Virginia Beach Housing Needs Assessment, Market Analysis, and Re-Investment Study

Prepared for

The City of Virginia Beach

Prepared by

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1 Executive Summary

1.1 Responding to Housing Needs and Preferences

After decades of growth, the City of Virginia Beach's is not as desirable to the wider market as it has been historically, and the housing market faces serious challenges, due in part to two major demographic and economic shifts. First, the millennial generation has surpassed baby boomers as the nation's largest living generation (Fry, 2016). As millennials get older, they are becoming the nation's largest market segment and their preferences are beginning to make a substantial difference in the housing market. Second, Virginia Beach has an increasing population of households with low incomes that struggle to afford housing and other necessities (refer to section 3.3, graph 6 and section 3.3.2, table 6).

1.1.1 Millennials

Virginia Beach householders are younger than householders in the MSA and the state with 24% of all households in Virginia Beach headed by a millennial compared to 22% in the MSA and 19% in Virginia as a whole. The city's higher education opportunities and military jobs attract large numbers of millennials, but Virginia Beach will only be able to retain these millennials into their professional prime if

- 1. The city shifts away from housing types that reflect the preferences of baby boomers when they were in their prime and
- 2. The city addresses stock vulnerabilities associated with older housing units that have not been updated and therefore, are more likely to be sold as "cash cows" to absentee landlords than to new owner occupants.

Virginia Beach's large supply of older single family homes occupied by middle- and working-class babyboomer homeowners is somewhat at odds with the demands of millennials, who are less interested in decades-old ramblers and townhomes and the low-slung shopping centers that dominate so much of Virginia Beach's built environment. This shift in preferences is part of the reason demand for these properties among today's homebuyers is weakening. Other amplifying factors include delayed household formation among millennials compared to baby boomers and changed underwriting standards that make buying a home less feasible for many millennials in the near-term.

Millennials' desire for convenience shapes their housing preferences. Both renters and homeowners think it's important to live near their friends and family because they want the convenience of being able visit without traveling far distances (Lachman & Brett, 2015). Millennials have shown a preference for mixeduse urban areas for their convenient walkability (Burbank & Keely, 2013; Logan, 2014). Moreover, all else being equal, most millennials will choose a location they perceive as ideal over a unit with greater square footage (Logan, 2014). With these preferences in mind, Virginia Beach's Strategic Growth Areas offer an ideal opportunity to shift away from the single-use, suburban, green-field, leapfrog approach to planning and development that has defined Virginia Beach for decades, and towards a more mixed-use, transit-oriented, development pattern that will

- a) better respond to millennial housing preferences,
- b) reduce the degree to which private costs are shifted to public responsibility,
- c) increase land values,
- d) reduce infrastructure expense, and
- e) generate higher revenue potential for the city.

1.1.2 Housing Affordability

Virginia Beach has sizable working and middle class populations, both as a percentage of the whole, and in magnitude. Depending on how the working and middle classes are defined, between 46.8 and 57.5 percent of the region's 637,189 households are in these categories, with annual incomes between \$25,000 and \$99,999. These percentages translate into durable fiscal stability for the overall region, but Virginia Beach's "working middle" is slowly getting smaller as the city's economy migrates more towards tourism and services and thus becomes increasingly oriented around lower-wage workers (see section 3.3 for more detailed information). While the number households with incomes less than \$35,000 and more than \$100,000 increased, Virginia Beach lost more than 4,000 households with incomes between \$35,000 and \$100,000.

Household Income in						
Constant 2014 Dollars	2000 (#)	2014 (#)	Change (#)	2000 (%)	2014 (%)	
All Households	154,635	165,296	10,661			
Less than \$20,000	11,543	16,549	5,006	7%	10%	
\$20,000 to \$34,999	17,073	18,914	1,841	11%	11%	
\$35,000 to \$49,999	23,366	22,657	-709	15%	14%	
\$50,000 to \$74,999	35,908	34,145	-1,763	23%	21%	
\$75,000 to \$99,999	26,927	25,215	-1,712	17%	15%	
\$100,000 or More	39,818	47,816	7,998	26%	29%	

Table 1: Change in Number of Households by Income Level, 200	0 to 2014
Source: czb tabulation of U.S. Census 2010 and 2014 ACS 5-year e	estimates

Further, the average wage earnings of employees in nine of the top ten industries in the City of Virginia Beach by employment were too low to afford the median rent of \$1,200 in 2014. In six of these industries, the average wages were too low to afford the median rent even if the workers "double up," combining the wages of two employees who are both earning at the average for that industry. Additionally, Virginia Beach's share of the region's lowest-income households (those with incomes below \$20,000) increased from 0.61 in 2000 to 0.70 in 2014. At the same time, the number of housing units affordable to these households decreased (see section 3.3.2 for more details). Increased demand for rental units among lowwage workers rents in two ways. First, the demand/supply imbalance pushes up rents and exacerbates the affordability problem. Second, units become increasingly more profitable for rent than for sale, which may also accelerate the deterioration of lower value units through cash-cow investing.

The number of households that struggle to afford housing along with other necessities is growing faster than the number of households overall, and larger shares of both owners and renters are cost burdened compared to 2000. As of 2014, more than one-third of households in Virginia Beach, approximately 61,420, were "cost burdened". The U.S. Department of Housing and Urban Development (HUD) established the term "cost burdened" to describe households that need more affordable housing. HUD defines cost-burdened households as "families who pay more than 30% of their income for housing... and may have difficulty affording necessities such as food, clothing, transportation and medical care."

Virginia Beach's increasing number of low-wage workers coupled with a measurable lack of affordable housing poses several challenges. First, low-wage workers will co-house to reduce housing costs per worker, imposing more stress on the wear of housing units. These pockets of concentrated use will be

prone to distress, and will grow in size and severity. Second, congestion will increase as workers seek greater affordability outside the city, imposing increased transportation and infrastructure expense on the community. Third, a greater number of local businesses will be unable to create new jobs in Virginia Beach because they are less able to retain and attract workers (since those workers will be unable to secure housing near their jobs). All such outcomes are the result of employers paying too low a wage for their employees to secure housing near work, shifting costs of employment to employees and the public. While employees accept these low wages, employers obtain 100% of the benefit and the public bears the expense to cure the consequences, paying for extra roads, code enforcement, et cetera. The private sector will not fix these problems without sufficient financial incentive to do so.

1.2 Transforming the Housing Stock and Preserving the Market

The city's weakening housing market is also a function of the housing stocks in Virginia Beach showing signs of age and poor maintenance. While certainly not at a crisis level just yet, a large number of formerly owner-occupied single-family detached homes in Virginia Beach will likely flip to absentee ownership if the city does not intervene to slow a sometimes hard-to-see cycle of disinvestment. The City should carefully monitor housing code violations, applications to convert houses from single-family to multi-family use, and the clustering of homes purchased by investors rather than owner-occupants. Again, the private sector is not likely to fix these problems without sufficient financial incentives and regulations to do so.

A sizeable number and percentage of the city's housing stocks are proving harder to market. Sales volume has slowed in recent years and prices have not continued to rise as in the past, indicating declining demand (see section 3.2 for more detail). Virginia Beach grew in an almost unilateral suburban fashion characterized by single-family homes developed with the intention of car travel; these units are especially susceptible to the emerging changes in consumer preferences. Moreover, much of Virginia Beach's housing was built several decades ago and roughly half of the 90,000 single family homes in the city are aging into older structures at nearly the exact same time. A resulting vulnerability is that large areas of the city are comprised of aging subdivisions full of aging homes that the market decreasingly wants, creating a significant volume of properties that aren't receiving needed maintenance. This vulnerability renders them ideal properties for absentee owners to "flip" to rental units with little incentive to upgrade the units or even to maintain them adequately. In turn, this vulnerability renders whole subdivisions prone to big changes triggered initially by changes in a few properties. Without market interventions, Virginia Beach could see tax revenue fall and code enforcement and policing costs go up.

The city's 3:1 ratio of single family to multifamily units aligned perfectly with the suburban expectations of the market from 1960 to 1990, especially a market buttressed by the large volume of government subsidy flowing into Virginia Beach that inflated demand at various price points. This ratio will need to shift significantly towards more multifamily units going forward, otherwise the city risks large areas becoming weak as formerly owner-occupied homes shift into rental tenure in a city with few regulatory tools in place to cope with absentee ownership that too frequently results in shoddy maintenance.

To preserve its historically stable but now softening housing market, Virginia Beach is going to have to confront a range of formidable challenges:

• Triggering the conversion of stocks that are increasingly obsolete (and thus hard to market) into more appealing homes with more desirable neighborhood settings and amenities.

- Using policy to shift development *away from* a, single-use, suburban, greenfield, leapfrog approach to planning and development and *more towards* a mixed-use, transit-oriented, urban pattern by virtue of redevelopment within existing city boundaries and along key transportation corridors.
- Establishing policies to ensure that the production of market-rate multifamily rental housing occurs in step with future demand, addressing affordability challenges for the city's growing share of low-wage workers.
- Creatively preserving housing stocks that are currently affordable, while tackling the problem of declining demand and concentrated distress (see section 3.2 for further discussion of demand trends).

The above challenges are very real. They are also interconnected to such an extent that what is required of Virginia Beach to remain vibrant in the coming years is a recognition of these realities - their origin and present condition - creative local policy changes in response, and either funding from local government, or compensatory subsidy from state and federal government.

Fortunately, Virginia Beach city officials in the city's planning and community development offices and their partners have already laid much of the necessary groundwork for reinvigorating and reinventing the city's housing market in the way this report describes. Notable steps taken to date include:

- The establishment of eight strategic growth areas (SGAs) designed to absorb future growth, all of which lie along key commercial corridors and near existing centers of development.
- The creation and adoption of a 2016 Comprehensive Plan, which outlines the economic development value of transit-oriented development and light rail.
- Significant municipal investment in developing a full throttled code enforcement capacity.
- Anti-sprawl measures contained in the Green Line that add to land values

1.3 Policy and Program Recommendations

While the bottom has not fallen out of the Virginia Beach housing market, nor is it likely to anytime soon, the city is showing significant vulnerabilities. If Virginia Beach wants to address its risks and maintain housing market stability, the city may to have to act in ways it has never had to before. It may have to become more active in marketing the city and its neighborhoods to potential buyers, more supportive of transit-oriented development than it is presently, more firm than ever on its growth boundaries, more invested than ever in subsidizing housing costs for service-sector workers, more nuanced and more focused when it comes to code inspections, and more oriented towards rental housing production. Moreover, the recommendations in this report stress the participation of both private and public partners because local government will need to be an active financial and regulatory partner to have an impact on housing affordability and neighborhood strength.

Putting together a set of strategically linked responses to the nuanced housing challenges requires a combination of four discrete but connected actions:

- Encouraging upgrades by current owners, including both homeowners and investors
- Encouraging the redevelopment of obsolete housing

- Encouraging multifamily developers to redevelop clusters of property at key locations, transforming moderate volumes of obsolete single-family and town homes into higher-density, mixed-income multifamily rentals.
- Providing intensive assistance to financially strapped or elderly owners to achieve code compliance, combined with equally intensive code enforcement for repeat violators.

Virginia Beach's local government may need to provide a range of incentives— financial (grants and loans) and non-financial (incentives embedded in zoning ordinances, for example)— to help private home builders and developers migrate both their thinking and their subsequent investment behaviors from an almost exclusive focus on low-density, single-use projects to a focus on moderate- and high-density residential and mixed-use infill projects. Similarly, Virginia Beach may find it necessary to provide a range of incentives to sufficiently encourage developers to refocus investment in single-family housing away from green-field sites to infill and redevelopment efforts in existing subdivisions, especially some of the city's older subdivisions. The City should complement developer/builder incentives for infill and redevelopment by providing incentives for owners to upgrade single-family units, with a special emphasis on units affordable to households with incomes between 60-120% Area Median Income (AMI).

Virginia Beach's local government may also need to provide gap financing for low-to-moderate-income multifamily rental housing development and rehabilitation, with a special emphasis on units priced for households with incomes between 30-80% AMI. Given the cost of acquisition, pre-development, and development in the local market, there is a substantial financing gap, meaning that private market forces are highly unlikely to create housing that is affordable for households earning less than 120% of AMI. These households will only be served through new funding streams, strong public-private partnerships, and the public providing shared equity and land to the cause. Even with more development of multifamily, mixed-income housing units, Virginia Beach will need to provide city-financed rental subsidies in addition to state and local subsides to make housing affordable for local low-wage service-sector workers.

Virginia Beach should build on its already designated Strategic Growth Areas and proposed transitoriented investment by designating the areas just beyond them (within ¾ of a mile of) as Strategic Code Enforcement and Redevelopment Areas. These areas have older residential stocks that are increasingly shifting from owner- to renter-occupancy and these subdivisions have the city's highest concentrations of code violations. According to City code-violation data, fully 70% of the investor-owned properties in these subdivisions had at least one code violation since 2011. Without intervention, these subdivisions risk further disinvestment and destabilization. These are also areas with remarkable potential to attract residents looking for neighborhoods within walking distance of jobs, retail, entertainment, and transit.

Strategic Code Enforcement and Redevelopment Areas should benefit from intensive code compliance assistance for financially strapped or elderly owners, combined with equally intensive code enforcement of recidivist violators. In addition to this code enforcement work, some subdivisions in this area need significant, strategic, surgical redevelopment to add more desirable stocks to the market, grow the supplies of stocks that are affordable, edit out obsolete stocks and dated development patterns, and revitalize areas of emergent distress.

Each of these strategies will likely require substantial financial and other supports, resources not likely to emerge from either the State of Virginia or the federal government; therefore, VCHR and czb recommend that Virginia Beach establish three new entities to add to the capacity of the city's DHNP, and plan to

resource them itself. These entities, listed below, would help guide the stabilization of weak subareas and the production of new affordable housing. The alternative, to let the market run its course, would be the equivalent of placing a bet of about \$3B (the estimated ad valorem of the city's older, increasingly obsolete ranch homes) on the notion that these once-but-no-longer appealing homes will find their match on the open market at a time and for a price that winds up being good for Virginia Beach. Should Virginia Beach leave its housing market to the unfettered forces of choice, association, and unchecked private property rights, or recognize the icebergs ahead and get out its sextant and slide rule? If taking charge of the task of navigating potentially rough seas is preferred, Virginia Beach will need the following tools:

- A City of Virginia Beach Land Bank can be helpful in the effort to acquire and hold (bank) troubled properties until future development by the private market or by designated nonprofit organizations can occur. Resource use would include dollars for surgical redevelopment of especially weak areas near SGAs.
- A City of Virginia Beach Community Land Trust is a good potential tool for acquiring and holding (banking) land in perpetuity for future use as affordable housing. Resource use would include assembling parcels to assure a permanent stock of affordable housing.
- A City of Virginia Beach Housing Trust Fund would be a valuable mechanism to collect and distribute housing and neighborhood resources to the Land Bank, the Land Trust, or to other entities as determined. A local housing trust fund may also help Virginia Beach leverage funds from State and Federal housing trusts.

1.4 Included in the Full Report

The full report that follows contextualizes the housing challenges of Virginia Beach and provides data that VCHR and czb used develop the recommendations summarized above. The report includes a detailed discussion of recommended strategies and implementation tools. Finally, the report's appendices provide additional data and information that Virginia Beach residents, local government staff and other stakeholders may find useful as they tackle these substantial housing challenges.

2 Preface

2.1 About VCHR and czb, LLC

The Virginia General Assembly and Virginia Tech created the Virginia Center for Housing Research at Virginia Tech (VCHR) in 1989 to respond to the housing research needs of Virginia and the nation. In its 25-year record of performance, VCHR has established an unparalleled reputation for high-quality research on affordable housing that integrates policy, building technology and the housing industry. As a university research center, VCHR is committed to developing and applying the best research design to improve public policy and programs through a mutual commitment to learning and discovery. The accuracy of data analysis depends on the quality of the data collection instruments and procedures. The Principal Investigators, Mel Jones, Andrew McCoy and Ted Koebel, who have significant training and experience in research methods, designed and supervised the data compilation, collection and analysis discussed in this report. All of the research procedures described below conform to established research protocols for assuring the objectivity and accuracy of data.

In response to every request, VCHR identifies the best talent within Virginia Tech and beyond to provide the capacity, talent and drive to deliver the best possible analysis and recommendations. VCHR selected czb, LLC to collaborate on this study for their extensive housing policy and strategy experience. Charles Buki, czb Principal, and Karen Beck-Pooley, PhD, czb's Senior Associate have experience from work spanning 44 states and more than 300 communities. Mr. Buki and Dr. Beck-Pooley are national authorities on housing policies and strategic response to local market conditions and priorities. czb's clients have ranged from severely challenged communities in Saginaw (MI) and Pittsburgh (PA), where their work has focused on economic development and the best way to stimulate housing demand amid a shrinking tax base with scarce resources, to prosperous and thriving communities like Santa Fe (NM) and Park City (UT), where their work focused on managing growth and its impacts, especially linking economic and community development to the needs of struggling families and maintaining housing affordability in a booming economy or real estate market.

2.2 Data and Methodological Notes

VCHR and czb, LLC used a number of data sources to learn about housing needs and conditions in Virginia Beach. The City of Virginia Beach provided much of that data, including real estate assessment data, code violation data, as well as housing policies and plans. VCHR and czb, LLC reviewed Multiple Listing Service (MLS) data, the Gold Standard for measuring market demand. The Real Estate Information Network (REIN) provided MLS data for this study on behalf of the Hampton Roads Association of Realtors. VCHR and czb also used publicly available data from the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, and the Virginia Workforce Commission among other sources. VCHR and czb have incorporated the latest data with which we are able to conduct a consistent analysis. The majority of our data resources provided 2014 estimates. In addition to the resources mentioned above, czb and VCHR collected data from residents of Virginia Beach, City staff, and expert stakeholders through focus groups and an online, selfadministered survey. A more detailed discussion of this data collection and an analysis of focus group and survey data is included in Appendix 11. Conclusions drawn from all of these data sources appear throughout the report.

