Volk Associates, Inc. (2020)

In order to calculate the property tax revenues generated from these 26,500 households, the Department of Finance provided the average assessed value and effective property income tax rates using data from historical property assessments. The number of units were multiplied by the respective average assessed value and effective property income tax rate in order to estimate the property tax revenues.

Figure A.12: Property Taxes Generated by Housing Type from New Households Within Five Years

Housing Type	# Units	Average Assessed Value	Average Effective Rate	Aggregated Assessed Value (\$M)	Property Tax (\$M)
Multifamily for Rent	19,709	\$132,462	1.52%	\$2,611	\$39.6
Multifamily for Sale	1,141	\$225,445	1.84%	\$257	\$4.7
Single Family Attached and Detached	5,650	\$156,015	1.86%	\$881	\$16.4
	26,500			\$3,749	\$60.8

Source: Baltimore City Department of Finance (2020), Zimmerman/Volk Associates, Inc. (2020), Econsult Solutions, Inc. (2020)

When scaled to 1,000 households using the same inputs and calculations, we get an estimated \$2.6 million in property tax revenue per 1,000 new households.

Figure A.17: Annual Local Property Tax Revenue Represented by 1,000 Households Moving into Baltimore

Housing Type	# Units	Aggregated Assessed Value (\$M)	Property Tax (\$M)
Multifamily for Rent	744	\$98.5	\$1.8
Multifamily for Sale	43	\$9.7	\$0.2
Single Family Attached	117	\$18.3	\$0.3
Single Family Detached	96	\$15.0	\$0.3
	1,000	\$141.5	\$2.6

Source: Zimmerman/Volk Associates, Inc. (2020), Econsult Solutions, Inc. (2020), Baltimore City CAFR (2019)

Appendix F: Public School Age Children Calculation

Methodology

To estimate the number of public-school age children a result of residential growth, we used ESI's proprietary Community Data Analytics (CDA), which provides demographic ratios by Public Use Microdata Areas (PUMAs). The US Census Bureau defines PUMAs as statistical geographic areas made up of aggregated census tracts within states. The size of each PUMA relies on population rather than geographic size, indicating that less populous areas will contain larger PUMAs. Baltimore City contains five PUMAs: 1) Sandtown-Winchester, Ashburton & Mount Washington PUMA, 2) Guilford, Roland Park & Druid Lake PUMA, 3) Frankford, Belair-Edison & Loch Raven PUMA, Inner Harbor, 4) Canton & Bayview PUMA, and 5) Irvington, Ten Hills & Cherry Hill PUMA. These five PUMAs were combined for the purposes of this analysis. The demographic multipliers used to predict the number of new school age children per housing unit.

Using the multipliers from CDA, we estimated the number of public-school age children based on a residential growth of 1,000 households. The distribution of these households by housing type come from ZVA's market analysis of the residential growth of Baltimore, where we multiplied the respective CDA ratio by housing type to the projected number of households by housing type.

Figure A.18: Housing Type Distribution of Potential Households Moving into Baltimore Each Year

	Distribution	Households
Multifamily for Rent	74%	744
Multifamily for Sale	4%	43
Single Family Attached	12%	117
Single Family Detached	10%	96

Source: Zimmeran/Volk Associates, Inc. (2020), Econsult Solutions, Inc. (2020)

Figure A.19: Estimated Number of Public-School Age Children by Housing Type in Baltimore for 1,000 Households

Housing Type	Households	Number of Public School Age Children per Housing Unit/Type	Estimated Public School Aged Population
Multifamily for rent	744	0.15	109
Multifamily for sale	43	0.05	2
Single Family Attached	117	0.39	46
Single Family Detached	96	0.28	27
	1,000		183

Source: Community Data Analytics (2020), Econsult Solutions, Inc. (2020)

About Community Data Analytics

Community Data Analytics (CDA) is a proprietary product developed by Econsult Solutions for the purpose of fiscal impact analysis. CDA consists of planning ratios derived from the latest Census American Community Survey Public Use Microdata Sample dataset. CDA uses appropriate geography consisting of a PUMA or multiple PUMAs for the best estimations.

CDA planning ratios are calculated using its proprietary Planning Ratio Estimation Program (PREP) and are produced for users to conduct activities such as creating community surveys, planning studies, projection and forecasting, and impact analysis. While the data are sound, user should not solely rely upon CDA ratios as the only basis for making decisions.

Users may not reproduce, change, share, sell, transfer or otherwise give PREP tables to any third party unless CDA specifically provides advance, written authorization. Users expressly understand and agree that CDA shall not be liable for any damages or losses resulting from the use of CDA data products. CDA cannot accept responsibility for any unauthorized alterations or changes of the PREP tables.

Although CDA endeavors to provide the most appropriate and accurate estimates, CDA makes no guarantee or warranties of any kind.