VCHR and czb used City real-estate assessment data, City code violations data, U.S. Census American Community Survey (ACS) data, and MLS data to gather information about the housing stock. VCHR used City assessment data to gauge the age of housing in Virginia Beach and supplemented this data with information from the ACS including building type (single family attached and detached, multifamily by number of units in the structure, and mobile and manufactured homes), and the number of bedrooms. Czb used City assessment data, code violation data and MLS data to assess vulnerabilities beyond the age of the City's stock to identify declining subdivisions and areas in need to rehabilitation and revitalization.

The American Community Survey Public Use Microdata Sample (ACS PUMS) is VCHR's main source of information on City households including demographic profile (family size, family type, householder age, etc.); occupancy characteristics (number of occupants, presence or children, seniors, elderly and or people with disabilities); and tenure, whether the household rents or owns the home where they live. The ACS PUMS also enabled VCHR to assess the characteristics of households in population subgroups: households headed by a millennial, household headed by a baby boomer, households with one or more senior members, households with one or more active-duty military members, etc.

VCHR used a special tabulation of the ACS called the Consolidated Housing Affordability Strategy (CHAS) data to estimate the degree to which the economic means of households are matched with the affordability of the housing supply. See the housing affordability gap analysis in Appendix 8. The CHAS data designates each unit as affordable to specific income levels based on the size of the unit, the unit's value or rent, and the level of income required for a household of corresponding size to affordably rent or own the unit. The CHAS tabulation also provides data on the income levels of occupants currently living in units at each unit affordability level.

2.2.1 Important Terms and References

- **Cost-burdened Households** The U.S. Department of Housing and Urban Development (HUD) established the term "cost burdened" to describe households that need more affordable housing. HUD defines cost-burdened households as "families who pay more than 30% of their income for housing... and may have difficulty affording necessities such as food, clothing, transportation and medical care." Severely cost-burdened households pay 50% or more of their income for housing and are likely to be making tough choices between housing and other necessities.
- Percent of Area Median Income (AMI) HUD sets income limits by household size that determine eligibility for assisted housing programs. HUD develops these income limits based on Median Family Income estimates and Fair Market Rent area definitions for each metropolitan area, parts of some metropolitan areas, and each non-metropolitan county. These income limits are useful tools for housing needs assessments because they are a common standard with which to categorize households based on income, taking into consideration household size. Although HUD only publishes the median for a family of four and income limits at 30, 50 and 80 percent of the median for households including up to eight people, HUD offers documented formulas for calculating limits at other income levels as a percent of the median and for larger household sizes. VCHR follows this methodology for calculating limits at other, unpublished levels such as 100 and 120 percent of AMI.
- Housing Affordability Housing affordability is a broad term used to discuss the degree to which housing units in a particular market or sub-market meet the income-based needs of households in that market. Researchers and practitioners generally consider housing affordability for income groups that may face challenges related to affording housing, for example

- extremely low-income households that do not make enough money to obtain decent housing;
- young professionals who wish to become homeowners, but cannot find a starter home with associated costs within their budget; and
- established owners who cannot find an appropriate home in which to "upgrade" as their families grow and they enter their professional prime.

Housing affordability is not usually a concern for higher-income households that have the means to obtain their desired housing without sacrificing other household needs such as safety, transportation, medical care, food, education, childcare, etc.

2.3 Profile of Housing and Households

2.3.1 The City's Housing Stock

As of 2014 there were approximately 182,152 housing units in the City of Virginia Beach. Three-fourths (75%) or about 138,000 of these housing units are single-family homes. The majority of single family homes are detached units, but more than one-third (36%) are town homes or duplexes and classified as "attached." The percentage of single-family units is slightly greater in Virginia Beach than in the MSA (72%) and Virginia (73%), but its share of detached single-family units is moderately lower.

Nearly one in four or about 42,000 housing units in the City of Virginia Beach are in a multifamily structure. Half of the multifamily units are in structures containing fewer than 10 units while others are in larger buildings: 22% in 10- to 19-unit buildings, 10% in 20- to 49-unit buildings, 16% in buildings with 50 for more units.

The median number of bedrooms per housing unit in Virginia Beach is 3. Single-family detached homes have a larger median number of bedrooms, 4 per unit, while attached single-family homes have a median number of bedrooms consistent with all housing units at 3. Multifamily units in Virginia are typically smaller with a median of 2 bedrooms per unit. There are less than 2,500 efficiency- or studio-style units (between 846 and 2,496 units) with no bedrooms.

About half of the housing stock in the City of Virginia Beach was built in the 1970s and 1980s. The City's proportion of housing units built between 1970 and 1989 is significantly larger than in Virginia as a whole, units built between 1970 and 1989 make up 32% of Virginia's housing stock. The report includes a more in-depth discussion of the age, value and condition of the housing stock in section 3.2.

2.3.2 Occupancy and Tenure

As of 2014, approximately 92% of housing units in Virginia Beach were occupied. The homeowner vacancy rate has decreased since 2011, while the rental vacancy rate has increased. These vacancy trends may be explained in part by changes in tenure. Some previously owner-occupied units were likely converted to rental after the Great Recession and subsequent foreclosure crisis. Renting became more attractive to many households following the recession (see discussion of baby boomer housing trends in Appendix 4). Further, very few new single-family units have been added (see Appendix 10, graph 42 for more information). These trends toward renting also portend the changing nature of housing valuation in the local market wherein yesterday's value was a derivative of demand by future homeowners, and today's value is increasingly driven by projected net present value of rental incomes. The flip in profitability towards absentee-owned rental property of formerly owner-occupied single-family detached housing

units is indicative of a greater return being available from rent flows and nominal reinvestment than from sales to future owner occupants.

Over the previous ten years Virginia Beach vacancy rates have typically been well below vacancy rates for the entire MSA. In recent years, Virginia Beach and MSA rates have grown together with MSA rates falling dramatically since 2011, Virginia Beach's rental vacancy rates increasing and the City's homeowner vacancy rate remaining fairly constant. In 2014, homeownership vacancy rates and rental vacancy rates in Virginia Beach were nearly the same as the rates for the entire MSA. This trend may indicate that the metropolitan housing market has become more connected and demand within the market more fluid.



As of 2014, owners occupied 64% of the 167,000 occupied housing units in the City of Virginia Beach. Renters occupy the remaining 36% of units. Renters and owners have different housing costs and renters are more likely to grapple with housing affordability challenges. A disproportionately large share of renters have low household incomes, less than 80% of Area Median Income (AMI). Renters are also disproportionately cost burdened, meaning that renters are more prevalent in the population of households paying more than 30% of their income for housing than they are in the total population of households. Households that pay more than 30% of their income for housing may have to make choices between housing and other necessities like medical care, transportation or food. The report discusses housing affordability for renters, owners and other population segments in more detail in section 3.3.

2.3.3 Households

As of 2014, the population of Virginia Beach was an estimated 451,227 people, making up approximately 167,000 households. About a quarter of Virginia Beach householders are millennials, age 18-24, 27% are 35-49, 35% are categorized as baby boomers, ages 50-69, and about 13% are 70 or older. Note that although millennials are the largest cohort by population, many have not yet formed their own households so they are not yet the largest cohort of householders. Virginia Beach householders are generally younger than householders in the MSA and Virginia overall. Households headed by a person age 15 to 34 comprise 24% of all households in Virginia Beach compared to 22% for the MSA and 19% for Virginia as a whole. Further, 26% of households are headed by an individual age 60 or older, compared to 29% for the MSA and 31% for Virginia.

The majority, 71%, of households within Virginia Beach are families. The American Community Survey (ACS) defines family households as two or more related individuals occupying a single housing unit. Slightly less than half of married-couple households have children present.

Virginia Beach has a greater prevalence of households with children than the MSA and Virginia as a whole. Within Virginia Beach, 35.4% of all households include one or more people under the age of 18. Of these households with children, 98.7% are family households indicating that the child/children present are living with a relative. A large majority of households with children are households with parents and their own children present, at 90%.

One-third of Virginia Beach households are made up of 2 people. About 40% of household include 3 or more people and the remaining quarter are single-person households. The average household size is 2.62, which is nearly identical to the average of the MSA and Virginia. Individuals living alone make up a relatively small proportion of the household population compared to the MSA and Virginia as a whole. The majority, 80%, of the 48,332 non-family households are individuals living alone. The remaining 9,833 non-family households consist of households with multiple unrelated individuals.

The median household income for Virginia Beach is \$70,388 as of 2014, which is well above the 2014 median household income of for the MSA (\$59,244) and for Virginia as a whole (\$64,792)¹ Married couple households and multi-generational households have the highest median incomes, likely because many include two or more earners. Single-mother households and seniors living alone have the lowest median incomes. The report includes more detailed information about housing challenges and vulnerable households in section 3.3.

¹ The city's median is a reflection of many changes the last 15 years, including an increase of 6,847 more households with incomes less than \$35,000, the loss of 4,184 households with incomes between \$35,000 and \$100,000, and the addition of nearly 8,000 new households earning more than \$100,000. In effect, like much of the nation over this period, Virginia Beach grew at the top and bottom while losing some in the middle, the effect of which is rising housing prices overall, a growing cost burden for the bottom, and a poor match of supply to demand in the middle.

3 Findings

VCHR and czb analyzed City data, publicly available data and data collected from residents and expert stakeholders as a part of the Housing Needs, Housing Market Analysis, and Housing Re-investment Study for the City of Virginia Beach. At the culmination of this analysis, VCHR and czb identified three primary conditions that form the basis of our recommendations. These conditions, (1) the importance of millennials, (2) the age and associated vulnerabilities of the city's housing stock, and (3) the increasing importance of lower-wage jobs along with their associated threats and opportunities for the City of Virginia Beach, are the main impetus for the interventions recommended in section 4.1. This section discusses each of these conditions and associated considerations that VCHR and czb believe are important for the City of Virginia Beach to acknowledge.

3.1 Millennial Impact

VCHR estimates that approximately 120,938 millennials lived within the City of Virginia Beach in 2014, comprising over a quarter (26.8%) of the total population. Millennials are individuals born between 1981 and 1997², making them age 17 to 33 in 2014. Over 40,000 households in the City of Virginia Beach have a millennial head of household, just under one fourth (24.1%) of total households. Further, 42.7% of households include at least one millennial resident.

As of 2015, millennials³ have surpassed baby boomers as the nation's largest living generation, at 75.4 million strong (Fry, 2016) The housing choices of millennials are important because of the generation's large size and resulting large impact on the housing market. In the next five years, millennials will spend more per-household on rent and home purchases combined than any other generation (Burbank & Keely, 2013).

In 2009, people age 18-34 became the largest age group by number in Virginia Beach and as of 2014, millennials make up 27% of the Virginia Beach population. Virginia Beach householders are generally younger than householders in the MSA and Virginia overall. Households headed by a person age 15 to 34 comprise 24% of all households in Virginia Beach compared to 22% for the MSA and 19% for Virginia as a whole.

Military jobs and opportunities for higher education attract millennials to Virginia Beach. Nearly one-fourth (24.2%) of the millennial population and one fifth of millennial householders in Virginia Beach are currently attending college. Further, 13.6% of all households include at least one millennial currently attending college.

Millennials make up 40% of the City's resident labor force, people who live in Virginia Beach and are working or seeking work. About 6,821, 6.8%, of these millennials are unemployed. Millennials are disproportionately unemployed, comprising half (52%) of all unemployed individuals living within the City of Virginia Beach. VCHR estimates that approximately 20,000 (26.5%) of Virginia Beach's millennial residents are not currently in the labor force and not currently seeking work, many of whom are likely students.

The two largest millennial employment industries are the Military and the Arts, Entertainment, Recreation, Accommodation and Food Services industry. VCHR estimates that about 17% of the millennial

² http://www.pewresearch.org/fact-tank/2016/04/25/millennials-overtake-baby-boomers/

³ Millennials here as defined as those ages 18-34.

labor force are working in each of these two Industries. As shown in Graph 2, millennials are disproportionately represented in both the Military and in the Arts, Entertainment, Recreation, Accommodation and Food Services industry. For example, 74.4% of workers employed by the Military in Virginia Beach are millennials even though millennials only make up quarter of the city's population.



While the City currently has a large number of millennial households and the number of millennial households is growing, the number of householders age 35-49 declined 22% from 2005 to 2014. The decline of households headed by householders age 35-49 (the first millennials turned 35 in 2016), combined with housing stock characteristics that may deter millennials from long-term residency suggest that Virginia Beach will need to work actively to retain the millennials who are living in Virginia Beach temporarily, until they graduate or complete their military service. VCHR has included more information on millennials in Virginia Beach in Appendix 3.

Virginia Beach's large supply of older single-family homes occupied by middle- and working-class babyboomer homeowners is somewhat at odds with the demands of millennials, who are less interested in decades-old ramblers and townhomes and the low-slung shopping centers that dominate so much of Virginia Beach's built environment. This mismatch is part of the reason demand for these properties among today's homebuyers is weaker. Whether they rent or own, the housing preferences of millennials can be characterized by privacy, convenience, and conservation. Although the single-family detached stock that dominates much of Virginia Beach may offer the privacy and space that millennials seek, it is unlikely to appeal to conservation preferences and above all, the convenience requirements demanded by home-seeking millennials.

Millennials look for convenient features when finding a home. Both renters and homeowners think it is important to live near their friends and family because they want the convenience of being able to visit without traveling far distances (Lachman & Brett, 2015). Millennials have shown preference for mixeduse urban areas for their convenient walkability (Burbank & Keely, 2013; Logan, 2014). Millennials value cars for their usefulness rather than their status symbol. If an alternative form of transportation is faster, cheaper, or more convenient, they are likely to stray from personal automobiles. As a result, millennials are driving fewer miles than the generations before them (Lachman & Brett, 2015). Most millennials will choose the ideal location over greater square footage (Loan, 2014). As they age and start families, more millennials might want homes with yards. A likely challenge for Virginia Beach is that the stocks that should appeal to millennials as they have children have not been well maintained, nor are they especially well located; thus, the need to retrofit homes and revitalize neighborhoods is discussed more in section 4.1, Suggested Interventions.

Housing preferences of baby boomers are also changing, adding to the shift in preferences stemming from millennial demand. Boomers exiting their long-term home often transition to central cities and active communities, which corresponds with the preferences of millennials. Rappapart (2016) indicates that adults 50-69 occupied nearly 2.5 million additional multifamily units from 2000-2013, which accounts for most of the increase in overall U.S. multifamily occupancy. Part of this trend stems from the rise in 55+ households occupying condos within central cities, a location often desired by recent college graduates as well. Demand from these two groups, along with limited supply can rapidly inflate rents and sale prices (Keates, 2013). Residential developers find the entry-level homes, which they market to young families, are instead acquired by boomers (Lawrence, 2016). Empty-nest boomers raised millennial children, and so Lawrence (2016) suggests, "they want to live side by side with their kids, the millennials, in physically and socially active neighborhoods". Proximity to children ultimately betters the promise of aging in place and can avoid an eventual transition to a nursing facility (Desjardins, 2013; Painter & Lee, 2009). Community features including open space and exercise paths compel select boomers to depart from their conventional suburban or rural home in pursuit of a more active, socially connected lifestyle (Bernstein et al., 2011; Lawrence, 2016). Further, boomers have financial incentives to downsize and rent including reduced maintenance and home modification concerns as well as increased liquidity of assets (Keenan, 2010; Kwon et al., 2015; Lawrence, 2016). VCHR has included an in-depth discussion of millennial housing preferences and boomer housing preferences as they are described in the current academic and trade literature in Appendices 2 and 4. Appendix 5 includes information about baby boomers in Virginia Beach.

This shift in preferences means that demand for much of the Virginia Beach stock is weaker among today's homebuyers, evidenced by more and more homes selling not to new owner-occupants, but to absentee owners instead (see Section 3.2.2 for further discussion). While not at crisis levels just yet, it is likely that a large number of formerly owner-occupied single-family detached homes will flip to absentee ownership if nothing is done. The private sector will not fix these problems without sufficient financial incentive to do so. Further, as a large percentage of the city's housing stocks age and become less marketable, and as other communities in the region become better positioned to compete for gen X, millennial, and postmillennial households (whose housing preferences are decidedly less suburban than the preferences of baby boomers were at their age), Virginia Beach will have to confront a range of formidable challenges:

City of Virginia Beach Housing Needs Study, Market Analysis and Re-investment Study

- Converting stocks that are increasingly obsolete into marketable homes in desirable settings.
- Shifting away from a single-use, suburban, greenfield, leapfrog approach to planning and development and moving towards a mixed-use, transit-oriented, urban development pattern by virtue of redevelopment within existing city boundaries and along key transportation corridors.
- Ensuring the production of market rate multifamily rental housing on par with future demand, and addressing affordability challenges for the city's growing share of low-wage workers.
- Creatively preserving housing stocks that are currently affordable, while tackling the problem of declining demand and concentrated distress.

3.2 Stock Vulnerabilities

Virginia Beach used to have housing stocks that were new and highly desirable, but that's less the case today. A large number and percentage of the city's housing stocks have marginal appeal at present, and are becoming less desirable each day owing in part to slow and slight but continual disinvestment. Because Virginia Beach grew in almost unilaterally suburban fashion - single family homes developed entirely around a car - these stocks are especially susceptible to changing consumer preference. As the typical Virginia Beach brick rambler has gone out of style, demand has softened and continued price stability cannot be assumed.

The average sale price of single-family homes has been stagnant (for the most part) for the last 10 years. It increased slightly during the boom (to a high of nearly \$378,000 for single-family detached homes in 2007), but returned to and has since remained at pre-boom levels.



Similarly, single-family homes spend more time on the market now than they did during the boom: roughly three-and-a-half months versus just over two months (graph 4 below). Although Virginia Beach fared well during the recession, performing better than Virginia and the US overall, Virginia Beach has lagged behind Virginia in price recovery since 2012 (see graphs 31 and 33 in Appendix 10).



Moreover, Virginia Beach grew up all at once and roughly half of the 90,000 single family homes in the city are all aging into older structures at very nearly the exact same time, a large enough number requiring a significant enough measure of catch-up capital improvements to warrant concern. Note the correlation between the location of older properties built in the 1960s, 1970s, and 1980s and the location of the lowest sale values along the transportation arterials that make up the core of the Strategic Growth Areas shown in maps 1 and 2.



The net vulnerability is that large areas of the city are comprised of aging subdivisions (see Map 1 on page 19) full of aging homes that the market decreasingly prizes (see Map 2 on page 20), creating a large volume of properties that aren't receiving needed maintenance which renders them ideal flip-investor properties for a next generation of absentee owners. Note the correlation between code violations and investor-owned properties shown in maps 3 and 5 on page 22 and 38. These trends render whole subdivisions prone to big changes - such as a shift from majority owner to majority renter occupancy - as a result of initially small events. Based on this information and analysis, the question for Virginia Beach is "What it as a city is willing to do to intervene in the disposition of what amounts to 50% of its housing stocks, now having been informed that most of these are disposed to decline without large-scale public sector intervention?"





Virginia Center for Housing Research at Virginia Tech & czb, LLC Final Draft, February 2017





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3.2.1 Low Investment

As the city's housing stocks have aged, so have homeowners.

Source: 0.5. Census 2000 and 2014 ACS 5-year estimates, table B25007							
	2000	2014	Change	2000	2014		
Owner occupied:	101,308	105,999	4,691				
Householder 15 to 24 years	1,388	739	-649	1%	1%		
Householder 25 to 34 years	15,107	11,991	-3,116	15%	11%		
Householder 35 to 44 years	28,056	19,907	-8,149	28%	19%		
Householder 45 to 54 years	24,382	25,152	770	24%	24%		
Householder 55 to 64 years	15,071	22,484	7,413	15%	21%		
Householder 65 to 74 years	10,821	15,140	4,319	11%	14%		
Householder 75 to 84 years	5,596	7,859	2,263	6%	7%		
Householder 85 years and over	887	2,727	1,840	1%	3%		

Table 2: Owners by Age of Householder, 2000 to 2014

Source: U.S. Census 2000 and 2014 ACS 5-year estimates, table B25007

Owners who bought their first homes in the 1970s, 80s, and 90s are beginning to retire, and their changing family and financial considerations increasingly mean they or their families are or soon will be selling their homes. Individuals beyond age 65 typically begin acting as home sellers more than buyers, and Myers & Ryu (2008) predict sellers will start exceeding buyers across Virginia after 2031. Nationwide, this potential generational housing bubble represents an unprecedented phenomenon due to the size and spread of the baby boomer generation. Select research frames the aging of the baby boom generation and its housing with great concern, to the extent of characterizing baby boomer housing issues as a "silent tsunami" (Kennedy, 2010). Myers & Ryu (2008) provide an extreme scenario by suggesting the generational housing bubble equates to the emptying of suburbs, vacant single-family detached homes, depleted equity, and the inability to balance municipal budgets.

As households age, their capacity to take proper care of their homes declines, as does their financial capacity. In 2008 one quarter of seniors indicated that they had not invested in any home improvements within the past decade (Desjardins, 2013). As the on-going maintenance schedules change, properties begin to reflect shifts in upkeep and begin to look tired. Landscaping is done less frequently. Exterior paint or power washing is less common. Gutters, downspouts, and roofing are replaced less often. The market notices and, all else being equal, demand falters - slightly, even imperceptibly at first. Eventually a collection of formerly house-proud owners whose decades of steady upkeep used to inspire pride among neighbors and sustain stable home values can give way to indifference, a downturn in pride and reinvestment, a tenure shift, and absentee investor ownership. In too many instances throughout Virginia Beach, this shift is occurring and the associated market vulnerability may be substantial, in overall volume and especially on a block-by-block basis in key older settlements. The question for Virginia Beach is what it as a city is willing to do to assist aging owners to increase their level of investment in their homes and pick up the pace and quality of on-going maintenance?





Virginia Center for Housing Research at Virginia Tech & czb, LLC Final Draft, February 2017 Baby boomers own 42% of owner-occupied housing units in Virginia Beach, nearly 45,000 units. The vast majority, 80%, of these units are single-family detached units. Further, 41% of these boomers living in single-family detached units have lived in their homes for 20 years or longer, 36% have lived in their homes for 10-19 years, and only 23% have lived in their home for less than 10 years.

More than one-quarter of boomer owners in Virginia Beach are cost burdened, spending more than 30% of their income on housing. The cost-burden rate is similar, 24%, among boomers who own single-family detached units. Cost-burdened households may have to choose between housing costs and other necessities, so it follows that cost-burdened owners are unlikely to have extra income to address housing repairs and even less likely to have funds for capital investments that keep their home market ready. Overall, 27% of owners occupying single-family homes are cost burdened, just under 21,000 occupy single-family detached homes while 5,000 to 8,000 occupy single-family attached homes like townhomes and duplexes.

3.2.2 Transfer Risk

In Virginia Beach - with a high rate of owners exiting military service - there is considerable risk when properties are listed for sale, they will become absentee owed, especially rentals holding the promise of monthly dividends, and older owner-occupied properties conducive to a flip to rental. The emerging risk is really a perfect storm of converging factors: older housing that is hard to market to would-be owner occupants, older owners seeking to sell their existing, modestly sized and generally unappealing housing stocks, and a large and growing cohort of service sector workers employed in Virginia Beach with limited incomes. An era of softer values is inevitable as older owners of older homes try to sell real estate of limited market appeal. Softer values will be low-hanging fruit to speculative landlords, and especially attractive to would-be buyers lacking deep pockets and short on asset and property management experience. Continued deferred maintenance is all but certain in many cases, as is a high probability of reduced investments in capital upgrades. Resulting values will stem less from anticipated tax benefit or future sales proceeds than from cash flow, and a large number of formerly house-proud single-family detached and semi-attached homes are likely to be susceptible to decline. Factor in the increased competition from elsewhere and the changing preferences, and the most notable place where risk can be seen is at the point of sale. The question for Virginia Beach is what it as a city is willing to do to intervene in sales transactions to ensure quality of owners are maintained.

3.3 Housing for Low and Middle Income Workers

Virginia Beach historically outpaced the region in the competition for middle-income families; for many reasons, that is no longer true. The region is now far abler to compete against Virginia Beach for a share of the middle-class households that Virginia Beach has long been accustomed to attracting disproportionately. These households used to avoid downtown Norfolk and the near downtown Norfolk neighborhoods of Park Place, Ghent, and others. It used to be that Norfolk, Newport News, Chesapeake, Portsmouth, and Hampton could not offer competitive quality of life opportunities on par with Virginia Beach, but as baby boomers have aged in Virginia Beach, too many are retiring with several decades of too little proper upkeep of their homes, and too low a level of capital upgrades, reducing their chances for obtaining the sales prices they will want. Moreover, many in Virginia Beach will be struggling to find good buyers for their brick ramblers and split-level colonials while neighboring jurisdictions throughout the region are trading on the historic architecture and authentic urban form that the market demands. Gen X, millennial, post-millennial and even aging boomer households all prefer the convenience of a more

urban experience of the sort found in Norfolk. This urban form is far less prevalent in Virginia Beach because the baby boomers who settled in Virginia Beach preferred a suburban form that today constitutes the essence of the city's character expressed in ranch style homes, low-density shopping centers, garden apartments, and cul-de-sacs. As Virginia Beach's neighbors have begun to revitalize, gentrify and reinvest in their downtowns and in their historic architecture, it is no longer given that Virginia Beach will retain its hold on the region's middle class.

Further, the Virginia Beach economy is dominated increasingly by tourism-related industries and the lower-wage jobs associated with businesses in these industries (especially "accommodations and food services" jobs). Employment in the Hospitality and Leisure industry has increased 25% since 2001 and now constitutes 21% of private (non-government) employment. Employees in the Hospitality and Leisure industry made up about 16% of all those employed in the City of Virginia Beach in 2015. Average annual pay in privately owned businesses in the Hospitality and Leisure industry was \$17,312 in 2015 compared to an average of \$40,735 for all employees in Virginia Beach and \$39,883 among employees of all non-government establishments.

Between 2000 and 2014, Virginia Beach's share of the MSA's highest-income and middle-income households fell (see graph below). While Virginia Beach still has less than its share of the region's lowest-income households, those with incomes below \$20,000, its share increased from 0.61 in 2000 to 0.70 in 2014. Households with incomes below \$20,000 was the only income category that saw an increase.



The average wage earnings of employees in nine of the top ten industries in the City of Virginia Beach by number of employees were too low to afford the median rent, \$1,200 in 2014. In six of these industries, the average wages are too low to afford the median rent even if the workers "double up," combining the wages of two employees both earning at the average for that industry.

VCHR and czb compared the maximum affordable housing costs for workers to the median rent and median owner costs in Virginia Beach to identify workers that may face housing affordability challenges or not be able to afford to live in Virginia Beach at all. This comparison is particularly relevant in Virginia Beach, since the majority of units have associated costs that are very close to the median, within \$200-300. Further, there are very few units priced more than \$300 below the median, below \$900 per month. In the table below, employees earning the average wage in occupations designated by "!!", could not afford the median rent. Employees earning the average wage in occupations designated by "!!", could not afford the median rent if shared (doubled up) with another person with equivalent earnings

Table 3: Average Weekly Earnings and Maximum Affordable Housing Costs for the Top Ten Industries
by Employment in the City of Virginia Beach

Industry	Average	Average Weekly	Maximum	Maximum
	Employment	Wage	Affordable	Affordable
			Monthly Housing	Monthly Housing
			Cost	Cost, doubled up
Limited-Service	6,948	\$241	<mark>!</mark> \$289	<mark>!!</mark> \$578
Restaurants				
Full-Service	11,034	\$330	<mark>!</mark> \$396	<mark>!!</mark> \$792
Restaurants				
Supermarkets and	4,324	\$386	! \$463	<mark>!!</mark> \$926
Other Grocery				
(except				
Convenience)				
Stores				
Hotels (except	3,770	\$414	<mark>!</mark> \$496	!!\$993
Casino Hotels) and				
Motels				
Temporary Help	3,318	\$492	<mark>!</mark> \$590	<mark>!!</mark> \$1,180
Services				
Retail Trade	24,782	\$495	<mark>!</mark> \$594	<mark>!!</mark> \$1,188
Warehouse Clubs	3,005	\$678	<mark>!</mark> \$813	\$1,627
and Supercenters				
Elementary and	12,884	\$725	<mark>!</mark> \$870	\$1,740
Secondary Schools				
Manufacturing	5,601	\$950	<mark>!</mark> \$1140	\$2,280
Offices of	5,290	\$1,588	\$1905	\$3,811
Physicians (except				
Mental Health				
Specialists)				

Source: VCHR tabulations of 2014 Virginia Workforce Connection Labor Market Information Data

More detailed wage and earnings data is available for occupations for the Virginia Beach MSA. Eight out of the top ten occupations in the MSA by employment, designated by at least one "!", could not afford the median rent in Virginia Beach in 2015 (\$1,258) even when earning in the 90th percentile. Employees in occupations designated by "!!", could not afford the median rent when earning in the 90th percentile and, when earning at the median could not afford the median rent if shared with another person with

equivalent earnings. Most of these workers are included in the 40-80% of AMI income category and are considered to have very-low to low incomes.

Table 4: Median Earnings and Maximum Affordable Housing Costs for the Top Ten Occupations by
Employment in the Virginia Beach MSA

Occupation	Employment	Median	Median Annual	Maximum
		Wage	Earnings	Affordable
				Monthly
				Housing Cost
Retail Salespersons	28,580	\$9.47	\$19,700	!! \$492/mo.
Cashiers	22,410	\$8.80	\$18,300	<mark>!!</mark> \$457/mo.
Combined Food Preparation and Serving	21,570	\$8.86	\$18,420	!! \$460/mo.
Workers Including Fast Food				
Office Clerks General	16,540	\$13.56	\$28,200	! \$705/mo.
Registered Nurses	13,700	\$29.50	\$61,350	\$1,533/mo.
Waiters and Waitresses	13,560	\$10.42	\$21,680	<mark>!!</mark> \$542/mo.
Customer Service Representatives	12,960	\$13.94	\$29,000	! \$725/mo.
Janitors and Cleaners Except Maids and	11,870	\$10.57	\$21,990	!! \$549/mo.
Housekeeping Cleaners				
Stock Clerks and Order Fillers	11,500	\$11.31	\$23,530	<mark>!!</mark> \$588/mo.
General and Operations Managers	9,190	\$50.70	\$105,460	\$2,636/mo.

Source: VCHR tabulation of 2015 U.S. Bureau of Labor Statistics

Even some municipal employees are likely to face housing affordability challenges based on their earning compared to the median rent. Employees subject to the General Pay Plan (G grades) for the City are more likely to face housing affordability challenges than employees subject to the Administrative Pay Plan (A grades). Municipal employees earning below the G.17 pay grade could not afford the median rent in 2014 even when earning the maximum pay for their grade and employees earning at the minimum level for pay grades below the G.11 grade could not afford the median rent even when "doubled up" with another employee earning equal wages. Those needing a unit for less than \$800 per month in rent, may find that doubling up or renting a room is their only option. Some of these pay grades are for entry level positions in which employees are likely to move to higher pay grades, making their housing challenges somewhat temporary. In other cases, these positions are leadership positions and may have less opportunity for upward movement. Employees earning at or below the A.09 grade cannot afford the median rent when earning the minimum for their grade, however these employees can afford the median rent when earning at the maximum, so their housing challenges are more likely to be temporary assuming they are not working alone to support more than one person.

With median house prices above \$260,000 and median gross rent more than \$1,200, Virginia Beach is roughly a \$22/hour rental market and a \$38/hour market for buyers, yet a large part of Virginia Beach's economy is tourist-based and heavily reliant on jobs that pay less than \$10/hr. These low-wage workers fill the gap between what rental housing costs and what they can afford in several ways. One is by doubling and tripling up; stressing properties not designed for such intensive use. Stressed and overcrowded properties run the risk of being destabilizing forces on their surroundings, making nearby homes less desirable to current and/or future homeowners, which increases those properties' chances of

switching from owner- to renter-occupied (in the best case) or becoming overcrowded, problematic rentals (in the worst case). Though overcrowding is not a serious problem now, the convergence of low-desirability stocks and a growing reliance on low-wage workers who cannot afford the median rent makes overcrowding a problem in the making that the city will want to smother before it becomes too big to handle.

A second strategy for filling the gap is for low-wage households to commute from less expensive housing in less expensive jurisdictions. According to OnTheMap, the number of Virginia Beach workers living outside the city increased by more than 5,000 workers between 2005 and 2014 (up from 67,265 to 72,486). By 2014, nearly half (46%) of local workers lived outside the city, compared to 43% in 2005. This commuting strains Virginia Beach by increasing the cost of infrastructure maintenance and improvements, and increasing traffic congestion. Further, Virginia Beach is likely to experience more and more "leakage" as commuting grows, since employees earn money in Virginia Beach, but then spend it where they live.

3.3.1 Housing Cost Burdens

More households are facing housing affordability challenges as the city's share of low-income households and the prominence of lower-wage jobs are increasing. There were approximately 61,420 "costburdened" households in Virginia Beach in 2014. The U.S. Department of Housing and Urban Development (HUD) established the term "cost burdened" to define households that need more affordable housing. HUD defines cost-burdened households as "families who pay more than 30% of their income for housing... and may have difficulty affording necessities such as food, clothing, transportation and medical care." Households that pay more than 50% of their income for housing are considered "severely cost-burdened" and may face even harder choices between paying for housing and other necessities. In 2014, 46% costburdened households were severely cost-burdened.

Housing cost burden is more prevalent among lower income households. Households with extremely lowincomes, less than 30% of AMI, are the most likely to be cost burdened. Further, 93% of extremely lowincome, cost-burdened households are severely cost-burdened, spending more than 50% of their income for housing. Households within higher income categories are less likely to be cost burdened, but households up to 120% of AMI struggle with housing costs: 94% of cost-burden households make less than 120% of area median income, \$84,700 for a 4-person household. Practically all, 97%, of the severely cost-burdened households make less than 120% of AMI. When households that make moderate incomes, from 80 to 120% of AMI, struggle to find affordable and appropriate housing communities may begin struggle with economic development challenges. That is, these working households may choose to relocate to more affordable regions or they may accept cost-burdens and the instabilities associated with cost-burdens. For example, cost-burdened households are less able to save for emergencies and are less likely to invest in child enrichment, both of which are important for family stability and economic opportunity.