Appendix G: Positive Return on Investment in Tax Incentives to Induce New Residential Construction

A useful way of considering the efficacy of development incentives is to determine the inducement rate at which the City is better off with incentives than without. The figure below illustrates that, based on the characteristics of Baltimore's main incentive program (Newly Constructed Dwelling Property Tax Credit (NCDPTC)) and its current property tax rate, the City is better off in terms of tax revenue generation if 15 percent or more of the units that received the incentive were induced by the incentive and would not have otherwise been built but for the incentive. While it is impossible to know what the true inducement rate is, it is likely that that rate is higher than 15 percent, which would indicate that the City has generated more in tax revenues due to the existence of the incentive than if it did not have the incentive in place.

The figure below steps through the City property tax ramifications from the NCDPTC's availability (top) as well as counterfactual scenario in which the NCDPTC does not exist. In the top scenario, a certain amount of development occurs, generating property tax revenues, although a portion of those tax revenues are abated and are therefore never collected. In the bottom scenario, less development occurs, but all of the resulting property tax revenues are collected.

Based on the current terms of the NCDPTC and current property tax levels, note that at a 15 percent inducement level the amount the City receives in property tax revenues is equal in the with-incentive and without-incentive scenario. At higher inducement levels, the with-incentive scenario would generate even more in property tax revenues and therefore be better for the City. Note also that this does not include the additional economic activity and resulting tax base enhancement from having more households living (and spending money) in the city.³⁹

³⁹ This incentive model reflects the terms of the incentive program that have sunset in 2020; however, the new incentive program is likely to be replaced with terms that are on average similar in incentive level but that have a sliding scale based on house value.

Figure A.20 NCDPTC Incentives Model Inputs and Results

Inducement rate	15%			
Average Market House Value	\$170,000			
Equalization Ratio	86.6%			
Assessed Value	\$147,220			
Total of HH w/ incentive	1,000			
# of HH Induced	150			
Homeowner Property Tax Rate	2.048%			
With Incentive				
# of Households	1,000			
Aggregate City Tax per HH	\$3,147			
Year	City Taxes Due	Credit %	Credit Amount	City Revenue
1	\$3,015,066	50%	\$1,507,533	\$1,507,533
2	\$3,015,066	40%	\$1,206,026	\$1,809,039
3	\$3,015,066	30%	\$904,520	\$2,110,546
4	\$3,015,066	20%	\$603,013	\$2,412,052
5	\$3,015,066	10%	\$301,507	\$2,713,559
6	\$3,015,066	0%	\$0	\$3,015,066
7	\$3,015,066	0%	\$0	\$3,015,066
8	\$3,015,066	0%	\$0	\$3,015,066
9	\$3,015,066	0%	\$0	\$3,015,066
10	\$3,015,066	0%	\$0	\$3,015,066
Total	\$30,150,656		\$4,522,598	\$25,628,058
Without Incentive				
# of Households	850			
Aggregate City Tax per HH	\$3,147			
Year	City Taxes Due	Credit %	Credit Amount	City Revenue
1	\$2,562,806	0%	\$0	\$2,562,806
2	\$2,562,806	0%	\$0	\$2,562,806
3	\$2,562,806	0%	\$0	\$2,562,806
4	\$2,562,806	0%	\$0	\$2,562,806
5	\$2,562,806	0%	\$0	\$2,562,806
6	\$2,562,806	0%	\$0	\$2,562,806
7	\$2,562,806	0%	\$0	\$2,562,806
8	\$2,562,806	0%	\$0	\$2,562,806
9	\$2,562,806	0%	\$0	\$2,562,806
10	\$2,562,806	0%	\$0	\$2,562,806
Total	\$25,628,058			\$25,628,058

Source: Econsult Solutions, Inc. (2020)

Appendix H: Photo Credits

1.2. Economic and Social Impact

National Archives, “Man with a derby hat stands atop a mound of oyster shells outside the C.H. Pearson & Company oyster cannery,” National Archive photo no. 22-CE-172, ca. 1890

Jackson, Jerry, Photo of *Gross and Stoops*, “Abandoned carriage shop carries a ghostly reminder of Baltimore’s past,” by Jacques Kelly, Baltimore Sun, September 2019

2.2. A Dynamic Competition for Residents

Ghee, Phylicia, “MORGANPARK-7”, Live Baltimore

Ghee, Phylicia, “ABELL-3”, Live Baltimore

Ghee, Phylicia, “BELVEDERE-185a”, Live Baltimore

Barnes, Elvert, “GRAFFITI ALLEY”, Flickr, Elvert Barnes Photography, June 2018,
<https://www.flickr.com/photos/perspective/42149314564>

3.5. New Households in the City Means New Spending in the City

Ghee, Phylicia, “BELVEDERE-167”, Live Baltimore

Ghee, Phylicia, “BELVEDERE-175”, Live Baltimore

Ghee, Phylicia, “CHINQUAPIN-8”, Live Baltimore

3.8: A More Vibrant City Economy

“DSC_0075”, Live Baltimore

Ghee, Phylicia, “ABELL-34”, Live Baltimore

5.4. Key Public Services Supported by Net New Tax Revenues

Ghee, Phylicia, “CHINQUAPIN-43”, Live Baltimore

5.5. Public Services to Amenities

Photo of *Baltimore Farmers’ Market & Bazaar*, “Holiday & Saratoga Streets,” Baltimore Collegetown

“DSC_0055”, Live Baltimore

Appendix I: 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.



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