Household	Total Households	Cost-Burdened	Severely Cost-	Percent of All				
Income		Households	Burdened	Cost-Burdened				
		(Percent of	Households	Households				
		Households in	(Percent of	(56,066)				
		Income category)	Households)					
			[Percent of Cost-					
			burdened					
			Households]					
< 30% of AMI	13,867	12,165	11,273	22%				
		(88%)	(81%)					
			[93%]					
30-60% of AMI	26,909	21,959	11,625	39%				
		(82%)	(43%)					
			[53%]					
60-80% of AMI	12,028	7,509	987-1,851*	13%				
		(62%)						
80-120% of AMI	34,054	11,234	960-2,556*	20%				
		(33%)						

Source: VCHR tabulation of 2014 ACS PUMS 1-year data

*Range calculated based on margin of error, estimate not reliable (coefficient of variation greater than 15% at a 90% confidence interval).

A disproportionately large share of renters have low household incomes, less than 80% of AMI. Renters are also disproportionately cost burdened. The graph below shows the relative proportions of owners to renters in the entire population, in the low-income population, and in the cost-burdened population.



Owners are less likely to be cost burdened than renters are, 29% of owners are cost burdened, compared to 51% of renters (see table 6 on page 29). However, owners are more likely to be cost-burdened with moderate incomes. Nearly all cost-burdened renters, 98%, have incomes below 120% of AMI. In the case of cost-burdened owners, 43% have incomes greater than 80% of AMI and 20% have incomes greater than 120% of AMI. Since owner-occupancy is usually a longer-term tenure choice some homeowners may have

become cost-burdened because of changes in costs such as increased taxes (stemming from increased value or tax rate increases), increased utility costs, and changes in mortgage interest rates or because of changes in income. Although median household income for owners increased from 2013 to 2014, this increase followed decreases in preceding years. In general, median household income has been fairly stagnant, so some households may be experiencing decreases in income while others have stagnant or increasing incomes.

Levels of cost burden among renters have increased substantially since 2000, while the percent of costburdened owners has increased only marginally. The levels of cost-burden increased more substantially than the number of households overall for both renters and owners from 2000 to 2014.

Year	2000		2014	2014		Percent Change	
					2000-201	4	
Tenure	Rent	Own	Rent	Own	Rent	Own	
Total Households	53,147	101,308	60,790	106,218	14%	5%	
Cost-Burdened	20 1/2	27 758	20 971	20 540	52%	10%	
Households	20,143	27,738	30,871	30,349	5570	1076	
Percent Cost Burdened	38%	27%	51%	29%	34%	7%	

Table 6: Change in Cost Burden by Tenure

Source: U.S. Census 2000 and 2014 ACS 1-year Estimates, tables B25070 and B25091*

* Note that 2000 numbers are drawn from 2005 VCHR report for Virginia Beach and 2014 ACS 1-year estimates from published tables, instead of PUMS tabulations, are the most comparable data.

3.3.2 Housing Affordability Gap

At the same time that the number of low-income households are increasing, the number of units with rents or owner costs (mortgage, insurance, taxes and utilities) affordable to low income households has decreased. From 2000 to 2013, there was a 27% decline in rental units and a 58% decline in owner-occupied and for-sale units affordable to households making less than 80% of AMI. VCHR does not attribute this decrease to a decrease in physical units, but instead the combination of stagnant incomes, increasing numbers of lower-income households, and increasing housing costs that have made previously affordable units now out of reach to many households.

VCHR compares the number of households that need more affordable housing to the number of available (vacant, for-sale or for-rent) housing units that are affordable to those households to determine the size of the affordable housing gap. In addition, VCHR compares the number of extremely low-income renters, very low-income owners and renters, low-income owners and renters and moderate-income owners to the number of physical units that are affordable to households in each category to learn more about the nature of the affordable housing gap.

Income Range	Total Owner Households	Total Owned or For-Sale Units	Owned or For-Sale Units with Complete Kitchen	Total Surplus (Deficit) in Physical Stock	Units with Complete Kitchen Facilities Surplus (Deficit)
<= 50% HAMFI	10,550	5,335	5,195	(5,215)	(5,355)
50%-80% HAMFI	12,410	17,349	17,300	4,939	4,890
80%-100% HAMFI	10,285	25,909	25,765	15,624	15,480

 Table 7: Owned/For-Sale Housing Stock Affordability Compared to Household Income

 Source: VCHR tabulation of 2009-2013 CHAS Data

VCHR has drawn a number of conclusions from these comparisons. First, there is not enough physical stock to accommodate owner households with incomes at 50% of AMI or less (see table 7 above). Virginia Beach has a shortage of more than 5,000 units when comparing the number of units that are affordable to households in this income category to the number of households in this category.

Second, households with incomes greater than 50% of AMI occupy 70% of the owned stock that is affordable to households with incomes 50% of AMI or less (see Appendix 8 for more information on occupancy of units by household income). The housing market does not match affordable units with households that need them, and many households prefer to spend much less than 30% of their income on housing. The resulting housing "mismatch" is explained in part by households choosing to live below their means or purchasing their homes at a lower income level and not moving to a higher-value home as their income has increased. It is generally difficult for households to adjust their housing choices quickly and often the housing they might prefer is unavailable at the time and price required, possibly perpetuating this housing market mismatch.

In general, higher income households are more attractive to lenders and therefore have better access to financing allowing them to compete more effectively for housing. The occupancy of lower valued homes by households with higher incomes tends to "crowd out" lower-income households and indirectly prevents some households from becoming homeowners and at least some of the more than 20,000 cost-burdened homeowners from buying a home they can afford comfortably. Choosing to rent instead of own is not likely to offer any advantage to cost-burdened owners, since the number of rental units affordable to households making less than 80% of AMI is equally small, there are more households competing for these units, and renting households are more likely to face variability in housing costs. There are less than 1,600 for-sale units that could more affordability accommodate these cost-burdened owners and there could be as few as 588.

Table 8: Housing Affordability Gap, Cost-burdened Owners Compared to Vacant For-sale, AffordableUnits

Income Range	Total Owner	Cost-	% of	Vacant Units	Affordable Housing	
	Households	burdened	Households		Gap: Cost	
		Owners	that are		Burdened Owners	
			Cost		minus	
			Burdened		available/vacant	
					affordable units	
	10 550	7 700	74%	225*	7,555*	
<= 50% HAIVIT	10,550	7,780	7470	(73-377)	(7,482-7,932)	
	12 /10	<u> 9 400</u>	690/	455*	7,945*	
30/0-80/0 HAIVIFI	12,410	8,400	0870	(291-619)	(7,654-8,564)	
90% 100% HANAEI	10 295	5 750	E6%	390*	5,360*	
0070-100% HAIVIFI	10,285	5,750	50%	(224-556)	(5,136-5,916)	

Source: VCHR tabulation of 2009-2013 CHAS Data

There is a similar housing "mismatch" among owners with higher incomes even though there is enough owned or for-sale housing stock to accommodate owner households with incomes between 50% and 100% of AMI. Households that are living in a unit that "matches" their income occupy only 6,500 or 15% of the stock, and more than 14,000 owners with incomes between 50 and 100% of AMI are cost burdened.

Households with incomes that are higher than are required to afford a home in the 50-80% of AMI and 80-100% of affordability categories occupy nearly 65% of the housing stock that is affordable for households with incomes between 50% and 100% of AMI. Households with incomes greater than 80% of AMI occupy more than 11,000 owner-occupied homes that are affordable to households making between 50 and 80% percent of AMI. Households with incomes greater than 100% of AMI occupy more than 16,000 owner-occupied homes that are affordable to households making between 80 and 100% of AMI. Some households that could afford more housing costs may be willing to "upgrade" if more appropriate or desirable housing were available. Therefore, adding housing for more moderate-income households 80-120% of AMI may relieve pressure on stocks affordable to lower-income households below 80% of AMI, allowing lower-income households to access housing they can afford.

Finally, nearly 8,500 households own homes that may have costs that are greater than they can comfortably afford. Since owner-occupancy is usually a longer-term tenure choice, some homeowners may have become cost-burdened because of changes in income or changes in housing costs such as increased taxes, increased utility costs or changes in mortgage interest rates. The mortgage financing process generally ensures that homeowners can afford their housing costs at the time of purchase, so generally homeowners cannot "choose" to be cost burdened, instead they become cost burdened when their circumstances change. Although median household income for owners increased from 2013 to 2014, this increase followed decreases in preceding years. In general, median household income has been fairly stagnant, so some households may be experiencing decreases in income while others are experiencing stagnant or increasing incomes.

Nearly 23,000 renting households with incomes less than 80% of AMI are cost burdened in their current situation and need more affordable housing. Overall, there is a shortage of rental units affordable to households with incomes less than 50% of AMI, with 8,000 more households making less than 50% of AMI

than there are units that can accommodate them affordably. As with owners, a substantial portion of the rental units (52%) affordable to renters making less than 50% of AMI are occupied by households with incomes that are higher than required to afford a home in the 30% of AMI or less and 30-50% of AMI affordability categories.

Income Range	Total Renting	Total Rental	Rental Units	Total Surplus	Units with
	Households	Units	with Complete	(Deficit)	Complete
			Kitchen		Kitchen
			Facilities		Facilities
					Surplus
					(Deficit)
<= 30% HAMFI	7,415	3,265	3,135	(4,150)	(4,280)
30-50% HAMFI	6,485	2,415	2,345	(4,070)	(4,140)
50-80% HAMFI	14,445	28,430	26,395	13,985	11,950

 Table 9: Rented/For-Rent Housing Stock Affordability Compared to Household Income

 Source: VCHR tabulation of 2009-2013 CHAS Data

Extremely low-income households, those making less than 30% of AMI, are less likely to be cost burdened and have a larger affordable housing stock, than those making between 30% and 50% of AMI, likely due to existing public supports for this group. Only 21% of households with incomes between 30% and 50% of AMI are living in the housing stock affordable to them compared to 49% in the less than 30% of AMI category. 91% of households in the 30-50% of AMI income range are cost burdened compared to 73% in the less than 30% of AMI category. The larger affordability gap among households making 30%-50% of AMI may be evidence that households in the 30-50% of AMI range are an underserved population while income-restricted affordable housing units and other forms of housing subsidy may serve households with incomes less than 30% of AMI.

Table 10: Housing Affordability Gap, Cost-burdened Renters Compared to Vacant For-rent, AffordableUnits

Income Range	Total Renting	Cost	% of	Vacant	Affordable
	Households	Burdened	Households	Units	Housing Gap:
		Renters	that are Cost		Cost-Burdened
			Burdened		Renters minus
					available/vacant
					affordable units
<= 30% HAMFI	7,415	5,450	73%	20* (0-83)	5,430*
					(5,430-5,513)
30%-50% HAMFI	6,485	5,885	91%	55*	5,830*
				(0-122)	(5,830-5,952)
50%-80% HAMFI	14,445	11,630	81%	1,925	9,705

Source: VCHR tabulation of 2009-2013 CHAS Data

There are more than enough affordable rental units to accommodate renters in the in the 50% to 80% of AMI income range, but households outside of the 50% to 80% income range occupy two thirds of those rental units. Households with income less than 50% of AMI occupy 24% of these "mismatched" units and

therefore, may be spending more on housing than their incomes affordably allow. These 7,000 renter households may be "forced" to rent units that are more expensive than they can comfortably afford due to a lack of available affordable units. For example, renting a more expensive unit near one's job may be more affordable than the combined rent and transportation costs of less expensive unit outside of Virginia Beach.

A large part of renter households (42%) in the 50%-80% income range are living in rental units more than affordable to them, spending below their means. Many households prefer to pay less for housing if lower cost units that satisfy their housing needs are available. Households with higher income typically have better access to their choice of rental units due to a combination of factors including higher incomes, better credit ratings and better or longer rental history. Since higher income tenants are usually more attractive to landlords, they "crowd out" lower income households, leaving the lowest income households to choose more burdensome housing options: those that are too expensive, far away, or overcrowded and otherwise inappropriate or substandard.

Virginia Beach's increasing number low-wage employees and lack of affordable housing for them poses several challenges:

- 1) pockets of concentrated distress that are apt to worsen and grow in size,
- 2) congestion and rising transportation and infrastructure expenses, and
- 3) more local businesses unable to create new jobs in Virginia Beach because they are unable to attract workers (because those workers are unable to secure housing near their jobs).

The private sector will not fix these problems without sufficient financial incentive to do so.

4 Going Forward

Virginia Beach is going to have to confront a range of formidable challenges to ensure the city's historically stable housing market remains competitive in the region. Through a creative combination of policies, cash equivalencies, and direct intervention, the city will need to:

- Address the fact that a high percentage of its housing stocks are increasingly obsolete and thus hard to market.
- Continue to shift away from one-dimensional, single-use, greenfield, suburban planning and development and move towards a mixed-use, transit-oriented, and more urban development patterns through redevelopment within existing city boundaries and along key transportation corridors.
- Ensure the production of market-rate multifamily rental housing on par with future demand and address affordability challenges for the city's growing share of low wage workers; the city should look to create opportunities to capitalize on the market (and tax base) potential of these workers.
- Creatively preserve housing stocks that are currently affordable, while tackling the problem of declining demand and concentrated distress.

Virginia Beach should build on key actions taken and underway, specifically, the establishment of eight strategic growth areas (SGAs) designed to absorb future growth, the creation and adoption of a 2016 Comprehensive Plan, significant municipal investment in developing a full throttled code enforcement capacity, and preliminary anti-sprawl measures contained in the Green Line.

The common economic thread in these efforts going forward is the implicit focus on growing the value of developable land by titrating supply on one hand and channeling and tailoring demand towards existing publicly financed infrastructure. Increased values will encourage investment and generate revenues that Virginia Beach can use to alleviate affordable housing challenges, promoting the stability for individuals, families and employers. VCHR and czb present this basic logic in a graphic in Appendix 1.

There are clearly identifiable reasons such steps must be taken now and not at some point in the future. First, there are no more large tracts of undeveloped green space in Virginia Beach to develop. Those that remain are more valuable to Virginia Beach as undeveloped amenities and as a curb on keeping the supply of land constrained than as housing. With few green-field development opportunities remaining, rehabilitating and redeveloping existing housing units and subdivisions becomes both increasingly attractive and increasingly necessary.

Second, while there is nothing to suggest military expenditures in the region will decline, the more durable economic development strategy is to continue diversifying towards medicine, finance, education and tourism. The more diverse the local economy, the more diverse and suitably matched the housing needs to be.

Third, Virginia Beach's boom years are now nearly twenty years in the rear view mirror. While the city experienced 50 years of incredible growth – literally doubling in size over the course of the 1940s, the 1950s, and the 1960s, and seeing population increase roughly 50% during the 1970s and the 1980s – that pace of change has slowed dramatically. Between 1990 and 2000, the city's population increased by just 8%; it grew by only 3% between 2000 and 2010 and by a similar rate since 2010 (U.S. Census). This slowed pace reflects the new housing preferences of millennials and the shifting preferences of aging boomers, who both tend to favor a more diverse and convenient, "urban" experience that Virginia Beach does not provide (or at least does not provide enough). Virginia Beach's basis for growth – its suburban sprawl – is now a striking liability.

4.1 Suggested Interventions

Both public and private actors must change the way they approach and invest in local housing and subdivisions to maintain Virginia Beach's housing market strength – for the city to continue attracting and retaining a sizable working and middle class, and for the city to ensure that its housing stock and neighborhoods are held to high standards of upkeep. Specifically,

- Public and private partners must address the high housing costs that an increasing number of working households face in Virginia Beach; and
- Public and private partners must address the aging and increasingly competitively disadvantaged housing stocks near the city's Strategic Growth Areas, as well as the emerging distress resulting from these properties being largely concentrated in a few areas (the vast majority of which lie within three-quarters of a mile of Virginia Beach Boulevard and I-264).

The recommendations below stress the participation of both private and public partners because, to have an impact on housing affordability and neighborhood strength, local government will need to be an active partner.

Virginia Beach's local government will need to provide a range of incentives – financial (grants and loans) and non-financial (incentives embedded in zoning ordinances, for example) – to private home builders

and developers to help them migrate their investments from almost exclusively low-density, single-use projects to a greater mix of investments dominated by moderate and high density residential and mixeduse infill projects. Virginia Beach needs an updated zoning ordinance to encourage these projects to be co-located near employment and public transit. Other incentives, such as tax abatements, can further encourage this type of development by reducing the cost of building multifamily housing and enabling developers to provide more units at rents affordable to service sector workers.

Even with the development of more multifamily, mixed-income housing units, Virginia Beach's local government will need to provide city-financed rental subsidies to make housing affordable for local low-wage service-sector workers. Further, Virginia Beach's local government will need to provide gap financing for low-to-moderate-income multifamily rental housing development and rehabilitation, with a special emphasis on units priced for households with incomes between 30-80% AMI. Incentives should be **financial** (*direct* city equity (shared) investments, scaled tax forgiveness by the city to developers/owners placing units in service below 100% AMI, and city-supplied project-based rental vouchers) and **regulatory** (negotiable density and height increases tied to inclusionary production).

Given the cost of acquisition, pre-development, and development in the local market, there is a substantial gap, meaning that private market forces are highly unlikely to create housing that is affordable for households earning less than 120% of AMI. See Appendix 10 for more information on development costs in Virginia Beach. There are sound public supports available for households with incomes up to 30% of AMI, and some supports for those with incomes from 30 to 60% of AMI. Still, the need for housing units affordable to households with incomes ranging from 60% of AMI to 120% of AMI, with an awareness of the special need for units between 30-80% AMI, will only be met through new funding streams, strong public-private partnerships, and the public providing shared equity and land to the cause.

Virginia Beach's local government will need to provide a range of incentives – financial (grants and loans) and non-financial (incentives embedded in zoning ordinances, for example) – to similarly encourage developers to refocus investment in single-family housing away from greenfield sites to infill and redevelopment efforts in existing subdivisions, especially some of the city's older subdivisions. To do this, the city will need to streamline its permitting processes for such projects, significantly reduce the fees associated with this type of work (while keeping those fees high for greenfield development).

Even with the development of more single-family units in existing subdivisions, Virginia Beach's local government will need to enforce housing and building codes in older subdivisions actively. "Given the growth of single-family rentals in many markets, it is imperative that strong public policies play a role in promoting neighborhood stabilization and protecting renters" (http://www.frbsf.org/community-development/files/rb2014-the-rise-of-single-family-rentals-az-ca-nv.pdf, see page 22). According to Alan Mallach, a senior fellow at the Brookings Institution and the Center for Community Progress, these policies should include monitoring landlords and rental properties; establishing and enforcing minimum property standards; penalizing owners for failing to comply (the stick); and offering owners training programs and financial incentives to improve their properties (the carrot).

To this end, it is recommended that Virginia Beach build on its designated Strategic Growth Areas and proposed transit-oriented investment by designating the areas just beyond (within ¾ of a mile of) the SGAs as Strategic Code Enforcement and Redevelopment Areas (pictured in map 4 on page 37). These areas have older residential stocks that are increasingly shifting from owner- to renter-occupancy and the

city's highest concentrations of code violations. Without intervention, these subdivisions risk further disinvestment and destabilization

The Strategic Code Enforcement Area subdivisions pictured on page 37 include roughly 59,000 parcels. These properties are mostly single-family homes (75%, or 43,900, of them) and townhouses (22%, or 13,170, of them). While most of the residential units in these subdivisions are owner-occupied (46,300, or 82% of all residential properties), a substantial minority – 10,000 units in all – are owned by an investor either living in Virginia Beach (5,875 properties) or outside Virginia Beach (4,186). Investor-owned residential properties within the existing Strategic Growth Areas and recommended Strategic Code Enforcement Areas are pictured in Map 4 on page 37. According to city code violation data, *fully 70%* of the investor-owned properties in these subdivisions had at least one code violation since 2011. (Though the violation rate among single-family homes in these subdivisions was much lower, at 40%, it too was high.)




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Map 5: Investor-owned Parcels in Existing Strategic Growth Areas and Recommended Strategic Code Enforcement Areas Source: czb tabulation of City of Virginia Beach Real-estate Assessment data

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	Owner-	VA Beach	Absentee	% Owner	% VA Beach	% Absentee
	Occupied	Investor	Investor	Occupied	Investor	Investor
		Owner	Owner		Owner	Owner
Single-family	31554	2633	2000	87%	7%	6%
Townhouse	6076	1685	1083	68%	19%	12%

Table 11: Single-family Detached Housing Units and Townhouses by Ownership StatusSource: czb tabulation of real estate assessment data

The areas pictured in the two preceding maps have remarkable potential to attract residents looking for neighborhoods within walking distance of jobs, retail, entertainment, and transit. As a result, a combination of tools deployed with geographic precision to address the intertwined issues of transfer risk, declining demand for unappealing housing, distress, tax delinquency, and substandard conditions and code compliance problems would be a valuable undertaking. Effective revitalization of these areas is likely to require highly coordinated efforts to inspect investor-owned properties in these areas on a regular basis, systematic evaluation and redevelopment by third party owners of hard-to-market properties using city-financed incentives, more aggressive tax collection efforts than now exist, and a focused code enforcement effort aimed at investor-owned properties.

Virginia Beach must also provide incentives for current owners and new buyers to re-invest and/or purchase in those same areas. Incentives for individual owners should target three types of owners: (1) senior and elderly owner-occupants who struggle to maintain their properties, (2) new owner-occupant buyers seeking funds to bring a home up to code, and (3) owners of single-family rental units. As discussed above, many aging residents are less able to invest-in and maintain their homes due to new financial restrictions associated with retirement and/or increasing costs home maintenance. Increased code enforcement may only contribute to existing cost-burdens for these households, so the City must be prepare to offer assistance to these households in an effort to bring their homes into compliance and as a result, create safer living environments for these households. The City should offer similar assistance to potential buyers deterred by housing conditions in the key locations of the recommended Strategic Code Enforcement areas. For example, the city could offer homebuyers a low-interest, forgivable (or partially forgivable) loan for home renovation that is tied to an occupancy and code requirement. Finally, financial and regulatory incentives for owners to upgrade single-family rental units should emphasize units affordable to households with incomes between 60 and 120% AMI. These incentives should be financial in the form of rental subsidies tied to the rehabilitation of deteriorating single-family detached housing at key locations, those close to transit and job centers.

In addition to this code enforcement work and incentives to individual owners, some subdivisions in this area may need significant, strategic, surgical incentive-driven redevelopment to add more desirable stocks to the market, grow the supplies of stocks that are affordable, edit out obsolete stocks and dated development patterns, and revitalize areas of emergent distress. Such redevelopment is a long-term effort as it will entail parcel accumulation by the city or third party entities as individual properties are sold voluntarily in the market.

There are numerous readily identifiable subdivisions ripe for significant and creative redevelopment, each an opportunity public-private collaboration. They include Lake Edward, Scarborough Square, Level Green, Pecan Gardens, Aragon Village, Liberty Ridge, Princess Anne Plaza, and Magic Hollow. Among these, Lake Edward (North and West), Princess Anne Plaza, and Aragon Village represent significant redevelopment opportunities that marry housing redevelopment to economic development and both to land use. Ultimately, what will be needed to transform these areas from less competitive to vibrant neighborhoods rests with a combination of three discrete, but connected actions:

- Encouraging upgrades by current owners and new buyers be those homeowners or investors.
- Encouraging the redevelopment of obsolete housing
 multifamily developers need
 encouragements to redevelop clusters of property at key locations, transforming by the handful
 moderate volumes of obsolete single family and town homes into higher density, mixed income
 multifamily rentals.
- Nuanced code compliance assistance and enforcement– intensive code compliance assistance for financially strapped or elderly owners, combined with equally intensive code enforcement of recidivist violators needs to occur.

4.2 Vehicle & Tools

Each of these interventions is likely to need substantial financial and other supports. VCHR and czb recommended that Virginia Beach consider establishing three new entities to add to the capacity of the city's DHNP. These tools will help facilitate the stabilization of weak subareas and the production of new affordable housing.

- A City of Virginia Beach **Housing Trust Fund** could collect and distribute housing and neighborhood resources to the Land Bank, the Land Trust, or to other entities as determined. Resource use could include providing dollars to encourage homeowners to reinvest.
- A City of Virginia Beach Land Bank could be helpful in the effort to acquire and hold (bank) troubled properties until future development by the private market or by designated nonprofit organizations can occur. Resource use could include dollars for surgical redevelopment of especially weak areas near SGAs.
- A City of Virginia Beach **Community Land Trust** could help acquire and hold (bank) in perpetuity land for future use as affordable housing. Resource use could include assembling parcels to assure a permanent stock of affordable housing.

The recommended connection of these vehicles and tools with existing and recommended entities and efforts is pictured in the graphic on the next page.



Virginia Center for Housing Research at Virginia Tech & czb, LLC Final Draft, February 2017

Appendix 1: Virginia Beach Housing Strategy Infographic

Virginia Beach To Date	Plan to revitalize neighborhoods and promote economic development and vitality , building on Virginia Beach's comprehensive plan and other policy and program foundations.
Greenfield	 Provide incentives for homeowners to rehabilitate housing and for new homebuyers to purchase, especially in areas with potentially threatened and/or declining stocks
Single Family	 Continue and enhance code enforcement capacity, and maintain anti-sprawl measures contained in the Green Line Provide incentives to refocus investment in single-family housing away from green-field sites to infill and rehabilitation and revitalization efforts in existing subdivisions, especially some of the city's older, declining subdivisions.
Low Density	 Build on designated Strategic Growth Areas (SGAs) and proposed transit-oriented investment by designating the areas just beyond them (within ¾ of a mile of) as Strategic Code Enforcement and Redevelopment Areas.
Single Use	 Build on the establishment of eight SGAs designed to absorb future growth. Provide incentives to help developers move toward moderate- and high-density residential and mixed-use infill projects. Ensure the production of market-rate multifamily rental housing on par with future demand.
Growing Affordable Housing Challenge	 Creatively preserve housing stocks that are currently affordable, while tackling the problem of declining demand and concentrated distress. Address affordability challenges for the city's growing share of low wage workers Provide maintenance assistance to homeowners in need. Provide gap financing for low-to-moderate-income multifamily rental housing development and rebabilitation, with a special emphasis on units priced for households with incomes between 30-80%
Real-estate Values Impacted by decreasing investment and limited opportunity	AMI.
Fiscal Revenues Limited by real-estate values and economic growth	Use land more intensively to increase land values and revenue potential. Increased values will encourage investment and generate revenues that can be used to alleviate affordable housing challenges,
Growth Limited by growing workforce housing challenges	promoting the stability for individuals, families and employers. Virginia Center for Housing Research at Virginia Tech & czb, LLC Final Draft, February 2017 Page 42 of 98

Virginia Beach Recommended

Rehabilitation & Infill

revitalize existing neighborhoods, attract new homebuyers, and encourage reinvestment

Multifamily

+

ew and diverse high quality developments that are mixed-use in the SGA's and along major arterials

Medium and High Density

+

Medium in existing neighborhoods, High in SGAs

Mixed Use

Integrated to create more convenient, walkable, vibrant areas

٠

Funds to Address Housing Challenges Dedicate funds tied to increasing revenues

Greater Values:

Increased homeowner property values, incentivizing owner-occupancy and re-investment

Increasing Property Tax Revenues

Increased Economic Opportunity

imulated by a vibrant housing market that responds to changes in demand from millennials, boomers and the workforce.

Appendix 2: Millennials and Housing Literature Review

No federally-recognized definition for the millennial generation exists, but most of the papers included in this review agree that millennials are defined as people born from 1980 through 1997.

What Makes Millennials Different?

Members of every generation exhibit unique qualities that set them apart from their parents and grandparents. For example, millennials value cars for their usefulness rather than their status symbol. If an alternative form of transportation is faster, cheaper, or more convenient, they are likely to stray from personal automobiles. As a result, millennials are driving fewer miles than the generations before them (Lachman & Brett, 2015). Millennials also use the internet much more than Baby Boomers and older generations. Internet is essential to millennials' lifestyle. Many watch shows and news via the internet. 46 percent of millennials say they pay their rent electronically. Additionally, one-third of millennials say they use the internet to look for housing, with the help of websites such as craigslist and Realtor.com (Lachman & Brett, 2015).

Millennials value a different lifestyle than older generations. Millennials who rent their home move frequently; almost half have moved two or more times in the last three years (Lachman & Brett, 2015). This transitivity could be one reason why most millennials are choosing to "settle down" later than their parents and grandparents did. Some say "age 30 is what 20 used to be" because this generation is waiting until their 30s to get married, buy homes, and have children (Lachman & Brett, 2015; Logan, 2014; Pew Research Center, 2014). Today approximately 30 percent of millennials are married and approximately 36 percent have children. However in 5 years, over 60 percent expect to be married and over 50 percent expect to have children (Burbank & Keely, 2013). Another difference among millennial lifestyle decisions is an increased focus on career and professional development. For example, between 1995 and 2014, the decline in homeownership rates of young adults has been attributed to delays in marriage as well as the pursuit of educational attainment and career development (Drew, 2015).

Housing Preferences

As of 2015, millennials⁴ have surpassed Baby Boomers as the nation's largest living generation, at 75.4 million strong (Fry, 2016). The housing choices of millennials are important because of the generation's large size and resulting large impact on the housing market. In the next five years, millennials will spend more per-household on rent and home purchases combined than any other generation (Burbank & Keely, 2013). About half of the millennial generation lives in rental housing (Lachman & Brett, 2015; US Federal Reserve Board, 2015), but most expect to own a home in the future (Burbank & Keely, 2013). Whether they rent or own, the housing preferences of millennials can be characterized by privacy, convenience, and conservation.

Millennials value space and privacy, which is why many of them prefer single-family homes. The percentage of young households in single-family homes is rising for both renters and owners. Householders aged 25-34 are equally likely to occupy a single-family home today as they were in 2000, before the housing boom and collapse. Millennials also have an interest in a broader range of rental options (Lachman & Brett, 2015): 60 percent of millennial renters live in apartments or condominiums and 38 percent live in single-family homes. Furthermore, millennial homeowners are more likely to own single-family homes than the previous generations (Simmons, 2015).

⁴ Millennials here as defined as those ages 18-34.

Millennials look for convenient features when finding a home. For renters, covered parking is one of the most important amenities (Lachman & Brett, 2015). Both renters and homeowners think it's important to live near their friends and family because they want the convenience of being able visit without traveling far distances (Lachman & Brett, 2015). Millennials have shown preference for mixed-use urban areas for their convenient walkability (Burbank & Keely, 2013; Logan, 2014). Most millennials will choose the ideal location over greater square footage (Logan, 2014).

Millennials have shown an increased interest in ecofriendly living. They find environmentally friendly features such as energy efficiency, water conservation, and recycled housing materials desirable and are willing to pay more for them. They value having a backyard, which suggests they value proximity to nature (Lachman & Brett, 2015). Walking, biking and public transit are growing in popularity among millennials living in larger metropolitan areas, which suggests that they care about reducing vehicle emissions to lower atmospheric pollution (Burbank & Keely, 2013). However, despite an increase in the diversity of transit preferences, 88% of millennial households own cars and 89% drive a car at least once a week (Demand Institute, 2014).

Millennial renters prefer the city more than millennial homeowners do. More than half of millennials renting a house or room in a house live in cities—only 36 percent of millennial homeowners live in cities (Lachman & Brett, 2015). Most millennials will become homeowners eventually and likely move out of the city. In several surveys, millennials responded that they believe homeownership is "an important long-term goal" and "an excellent investment" (Burbank & Keely, 2013; Lachman & Brett, 2015). Additionally, 48 percent said they would like their next home to be in the suburbs, 38 percent said they would like it to be in the city, and 14 percent said they would like it to be in a rural area (Burbank & Keely, 2013).

Affordability

Homeownership rates in the United States have declined steadily since 2005. In the fourth quarter of 2005 the country-wide homeownership rate was 69 percent, while in the fourth quarter of 2014 it was 64 percent (Callis & Kresin, 2015). Lending standards for homebuyers are stricter now than before the Great Recession. The current state of the economy and difficulties accessing credit have made purchasing a home problematic for many millennials, and as a result, fewer young adults own their homes today. The percentage of millennials who own homes fell 12 percent between 2006 and 2011 (Logan, 2014). In 2007, 40% of households headed by those who were 35 years old and younger owned their primary residence; in 2010, that percentage had dropped to 34% (Fry, 2013).

During the Great Recession, many millennials chose to live with their parents instead of buying or renting their own homes, in large part due to financial burdens such as student debt. In 2015, 26% of millennials continued to live with their parents, an increase from 22% before the onset of the Great Recession in 2007 (Pew Research Center, 2015). This generation has the most students graduating with debt and the highest average debt of any generation (Logan, 2014). According to a US Federal Reserve Board report, over half of individuals age 18 to 30 who attended college took on at least some debt (student loans, credit card debt, and other forms of borrowing) while pursuing their education (US Federal Reserve Board, 2015).

Since loan debt usually delays homeownership, millennials will wait longer to purchase homes (Mezza, Sommer, and Sherlund 2014). Fortunately, millennials are optimistic about their future housing: 79 percent believe their financial situation will improve and 74 percent plan to move in the next five years.

According to survey results collected by the Demand Institute from over 1,000 18 to 29 year olds, millennial-headed households are expected to increase from 13.3 million in 2013 to 21.6 million in 2018.

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Appendix 3: Millennial Households in Virginia Beach

VCHR estimates that approximately 120,938 millennials lived within the City of Virginia Beach in 2014, comprising over a quarter (28.2%) of the total population. VCHR has defined millennials as individuals born between 1981 and 1997, making them age 17 to 33 in 2014⁵. Just over 40,000 households in the City of Virginia Beach had a millennial householder in 2014, just under one fourth (24.1%) of total households. Further, 42.7% of households included at least one millennial resident.

Education

A significant portion of millennials living in the City of Virginia Beach are currently attending a college or University. Nearly one forth (24.2%) of the millennial population and one fifth of millennial householders in Virginia Beach are currently attending college. Further, 13.6% of all households include at least one millennial currently attending college.

Employment

Millennials make up 40% of the labor force, with about 6,821 or 6.8% being unemployed. Millennials are disproportionately unemployed, comprising half (52%) of all unemployed individuals within the City of Virginia Beach. The two largest millennial employment industries are the Military and the Arts, Entertainment, Recreation, Accommodation and Food Services industry. VCHR estimates that about 17% of the millennial labor force are working in each of these two Industries. Further, 74.4% of those employed by the Military in Virginia Beach are Millennials. Millennials are underrepresented in the Health Care and **Educational Services Industries.**



Graph 8: Top 8 Millennial Employment Categories by Industry

⁵ http://www.pewresearch.org/fact-tank/2016/04/25/millennials-overtake-baby-boomers/

Transportation

The majority (85%) of employed millennials commute via car, however car commuting is less prevalent among millennials than the general population of Virginia Beach (89%). Millennials are significantly more likely to use alternative transportation to commute than the general population. Three out of four residents of Virginia Beach who walk, bike, or use public transportation are Millennials.

Income

The median millennial household income is \$55,463, nearly 25% less than the median household income for the City of Virginia Beach as a whole. A majority (55%) of millennial households are in the 40%-120% AMI category, which is disproportionately higher than the same category for all of Virginia Beach.

e Level
e

Household Income	Millennials	All of	Virginia
Level		Beach	
40% or less	5,226	19,489	
40% to 80% AMI	10,634	33,315	
80% to 120% AMI	11,052	34,054	
120% or Greater	13,317	80,151	

Source: VCHR tabulation of 2014 ACS PUMS 1-year estimates

Family Status

When compared to the City of Virginia Beach as a whole, millennial households are less likely to be married, less likely to live with family, and more likely to include children. 64% of Millennial households live with family and 41% are married couples, compared to 71% and 51% respectively in the general population. Just over half of Millennial households include children, whereas about one third of households overall in Virginia Beach have individuals under the age of 18. Millennials are more likely to live with one or more non-related roommates. 57% of multiple person households in which all occupants are unrelated have a millennial householder. Millennial females are one third more likely to live with unrelated roommates than millennial males.



Housing Preference

Millennials are disproportionately more likely to live in multifamily housing than a single-family housing unit. 40% of millennial households live in multifamily structures compared to 22% in the general population of Virginia Beach. 82% of single-family housing units are occupied by someone other than a millennial-headed household. The majority (65%) of millennial households are renters, compared to 35% of all households in Virginia Beach. Millennial-headed households occupy nearly half of all rented housing units in Virginia Beach.

Appendix 4: Baby Boomers & Housing Literature Review

Terminology and the Body of Research

The U.S. Census Bureau defines the baby-boomer generation as the cohort born between 1946 and 1964 (Colby & Ortman, 2014). The age of boomers means that relevant research often pertains to demographic groups such as older adults, seniors or the elderly. Operationalized definitions for older adults include adults age 50+ or adults 50-69. Adults 62 and older who are eligible for social security and adults 65 and older are generally considered to be seniors or elderly. Research discussed below largely depends upon Census-based population estimates and surveys about housing preferences, especially in regards to *aging in place*.

Baby-Who?

Birth frequencies following World War II began exceeding three million children per year, a "baby boom", and never returned to pre-war levels. Today, boomers are between 52 and 70 years of age, and in 2015 about 75.4 million lived in the United States when accounting for immigrants (Colby & Ortman, 2014; Harvard JCHS, 2015). From 1990 to 2010, the population of age 50+ adults grew by 35 million people or 55% due to aging boomers (Harvard JCHS, 2014). Boomers began reaching age 65 in 2011, and the population overall began experiencing ever-accelerating population decline in 2012 (Colby & Ortman, 2014). Despite the onset of population decline, boomers make up about 30% of the overall U.S. population (Kwon et al., 2015). The senior population will about double to 80 million individuals by 2040, and Colby & Ortman (2014) emphasize that "by 2030, when all of the baby-boom cohort will be 65 or older, 1 in 5 Americans is projected to be 65 or older" (p. 12; Desjardins, 2013). Racial diversity across the boomer cohort reflects historical national composition, with 81.5% in 2012 identifying as white (Colby & Ortman, 2014).

Housing Trends

Boomers began purchasing homes in the 1970s, and continue to account for about 31% of all home purchases (Lawrence, 2016; Myers & Ryu, 2008). About 71% of boomers live in single-family detached residences, and about 75% of households age 50-64 own their homes (Harvard JCHS, 2014; Kwon et al., 2015). According to Blake & Simic (2005), the homeownership rate in 2003 was highest nationally within the 62-74 age bracket at 82.6% and followed by the 55-61 age segment at 80%. They predict that about 87% of boomers will own a home in 2030. However, homeownership began to decline in 2005 and ACS estimates indicate that 76.6% and 80.6% of age 55-64 and 65-74 households own their home (Harvard JCHS, 2014). 31% of age 55+ households reside within age-restricted communities, often known as retirement communities (Bernstein et al., 2011).

Both Lee & Ahn (2013) and Harvard JCHS (2014) suggest that about one-third of boomers experience significant housing affordability burdens, which equates to allocating at least 30% of their income to housing expenses, including utilities. Over 70% of homeowners age 50-64 still pay a mortgage, and about 33% confront a housing burden. Less than half or 15% of homeowners without mortgages navigate a similar budget challenge.

Despite the proportion of boomer homeowners, a minority yet growing quantity of boomers rent. Nearly one-half of renters 50-64 spend over 30% of their income on gross rent, contract rent plus utilities, which impacts their capacity to afford other essentials like groceries and health care (Harvard JCHS, 2014). About 11 million households age 50-70 rented in 2015, and this value increased by 4.3 million within the past decade. Older households age 50-70 exhibited the largest increase from 2005-2015. This trend coincides with accelerating rental growth overall:

the 2010s are on track to be the strongest decade of renter growth ever recorded, with the addition of 1.05 million net new households per year so far. This [rate] is nearly double the pace of growth in the 1970s when baby boomers came to age (Harvard JCHS 2015, p. 8).

Improved accessibility and the potentially impractical cost to retrofit one's home will likely cause even more boomers to rent as they age (Desjardin, 2013; Harvard JCHS, 2015).

Unique household composition, migration, and location trends characterize boomers regardless of housing tenure. People age 50-69 are least likely to be actively living with a partner according to Rappapart (2016), while Harvard JCHS (2014) suggests that householders 60-69 are more likely to live alone. One-third of 60-69 householders live alone compared to one-fourth of 50-59 householders. "Empty nests" are a common household makeup for both age groups: 40% of 50-59 and 50% of 60-69 households (Harvard JCHS, 2014). Homeowners presumably occupy the same residence for decades, as American Community Survey 2015 estimates show that 66% and 41% of 65+ and 35-64 homeowners respectively have lived in their home at least 14 years. About 43.9% and 50% of respondents lived in suburban or small town/rural communities respectively within Kwon et al.'s (2015) (n=403) sample. Kim (2011) asserts, "Elderly households [60+] tend to have less dramatic changes in their residential environment compared to younger households" (p. 13). According to the author, about 6% of elderly households move per year, and only 1% move across states.

Aging in Place

The future living arrangements of boomers continue to gain relevance with all boomers reaching age 65 by 2029 and elevating the senior population to one-fifth of the entire nation. Keenan (2010) utilized random digit dialing to build a sample (n=1,616) of individuals 45 and older, and 73% of people sampled strongly agreed with the notion that they wish to remain in their current home for as long as possible. Such sentiment reflects a desire to *age in place*, which the Center for Disease Control (2013) defines as the "ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level" (Kwon et al., 2015, p. 348). Kwon et al. (2015) drew similar conclusions from a random sample of 403 boomers, and noted that statistically significant drivers of this preference range from age to geography. The authors note "Baby boomers showed a strong desire to age in place if they indicated higher residential satisfaction (Kwon et al., 2015, p. 367)." Further, the choice to age in place offers immense practical and familial value (Desjardins, 2013). A majority of boomers attribute friends/family, being near places they want to go, and church/social organizations as very important reasons for their desire to age in place (Keenan, 2010). Health and financial reasons can force an individual

from their long-term home, but residing in an appropriate home within the same community reflects a more flexible form of aging in place (Keenan, 2010; Kwon et al., 2015).

Boomers will increasingly shift their housing tenure or downsize with age. Classic building designs often lack elements of universal accessibility like a master suite on the main level and a no-step entrance. About 80% of respondents in Keenan's (2010) sample reported having a full bath and bedroom on the main level, but only 36% of respondents' homes had an entrance without steps and 27% with wide doorways. Similar values from Harvard JCHS (2014) confirm the prevalence of no-step entries and complete single-floor living. Life changing events rarely lead a homeowner to begin renting immediately, however the loss of a spouse, retirement, and the onset of a disability exerts a statistically significant influence on an eventual shift in tenure (Painter & Lee, 2009). Wealth and liquidity likewise largely affect housing decisions. Lower income seniors are less likely to consider downsizing to a smaller home than those with higher incomes because of limited capital. While housing choice may not be an option for everyone, all income levels are equally likely to consider moving into strictly retirement housing (Weeks et al., 2013).

Aging in place by boomers could generate broader housing market implications. The older U.S. housing stock lacks accessible features, and for-sale housing supply may eventually exceed demand. Individuals beyond age 65 typically begin acting as home sellers more than buyers, and Myers & Ryu (2008) predict sellers will start exceeding buyers across Virginia after 2031. This potential generational housing bubble represents an unprecedented phenomenon due to the size and spread of the baby boom generation. Transitioning to a smaller home often at or below 2,000 square feet for homeowners provides an opportunity to liquidate capital, yet an immensely excessive supply would prevent doing so (Lawrence, 2016). About 80% of aging-related home modifications represent out-of-pocket expenses, and in 2008 one guarter of seniors indicated that they had not invested in any home improvements within the past decade (Desjardin, 2013). The rental housing stock likewise lacks aging friendly features, for example only 36.3% of units contain wheelchair friendly bathrooms (Desjardin, 2013). The legal and ethical burden of landlords to complete modifications remains uncertain. Gist et al. (2012) argue that being a boomer represented a statistically significant predictor of refinancing and withdrawing equity. About half of boomers with housing debt refinanced in 2007, while homeowners withdrawing equity on average extracted \$50,000 for uses including home improvement and other debt repayment (Gist et al., 2012). Lee & Ahn (2013) explain that boomers who are in Western areas or urban areas, female, non-married, non-White householders, or renters will continue to face more severe housing affordability challenges. Myers & Ryu (2008) simultaneously suggest that the generational housing bubble will bring about an emptying of suburbs, vacant single-family detached homes, depleted equity, and the inability to balance municipal budgets.

Boomers & Millennials

Boomers exiting their long-term home often transition to central cities and active communities, which corresponds with the preferences of millennials. Rappapart (2016) indicates that adults 50-69 occupied nearly 2.5 million additional multifamily units from 2000-2013, which accounts for most of the increase in overall multifamily occupancy. Part of this trend stems from the rise in 55+ households occupying condos within central cities, a location often desired by recent college graduates as well. Demand from these two

City of Virginia Beach Housing Needs Study, Market Analysis and Re-investment Study

groups, along with limited supply can rapidly inflate rents and sale prices (Keates, 2013). Residential developers find their entry-level homes which they market to young families being acquired by boomers (Lawrence, 2016). Empty-nest boomers raised millennial children, and so Lawrence (2016) writes in *Builder* "they want to live side by side with their kids, the millennials, in physically and socially active neighborhoods" (n.p.). Proximity to children ultimately betters the promise of aging in place and can avoid an eventual transition to a nursing facility (Desjardins, 2013; Painter & Lee, 2009). Community features including open space and exercise paths compel select boomers to depart from their conventional suburban or rural home in pursuit of a more active, socially connected lifestyle (Bernstein et al., 2011; Lawrence, 2016).

Baby boomers seeking to live near their millennial children also wish to live *like* their millennial children. Entry-level homes originally marketed to millennials and desired by boomers include features such as a single story and smaller footprints that appeal to both generations (Lawrence, 2016). Many baby boomer housing preferences stem from preferences not available in once popular 55+ retirement communities. Such include the diversity of the area, and urban areas provide both social and land-use diversity. More than a million baby boomers moved to within 5 miles of the downtown of the 50 largest cities between 2000 and 2010 (Keates, 2013). Moving downtown or to an inner-ring suburb enables baby boomers to experience all the amenities a city offers. Factors other than school quality and home size can now drive where baby boomers choose to live with their children gone.

New trends for age-friendly housing models are emerging in less urban areas as well. Home Sharing has proven popular in San Mateo, California where older homeowners are matched with home seekers. These home seekers typically pay rent and assist the homeowners in exchange for a house to share (Kennedy, 2010). Elder Group housing can also reduce housing cost burdens and in many cases allow elders to spend less than one-third of their income on living expenses (Kennedy, 2010). Alternative types of living arrangements for baby boomers will allow them to age in place without large financial burdens.

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Appendix 5: Baby Boomer Households in Virginia Beach

VCHR estimates that approximately 104,367 members of the Baby Boom generation live within the City of Virginia Beach, comprising just under a quarter (23.1%) of the total population. The U.S. Census Bureau defines baby boomers as individuals born between 1946 and 1964, making them age 51 to 69 in 2015⁶. Approximately 57,748 households in the City of Virginia Beach have a baby boomer householder, approximately one third (34.6%) of total households. Further, 41.4% of households include at least one boomer resident.

Employment

VCHR estimates that about 71,263 or 68% of Baby Boomers are currently in the labor force in the City of Virginia Beach. The remaining 33,104 or 32% of Baby Boomers not in the labor force are neither working nor actively seeking work. Approximately 3% of baby boomers in the labor force are unemployed, less than the unemployment rate of 5.2% for Virginia Beach as a whole. The industry with the largest number of baby-boomer employees is Healthcare followed closely by Professional Services, both with about 10,000 workers or 15% of the Boomer population. When compared to the City of Virginia Beach as a whole, Boomers are more likely to be employed in number of industries as displayed in Graph 10, most notably the Healthcare, Educational Services, Construction, Manufacturing, and Transportation industries. Nearly 40% of those employed in the Healthcare industry are boomers. Only 5.3% of employed boomers are working in arts, entertainment, and recreation, accommodation and food services compared to 12% of the general population of Virginia Beach. Additionally, boomers make up a large portion of those that work from home: 41% of employed individuals working from home are baby boomers.



⁶ http://www.pewresearch.org/fact-tank/2016/04/25/millennials-overtake-baby-boomers/

VCHR estimates that about 1 in 10 or 10,526 Baby Boomers are receiving retirement income and no wage, indicating that they are "fully retired". Boomers make up about 39% of the fully retired population in the City of Virginia Beach. An additional 11,461 Boomers are receiving both wage and retirement income, indicating that they are continuing to work beyond retirement. Veterans comprise nearly three fourths of those continuing to work beyond retirement.



Income

Baby Boomer households in the city are more likely to have household incomes above 120% of AMI (58%), than the general household population of Virginia Beach (48%). The median household income of a Baby Boomer household is nearly \$10,000 greater than that of the median household income for Virginia Beach (\$80,674 vs \$70,388). Boomer households are disproportionately represented in the higher incomes, making up 42% of all households in Virginia Beach making greater than 120% of AMI. Nearly 10,000 or 17% of all Boomer households have incomes greater than \$150,000 per year compared to 12% in the general population. About half of all households in Virginia Beach with an annual household income greater than \$250,000 are Boomers. Boomer households are also less likely to be in lower income categories, but still one out of four boomer households have low or moderate incomes, household income less than the AMI.



Cost Burden

VCHR estimates that about 17,000 baby boomer households are cost burdened with about 45% being severely cost burdened, spending greater than 50% of their income on housing. Both the rate of cost burden (30%) and severe cost burden (13%) among boomer households is less than that of Virginia Beach as whole (34%,16%). Boomer renters are much more likely than boomer owners to be cost burden at 44% and 26% respectively. Boomers who own their home "free and clear" are even less likely to be cost burden at a rate of 11%. Boomer owners who have a mortgage or loan are cost burden at a rate of 29%, still significantly less than renters. Baby boomer renters are only slightly less likely to be cost burden than renters in Virginia Beach as a whole (44%, 46%).

Transportation

Among employed boomers, 93% use a personal vehicle in their commute, greater than the rate for the general population of Virginia Beach (89%). Of employed boomers that commute via personal vehicle, between 5 and 7% carpool, less than the carpool rate in Virginia Beach as whole (9%).

One out of three boomer households in Virginia Beach have 3 or more vehicles, a rate that is 9% higher than the general population. Less than 3% of the boomer household population do not possess a vehicle. Less than 2.5% of the baby boomer population commute via public transit, walking or biking.

Tenure

Nearly four out of five (78%) baby boomer households in the City of Virginia Beach own the housing unit in which they reside. The rate of ownership among boomers is disproportionately greater than that of the general population (63%), with boomers comprising of 42% of all owner-occupying households in the city. Of boomer owner-occupied households, 22% own their home "free and clear," without a mortgage or loan.

City of Virginia Beach Housing Needs Study, Market Analysis and Re-investment Study

About 12,466 or 21% of boomer households rent their place of residence, much less than the rate of rental occupancy for the City of Virginia Beach in general (35%). Boomers occupy one in five rental units in Virginia Beach.

Housing Stock

More than four in five (83%) baby boomers live in a single-family home and they are significantly more likely to live in single-family homes than Virginia Beach as a whole. Boomers occupy a much larger share of single-family detached homes, compared to homes that are attached to another unit. A boomer is the householder in 42% of single-family detached housing units in Virginia Beach. In comparison, boomers occupy one fourth of attached single-family homes in the city.

Migration

A large majority (92%) of baby boomers residing in Virginia Beach have lived in the same house for at least a year. Of households in Virginia Beach that have moved within the two years, 12% of them have been boomers. Over half (53%) of baby boomers have lived in the same house for more than 10 years, and nearly a third (32%) have lived in the same home for 20 years or more.



Appendix 6: Households Including Seniors

26% of households are headed by an individual age 60 or older, compared to 29% for the MSA and 31% for Virginia. The highest concentrations of senior households in census tracts colored in orange and red in the map to the left.

Of the Virginia Beach population older than 60 years, nearly half are older than 70. The population of seniors age 60 and up has increased 42.9% since 2005 at an average yearly rate of 5.4%.

Seniors age 70 and older make up 23.1% of all non-family households. Non-family households comprise about 50% of the households within the older than 70 age group, meaning that half of elderly householders in Virginia Beach are living with roommates or alone. The number of elderly non-family households may indicate a vulnerability as they are less likely to have support. Approximately 14,156 individuals 65 or older live alone in Virginia Beach.

Young householders tend to be renters, while older householders tend to own their home. Graph 15 indicates households by householder age and tenure.





Table 13 on page 59 includes households with one or more seniors present. Almost a third of all households within Virginia Beach City include seniors age 62 or older. A senior individual age 62 and older is the householder in 90% of households where a senior is present. The median household income for households with presence of seniors decreases with the age of the individual present.

Table 13: Household Presence of Seniors							
Source: VCHR Tabulation of V	CHR tabulation	of 2014 ACS PUMS	5 1-year	data			
	Estimate	Percent of	Total	Median Household Income			
		Households					
60 and older	54,760	32.8%		\$66,475			
62 and older	47,655	28.5%		\$65,447			
65 and older	39,132	23.4%		\$60,506			
70 and older	26,180	15.7%		\$55,060			
75 and older	17,184	10.3%		\$50,018			

See Appendix 7 for information about seniors with disabilities.

Appendix 7: Households including One or More Person(s) with Disabilities

Nearly 20% of all households in Virginia Beach include an individual with a disability. VCHR has defined individuals with a disability as any person with at least one of six disability types listed in the ACS: hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care-difficulty, and independent living difficulty. Note that households may include individuals with multiple types of disabilities, and each disability category is not mutually exclusive. VCHR estimated that about 42,756 individuals with a disability reside in the City of Virginia Beach.

Graph 15 displays the number and prevalence (as a percent of total households) of households that include a person with a disability by type of disability and age, senior and non-senior. The most prevalent disability type is ambulatory, 10.7% of all households include a person with an ambulatory difficulty and just over half of households that include a person with a disability report that a household member has an ambulatory disability. Just under half of households that include a person with a disability report that one or more household members have a disability that is connected to their military service.

Half of households that include an individual with a disability also include a senior age 62 and older with a disability. Disabled seniors age 62 or older are present in 14,825 households, comprising about 10% of all households. About a third of all households with seniors age 62 and older also include a person with a disability, with an ambulatory difficulty being the most prevalent. About half of disabled seniors age 62 and older are over the age of 75 and nearly 90% of people in this subgroup have an ambulatory difficulty.

Seniors age 62 and older encompass roughly half of each respective disability type, except those that are military service connected. Approximately 80% of households that include a person with a military service connected disability have householders under the age of 62.

The median household income for households that include disabled seniors age 62 and older (\$60,506) is about \$5,000 less than those of the same age without a disability (\$65,447). The median income for a household drops further to \$51,934 when an individual is present age 75 and older with a disability.

Table 14: Households That Include an Individual with a disability								
Source: VCHR Tabulation of VCHR tabulation of 2014 ACS PUMS 1-year data								
			Estimate,	Percent of Total				
	Estimate,	Percent of Total	Households with	Households with				
	Households	Households	Seniors Age 62+	Seniors age 62+				
Any Disability	32,532	19.5%	14,825	31.1%				
Self-care	7,687	4.6%	2,963	6.2%				
Vision	5,510	3.3%	3,165	6.6%				
Hearing	9,048	5.4%	5,173	10.9%				
Independent Living	10,221	6.1%	5,301	11.1%				
Ambulatory	17,806	10.7%	9,596	20.1%				
Cognitive	11,764	7.0%	NR	NR				
Military service connected	15,533	9.3%	3,629	7.6%				



Graph 15: Number and Prevalence of Households with Presence of a Disability by Type of Disability and Age

Appendix 8: Housing Affordability Gap Analysis

The US Census Bureau categorizes the housing stock by its level of affordability in a special tabulation of American Community Survey data produced for HUD. Using this data, HUD designates each unit as affordable to specific income levels based on the size of the unit, the unit's value or rent, and the level of income required for a household of corresponding size to affordably rent or own the unit. The tabulation also to provides data on the income levels of occupants currently living in units at each unit affordability level. This tabulation allows VCHR to estimate how the economic means of households match to the affordability of the housing supply.

The latest data available for this tabulation is 2013, 5-year estimates, therefore the tabulation uses the 2013 HUD income limits. Both the 2013 and the latest, 2016 income limits for households with 1-, 2-, 3-, and 4-person households are provided for reference below.

	1-Person	2-person	3-person	4-person
	Household	Household	Household	Household
30% of AMI	\$15,400	\$17,600	\$19,800	\$22,000
50% of AMI	\$24,750	\$28,250	\$31,800	\$35,300
80% of AMI	\$39,550	\$45,200	\$50,850	\$56,500
100% of AMI	\$49,450	\$56,500	\$63,550	\$70,600

Table 15: HUD Defined Income Limits for the City of Virginia Beach, 2013

Table 16: HUD Defined Income Limits for the City of Virginia Beach, 2016

	1-Person	2-person	3-person	4-person
	Household	Household	Household	Household
30% of AMI	\$14,850	\$16,950	\$20,160	\$24,300
50% of AMI	\$24,700	\$28,200	\$31,750	\$35,250
80% of AMI	\$39,500	\$45,150	\$50,800	\$56,400
100% of AMI	\$49,350	\$56,400	\$63,450	\$70,500

Owner Affordability Gap

On the next page, Graph 16 displays data regarding the affordability gap among owners in the City of Virginia Beach. The left column within each income group displays the total number of owner *households* with incomes in the range indicated below the column. The right column represents the number of owner occupied or vacant, for-sale *housing units* affordable to that income range. In order to highlight households that may be economically distressed in their current housing situation, households (left columns) are broken into those that are cost burden in orange, spending more than 30% of their income on housing costs, and those that are not in green. The housing stock (total housing units), shown in the right columns, is split into four categories:

- (1) those units that are occupied by owners with a household income *within* the income affordability range of the unit (living in an appropriately valued housing unit) in grey,
- (2) those units that are occupied by owners with a household income greater than the income affordability range of the unit (living in a housing unit that is more than affordable to them) in yellow,
- (3) those units that are occupied by owners with a household income less than the income affordability range of the unit (living in a housing unit beyond their economic means) in purple, and
- (4) the final category is comprised of the housing units that are vacant, for-sale units in blue.

Graph 16: Housing Affordability Gap Analysis: Owners by Income Range



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Table 17: Owned/For-Sale Housing Stock Affordability Compared to Household Income							
Income Range	Total Owner	Total	Owned or For-	Total Surplus	Units with		
	Households	Owned or	Sale Units with	(Deficit)	Complete Kitchen		
		For-Sale	Complete		Facilities Surplus		
		Units	Kitchen		(Deficit)		
			Facilities				
<= 50% HAMFI	10,550	5,335	5,195	(5,215)	(5,355)		
50%-80% HAMFI	12,410	17,349	17,300	4,939	4,890		
80%-100% HAMFI	10,285	25,909	25,765	15,624	15,480		

Table 18: Housing Affordability Gap, Cost-burdened Owners Compared to Vacant For-sale, Affordable Units

Anordable office					
Income Range	Total Owner	Cost-	% of	Vacant Units	Affordable
	Households	Burdened	Households		Housing Gap: Cost
		Owners	that are Cost		Burdened Owners
			Burdened		minus
					available/vacant
					affordable units
		7 790	740/	225*	7,555*
	10,550	7,780	7470	(73-377)	(7,482-7,932)
	12 410	<u> </u>	600/	455*	7,945*
30%-80% HAIVIFI	12,410	8,400	0070	(291-619)	(7,654-8,564)
900/ 1000/ HANAEI	10.295	E 7E0		390*	5,360*
00%-100% HAIVIFI	10,265	5,750	50%	(224-556)	(5,136-5,916)

*Estimate of vacant units not reliable (coefficient of variation greater than 15% at a 90% confidence interval). Range provided based on margin of error.

VCHR has drawn a number of conclusions from this data. First, there is not enough physical stock to accommodate owner households with incomes at 50% of AMI or less. Virginia Beach has a shortage of more than 5,000 units when comparing the number of units that are affordable to households in this income category to the number of households in this category.

Second, households with incomes greater than 50% of AMI occupy 70% of the owned stock that is affordable to households with incomes 50% of AMI or less. The housing market does not match the affordable units with households that need them and many households prefer to spend much less than 30% of their income on housing. The resulting housing "mismatch" is explained in part by households choosing to live below their means or purchasing their homes at a lower income level and not moving to a higher-value home as their income has increases. It is generally difficult for households to adjust their housing choices quickly and often the housing they might prefer is unavailable at the time and price required, possibly perpetuating this housing market mismatch.

In general, higher income households are more attractive to lenders and therefore have better access to financing allowing them to compete more effectively for housing. The occupancy of lower valued homes by households with higher incomes tends to "crowd out" lower-income households and indirectly

prevents some households from becoming homeowners and at least some of the more than 20,000 costburdened homeowners with incomes at or below the median from buying a home they can afford comfortably. Choosing to rent instead of own is not likely to offer any advantage to cost-burdened owners, since the number of rental units affordable to households making less than 80% of AMI is equally small, there are more households competing for these units, and renting households are more likely to face variability in housing costs. There are less than 1,600 for-sale units that could more affordability accommodate these cost-burdened owners and there could be as few as 588.

There is a similar housing "mismatch" among owners with higher incomes even though there is enough owned or for-sale housing stock to accommodate owner households with incomes between 50% and 100% of AMI. Households that are living in a unit that "matches" their income occupy only 6,500 or 15% of the stock and more than 14,000 owners with incomes between 50 and 100% of AMI are cost burdened.

Households with incomes that are higher than are required to afford a home in the 50-80% of AMI and 80-100% of affordability categories occupy nearly 65% of the housing stock that is affordable for households with incomes between 50% and 100% of AMI. Households with incomes greater than 80% of AMI occupy more than 11,000 owner-occupied homes that are affordable to households making between 50 and 80% percent of AMI. Household with incomes greater than 100% of AMI occupy more than 16,000 owner-occupied homes that are affordable to households of AMI.

Finally, nearly 8,500 households own homes that may have costs that are greater than they can afford comfortably. Since owner-occupancy is usually a longer-term tenure choice some homeowners may have become cost burdened because of changes in costs such as increased taxes, increased utility costs or changes in mortgage interest rates or because of changes in income. The mortgage financing process generally ensures that homeowners can afford their housing costs at the time of purchase, so generally homeowners cannot "choose" to be cost burdened, instead they become cost burdened when their circumstances change. Although median household income for owners increased from 2013 to 2014, this increase followed decreases in preceding years. In general, median household income has been fairly stagnant, so some households may be experiencing decreases in income while others are experiencing stagnant or increasing incomes.

Table 19: Rented/For-Rent Housing Stock Affordability Compared to Household Income							
						Units	with
				Rental Units		Complete	
Incomo Bongo	Total Renting	Total	Rental	with Complete	Total Surplus	Kitchen	
Income Kange	Households	Units		Kitchen	(Deficit)	Facilities	
				Facilities		Surplus	
						(Deficit)	
<= 30% HAMFI	7,415	3,265		3,135	(4,150)	(4,280)	
30-50% HAMFI	6,485	2,415		2,345	(4,070)	(4,140)	
50-80% HAMFI	14,445	28,430		26,395	13,985	11,950	

Renter Affordability Gap

Chart 20: Housing Affordability Gap, Cost-burdened Renters Compared to Vacant For-rent,						
Affordable Units						
Income Range	Total	Cost	% of Households	Vacant Units	Affordable	
	Renting	Burdened	that are Cost		Housing Gap:	
	Households	Renters	Burdened		Cost-Burdened	
					Renters minus	
					available/vacant	
					affordable units	
<= 30% HAMFI	7,415	5,450	73%	20* (0-83)	5,430*	
					(5,430-5,513)	
30%-50% HAMFI	6,485	5,885	91%	55*	5,830*	
				(0-122)	(5,830-5,952)	
50%-80% HAMFI	14,445	11,630	81%	1,925	9,705	

*Estimate of vacant units not reliable (coefficient of variation greater than 15% at a 90% confidence interval). Range provided based on margin of error.

Nearly 23,000 renting households with incomes less than 80% of AMI are cost burdened in their current situation and need more affordable housing. Overall, there is a shortage of rental units affordable to households with incomes less than 50% of AMI, with approximately 8,000 more households making less than 50% of AMI than there are units that can affordably accommodate them. As with owners, a substantial portion of the rental units (52%) affordable to renters making less than 50% of AMI are occupied by households with incomes that are higher than required to afford a home in the 30% of AMI or less and 30-50% of AMI affordability categories.

Extremely low-income households, those making less than 30% of AMI are less likely to be cost burdened and have a larger affordable housing stock, than those making between 30% and 50% of AMI. Only 21% of households with incomes between 30% and 50% of AMI are living in the housing stock affordable to them compared to 49% in the less than 30% of AMI category. 91% of households in the 30-50% of AMI income range are cost burdened compared to 73% in the less than 30% of AMI category. The larger affordability gap among households making 30%-50% of AMI may be evidence that households in the 30-50% of AMI range are an underserved population while income-restricted affordable housing units and other forms of housing subsidy may serve households with incomes less than 30% of AMI.

There are more than enough affordable rental units to accommodate renters in the in the 50% to 80% of AMI income range, but households outside of the 50% to 80% range occupy two thirds of those rental units. Households with incomes less than 50% of AMI occupy 24% of these "mismatched" units and therefore, may be spending more on housing than their incomes affordably allow.

A large part of renter households (42%) in the 50%-80% income range are living in rental units more than affordable to them, spending below their means. Many households prefer to pay less for housing if lower cost units that satisfy their housing needs are available. Households with higher incomes typically have better access to their choice of rental units due to a combination of factors including higher incomes, better credit ratings and better or longer rental history. Since higher income tenants are usually more attractive to landlords, they "crowd out" lower income households, leaving the lowest income households to choose more burdensome housing options: those that are too expensive, far away, or overcrowded and otherwise substandard.

Graph 17: Housing Affordability Gap Analysis: Renters by Income Range



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Appendix 9: Benchmarks

Table 21 below displays a comparison of basic housing characteristics of benchmark cities identified by the Virginia Beach Department of Housing and Neighborhood Preservation. This chart provides a basic reference to the similarity between the housing markets among comparable cities. Virginia Beach falls in the middle of the distribution of populations of the benchmark cities, however the number of households across cities is similar with majority having between 100,000 and 200,000. Virginia Beach has a distinctively large number of homeowners compared to renters as shown by the rent to own ratio. Cities with ratios greater than one have more renters than owners and cities with ratios less than one have more owners than renters. Virginia Beach has the lowest ratio among all of the benchmark cities, and thereby the highest proportion of owners. Oklahoma City, Miami follow closely behind. Graph 18 on the next page shows the number of owners and renter households in each city. Comparing, the two columns for each city you can see the relative proportions of owners and renters visually.

	Population	Households	Rent to Own Ratio
Norfolk, Virginia	218,156	88,421	1.36
Raleigh, North Carolina	274,957	108,549	1.22
Oklahoma City, Oklahoma	284,645	110,141	0.64
Richmond, Virginia	341,409	124,883	1.20
Las Vegas, Nevada	420,950	144,832	1.23
Sacramento, California	428,254	180,218	1.01
Wichita, Kansas	434,429	159,885	2.24
Virginia Beach	451,227	167,009	0.55
Miami, Florida	513,588	191,657	0.64
Kansas City, Missouri	619,495	242,352	0.98
Mesa City, Arizona	625,514	222,086	1.08
Charlotte, North Carolina	766,657	293,079	0.71

 Table 21: Benchmark City Basic Characteristics

Source: VCHR Tabulation of VCHR tabulation of 2014 ACS PUMS 1-year data



Graph 18: Renter vs Owner Occupied Housing Units Source: VCHR Tabulation of VCHR tabulation of 2014 ACS PUMS 1-year data

Income and Affordability

The City of Virginia Beach is a relatively expensive place to live. Among the selected benchmark cities, Virginia Beach has the highest median property value, median monthly rent, median owner costs and median household income. Both Norfolk and Richmond are comparable to each other in terms of monthly rent and property value, but both have rents and property values that are much lower than the City of Virginia Beach. Median monthly rent in Virginia Beach is about \$250 greater than Norfolk and median property value is an estimated \$65,000 greater. High median household income among Virginia Beach residents reflects the City's high housing costs, indicating the need for higher incomes to afford housing in Virginia Beach.

Table 22: Income and Affordability in Benchmark Cities							
Source: VCHR Tabulation of VCHR tabulation of 2014 ACS PUMS 1-year data							
Variable	Median	Median	Median	Median			
	Property Value	Household	Monthly	Monthly Owner			
		Income	Rent	Costs			
Norfolk, Virginia	\$185,000	\$42,354	\$750	\$1,253			
Raleigh, North Carolina	\$235,000	\$47,799	\$780	\$1,172			
Oklahoma City, Oklahoma	\$100,000	\$44,572	\$550	\$920			
Richmond, Virginia	\$185,000	\$45,177	\$800	\$1,145			
Las Vegas, Nevada	\$170,000	\$43,866	\$730	\$1,038			
Sacramento, California	\$117,000	\$42,354	\$600	\$1,277			
Wichita, Kansas	\$250,000	\$32,875	\$870	\$860			
Virginia Beach	\$250,000	\$70,388	\$1,000	\$1,490			
Miami, Florida	\$165,000	\$46,388	\$750	\$860			
Kansas City, Missouri	\$175,000	\$50,421	\$750	\$910			
Mesa City, Arizona	\$240,000	\$48,203	\$860	\$906			
Charlotte, North Carolina	\$130,000	\$50,421	\$600	\$1,120			

The two graphs below show median monthly rent and owner costs for owners with a mortgage compared to median affordable rent and owner costs based on the median income of renters and owners with a mortgage respectively. When the affordable monthly housing cost exceeds the median monthly housing costs, households with incomes at the median can generally afford housing in a jurisdiction. Based on this data, renters with incomes near the median can more than afford the median monthly rent and since we know that the majority of Virginia Beach rental units are priced near the median, households with incomes near the median diffordable units. Based on this data, renters in Charlotte, Sacramento and Oklahoma City are all well position to afford rental units in their respective cities, even more so than in Virginia Beach. Renters with incomes at the median in Wichita, Richmond and Mesa City are relatively far from being able to afford the median rent in their cities respectively.





Household with incomes at the median for owners can afford median housing costs in each city. The mortgage financing process generally ensures that homeowners can afford their housing costs at the time of purchase, so generally homeowners cannot "choose" to be cost burdened, instead they become cost burdened when their circumstances change. Owners with a mortgage in Raleigh, Charlotte, and Oklahoma City have relatively high incomes compared to city owner costs. Owners with a mortgage in Norfolk have relatively low incomes compared to city owner costs. Virginia Beach falls in the middle. Although median household income for owners in Virginia Beach increased from 2013 to 2014, this increase followed decreases in preceding years. In general, median household income has been fairly stagnant, so some households may be experiencing decreases in income while others are experiencing stagnant or increasing incomes. Owners whose incomes decreased or did not increase in proportion to increases in utility costs, taxes, insurance costs, or interest rates may have become cost burdened.
Graph 20: Median Monthly Owner Costs Compared to Affordable Housing Costs for a Household with Median Income



Source: VCHR Tabulation of VCHR tabulation of 2014 ACS PUMS 1-year data

The rate of cost burden among households in Virginia Beach falls nearly in the middle of all of the benchmark cities, 5 cities have lower rates of cost burden and 6 cites have higher rates of cost burden. The rate of cost burden among households in Virginia Beach is 7% lower than both Richmond and Norfolk. Cost-burden data reflects the data shown in the previous two graphs, comparing median affordable housing costs to median housing costs. In cities with high levels of cost burden, there is a gap between median housing costs and median affordable housing among renters, or only a marginal difference. Charlotte and Oklahoma City have the lowest rates of cost burden, both almost 5% less than Virginia Beach. In each of these cities, the median affordable housing costs far exceed the median housing costs for both renters and owners with a mortgage.

The proportion of renter and owners respectively who are cost burdened in Virginia Beach is similar to the same statistics in both Norfolk and Richmond. However, while the rate of cost burden among owners is similar to other benchmark cities outside of Virginia, the percentage of cost-burdened renters in Virginia Beach (28.9%) is greater than all cities except Wichita (38.6%). Charlotte has the lowest owner cost burden rate of 19%.



Graph 21: Monthly Rent and Households Income in Benchmark Cities Source: VCHR Tabulation of VCHR tabulation of 2014 ACS PUMS 1-year data

The number of extremely low-income households, those with incomes less than 30% of AMI may also influence the level of cost burden in these cities. Cites with a higher proportion of extremely low income households who are more likely to be cost-burdened without public supports are likely to have higher levels of cost burden. Virginia Beach has the lowest proportion of extremely low-income households, but falls in the middle of the benchmark cities in terms of cost burden.





Millennial and Boomer Representation

Given the significance of Millennials and Boomers in the housing market in Virginia Beach and throughout the US, Graph 23 displays their representation among the population the benchmark cities. Even though Virginia Beach is relatively young compared to the State and the MSA, millennials make up a larger share of the populations of Richmond and Norfolk, nearly 9% more than Virginia Beach. Richmond and Norfolk may compete better for millennials based on housing preferences. Much of the Virginia Beach stock does not respond to millennial housing preferences in particular that of convenience (walkability and low maintenance associated with multifamily and smaller homes on smaller lots that are newer or well maintained).



Graph 23: Millennial and Boomer Representation among Benchmark Cities Source: VCHR Tabulation of VCHR tabulation of 2014 ACS PUMS 1-year data

Appendix 10: Additional Housing Market Characteristics

Housing Supply

Existing Housing Stock

There are approximately 182,152 housing units in the City of Virginia Beach. Three-fourths (75%) or about 138,000 housing units within the city are single-family homes. The majority of single family homes are detached units, homes that are free-standing and do not share a common wall with another residence, but more than one third (36%) are classified as attached⁷, generally townhomes and duplexes. The percentage of single-family units is slightly greater in Virginia Beach than in the MSA (72%) and Virginia (73%), but its share of detached single-family units is moderately lower.

Nearly one in four or about 42,000 housing units in the City of Virginia Beach are in a multifamily structure. Half of the multifamily units are in structures containing fewer than 10 units while others are in larger buildings: 22% in 10- to 19-unit buildings, 10% in 20- to 49-unit buildings, 16% in buildings with 50 for more units.



⁷ The American Community Survey questionnaire describes an attached single family home as "A one-family house attached to one or more houses". (http://www2.census.gov/programs-surveys/acs/methodology/questionnaires/2014/quest14.pdf)

Table 23: Housing Units by Number of Units in	All Units	Percent of Total	Occupied Units
Structure			
Source: VCHR tabulation of 2014 ACS PUMS 1-year data			
Total	182,152	100.0%	167,009
Single-family Unit detached	101,550	55.8%	95,838
Single-family Unit attached	36,248	19.9%	32,858
2 to 4 Unit Structure	8,338	4.6%	7,270
5 to 9 Unit Structure	13,919	7.6%	12,600
10 to 19 Unit Structure	9,285	5.1%	7,935
20 to 49 Unit Structure *	4,410	2.4%	3,507
50 or more Unit Structure	6,999	3.8%	5,598
Mobile Home or Trailer*	1,403	1.4%	1,403

*Estimate not reliable (coefficient of variation greater than 15% at a 90% confidence interval).

Size

The median number of bedrooms per housing unit in Virginia Beach is 3 and the median number of rooms per unit is 6. Single family detached homes have a larger median number of bedrooms, 4 per unit, while attached single family homes have a median number of bedrooms consistent with all housing units at 3. Multifamily units in Virginia are typically smaller with a median of 2 bedrooms per unit. The largest part of the of the housing stock is made up of units with 3 bedrooms. There are less than 2,500 units (between 846 and 2,496 units) with no bedrooms. The majority of these units are efficiency style, single-room apartments.

Table 24: Housing Units by Number of					
Bedrooms					
Source: VCHR tabulation of 2014 ACS PUMS 1-year data					
Number of	Number of	Percent of			
Bedrooms	Housing Units	Total			
0 Bedroom	846-2,496				
1 Bedroom	10,535	5.8%			
2 Bedroom	40,846	22.4%			
3 Bedroom	75,889	41.7%			
4 Bedroom	39,998	22.0%			
5 or more	13,213	7.3%			
Bedroom					

Age

Nearly half of the housing stock in the City of Virginia Beach was built in the 1970s and 1980s. The City's proportion of housing units built between 1970 and 1989 is significantly larger than in Virginia as a whole: units built between 1970 and 1989 make up 32% of Virginia's housing stock. The City of Virginia Beach has a much lower proportion of older homes built before 1960 (9.4%) than the MSA (21.1%) and Virginia (22.6%). Approximately 14,000 housing units, 7.5% of all units, were built within the past ten years compared to 13.4% for the MSA and 15.9% for Virginia as a whole.

Graphs 25 and 26 below display the City of Virginia Beach housing stock by year built. Similar to the ACS data reported in table 26, the city's real estate assessment data shows that more than half (52%) of the housing stock was built between 1970 and 1989. Further, only about 19,000 units are less than 16 years old (built after 2000). About 3% of the current housing stock was built in the past 6 years.





Approximately 92% of housing units in Virginia Beach are occupied. The newest units, those built after 2010 have the highest occupancy rate, 97.5%. The lowest levels of occupancy are among those homes built before 1950, in the 1960s and in the 2000s. In general, there is no discernable relationship between occupancy/vacancy and year built. Level of occupancy is more likely related to neighborhood, proximity to amenities and condition.

Table 26: Housing Units by	All Units	Percent of	Occupied	Percent of Units
Year Built		All Units	Units	Occupied
Source: VCHR tabulation of 2014 ACS				
PUMS 1-year data				
Total	182,152	100.0%	167,009	91.7%
Before 1950	6,314	3.5%	5,379	85.2%
1950-1959	10,661	5.9%	10,036	94.1%
1960-1969	22,653	12.4%	19,894	87.8%
1970-1979	40,612	22.3%	36,876	90.8%
1980-1989	50,735	27.9%	47,788	94.2%
1990-1999	24,626	13.5%	22,537	91.5%
2000-2009	21,639	11.9%	19,587	85.9%
2010 or later*	4,846	2.7%	3,317	97.5%



*Estimates not reliable (coefficient of variation greater than 15% at a 90% confidence interval).

Graph 27 displays the median reported value of housing units by the decade in which they were built. Housing units built between 1970 and 1989 have a lower median value than those built before and after that period. The relatively low median value suggests that homes built between 1970 and 1989 were either of lower relative value at the time of construction or their condition has degraded at a faster relative rate. Housing characteristics such as number of bedrooms and bathrooms, types of heating and cooling, as well as types of additional features vary by the decade in which the house was built. Generally, construction quality has increased from decade to decade, and "the quality of the housing stock, measured in such terms as completeness of plumbing facilities, age of structures, structural quality, and equipment and furnishings available, improved in every major respect during the decade of the 1970s (Adams 1987, 9)." Adams (1987) explains that the energy crisis of the 1970s forced a lot of industry changes that conserved energy and improved construction quality, however some building practices that encouraged heavy insulation and tight building envelopes caused condensation and subsequent wood rotting. Advances in building science have resolved these issues in newer homes. Construction quality decreased in the early 1980s (Adams 1987, 72), possibly as builders responded to demands for more affordable units since consumers were facing high mortgage interest rates and the effects of two, back-to-back recessionary periods.

The amount of housing units built between 1970 and 1989 presents an upkeep and rehabilitation challenge for Virginia Beach since a relatively large part of its stock was built in two decades, rather than spread more evenly across multiple decades. These homes are all facing deterioration challenges at the same time and will require increased management and attention from the city in order to prevent severe market consequences.

Value

The median self-reported value⁸ of all housing units within the City of Virginia Beach is approximately \$250,000, somewhat higher than the median assessed value, \$230,900, reported in FY 2016-17 Real Estate Assessor's Annual Report. Self-reported values are typically higher that market value while real estate assessments are typically lower than market value.

Based on ACS self-reported data, nearly 30,000 housing units have a value less than \$190,000 and just under 30,000 housing units have a value greater than \$375,000. One in five housing units in the City of Virginia Beach is valued between \$200,000 and \$250,000. Graph 28 displays the distribution of housing units across value categories for single and multi-family units. Single family homes have a median value of \$275,000 with an estimated 55,518 homes valued less. Multifamily units have a lower median value \$180,000 which follows logically since the value of multifamily units are less associated with land value and are typically smaller than single-family units. Nearly 2,000 units are valued greater than one million dollars, all of which are single family. Less than 200 multifamily units are valued greater than \$750,000. These units are likely high-end condos. About 3,000 single-family homes and less than 650 multifamily units are valued less than \$25,000.

Virginia Beach's real estate assessment data shows very similar distribution, with the exception of units valued at less than \$25,000. Based on self-reported responses from occupants, the ACS estimates that

⁸ The American Community Survey defines value as the respondent's estimate of how much the property (house and lot) would sell for on the current market. Some housing units have been excluded as they have had incomplete data regarding value.

there are more than 3,000 properties valued less than \$25,000 while real estate assessment records indicate there are less than 10 properties in values less than \$25,000. Real estate assessment data is generally considered to be more reliable in this context, when the ACS sample size is small. ACS estimates of multi-family properties valued less than \$25,000 and more than \$750,000 are not reliable.



Housing Market Dynamics

Vacancy

The homeowner vacancy rate has decreased since 2011, while the rental vacancy rate has increased. These vacancy trends may be explained in part by changes in occupancy. Over the same time period, the number owner occupied units decreased while the number of rental units increased.



Some, previously owner-occupied units were likely converted to rental after the recession and subsequent foreclosure crisis. Further, very few new single-family units have been added (see Construction Trends section below). Simultaneously, renting became more attractive to many households following the recession.

Over the previous ten (10) years Virginia Beach vacancy rates have typically been well below vacancy rates for the entire MSA. In recent years, Virginia Beach and MSA rates have grown together with MSA rates falling dramatically since 2011. In 2014, homeownership vacancy rates and rental vacancy rates in Virginia Beach were nearly the same as the rates for the entire MSA. This trend may indicate that the metropolitan housing market has become more connected and demand within the market more fluid.



In 2014, Virginia Beach had approximately 15,000 vacant units. A large part of these units, around 30%, were for sale or for rent. Nearly 18% had been sold or rented, but not yet occupied. Nearly 10% are estimated to be "vacant" because they are held for recreational, seasonal or other occasional use. Finally, about 20% are listed as having some "other" status. "Other vacant" units are commonly units in which no one lives, units the owner does not want to rent or sell, units used for storage or units whose owners are elderly and living in a nursing home or with family members (Kresin, 2013). Units that have been abandoned, condemned or are scheduled for demolition also fall into this category (Kresin, 2013; US Census, 2014).

Home Sales

Homes sales in Virginia Beach decreased dramatically after 2005, the height of the housing "bubble." Nonetheless, Virginia Beach weathered the recession well with home sale prices remaining relatively stable. At the depth of effects from the 2008 great recession and subsequent foreclosure crises, the Virginia Beach median sale price was only 4.1% lower than the median price in 2005. And in 2013, the

median price had fully recovered, surpassing the 2005 median price. However, Virginia Beach has lagged behind Virginia in post-recession price recovery.



\$200,000



The number of sales annually has not recovered to "bubble" level, but Virginia Beach has seen sales steadily increase since 2011. The tight for-sale inventory in Virginia Beach likely contributed to price stability and the slower, post-recessionary pace of sales. Slowed residential construction and a more cautious market for existing home sales are likely the primary trends leaving the for-sale inventory restricted.



Virginia Center for Housing Research at Virginia Tech & czb, LLC Final Draft, February 2017

Owner Costs

Gross housing costs incurred by owners which include mortgage payment, insurance, taxes and utilities have largely become more affordable for those who have a mortgage. Although real median household income for owners with a mortgage has remained fairly constant and the 2015 median is about 1% lower than in 2005, housing costs have decreased slightly more. The 2015 median owner cost for owners with a mortgage is 2% lower than in 2005. This decrease in costs for owners with a mortgage is likely due to favorable interest rates. Many owners who chose to maintain their ownership following the recession likely had opportunities to refinance their mortgages at lower rates and those who bought a new home benefited from historically low rates also.





Gross housing costs incurred by owners who own their home "free and clear" have also become more affordable. In this case, increased affordability is related to increasing incomes. Costs incurred among

those owners who own their home free and clear have increased over recent years and are about 1% higher than cost in 2005.



Housing costs are generally most affordable for households that own their home free and clear. The median income of households that own their homes free and clear was approximately \$62,671. A household with \$62,671 in annual income can afford up to \$1,567 in housing costs without being cost-burdened. The median housing cost for households that own their home free and clear is approximately \$590, less than 40% of the cost that would be affordable for a household with the median income for this group. For owners with a mortgage, the median housing cost is \$1,684, 77% of the maximum cost that would be affordable for a household with the median income for those affordable for a household with the median income for households with a mortgage. The median housing cost for renters was \$1,203 in 2015, about 3% higher than a household with the median income for renters, but preclude the fact that there are homeowners that need more affordable housing. The need for more affordable housing is discussed in more depth in Appendix 8.



Rents

Median contract rent in the City of Virginia Beach was \$1,033 in 2014 and gross rent which includes utilities was \$1,203. The median gross rent has decreased by nearly 10% since its peak in 2010. Many localities saw rents spike when households that previously owned their home chose to rent following the recession in 2008. The 2014 median gross rent was about 3% lower than median gross rent in 2005.



The median income among renters has decreased steadily since 2008. The 2014 median household income for renters was 10% lower than the 2008 median. In 2014 median household income among renters was about \$1,200 less than the income required to afford the median gross rent without being cost burdened, paying more than 30% of household income for housing costs.



*HUD estimates that households should spend no more than 30% of their household income on housing costs. Those who spend more than 30% of their income on housing are considered to be "cost-burdened" and may have to make choices between housing and other necessities.

Since 2012, affordability of rental units at the median has increased as incomes among renters have stabilized while the median rent has continued to decrease. Nonetheless, housing affordability among lower income households remains a challenge.

The majority of units are concentrated in rent levels close to the median: 50% of rental units have gross rents between \$1,000 and \$1,500. Nearly 30% of the remaining units have gross monthly rents of \$1,500 or more. There are very few units with gross rents less than \$800, approximately 4,700 or about 8% of all rental units. The units in the ranges represented in blue in Graph 40 represent approximately 90% of rental units.



The median rent varies only slightly based on the size of the unit. The median monthly rent for a 1-room, efficiency apartment was \$1,200 while the median monthly rent for and 6-room unit was also \$1,200.

Table 27: Median rent by Number of Rooms

Source: VCHR tabulation of 2014 ACS PUMS 1-year estimates

Number of	1	2	3	4	5	6	7	8	9	10
Rooms										
Median Rent	\$1,200	\$900	\$880	\$960	\$980	\$1,200	\$1,400	\$1,600	\$1,500	\$1,800
Average Rent	\$1,735	\$1,043	\$934	\$1,051	\$1,004	\$1,178	\$1,360	\$1,548	\$1,464	\$1,709

The vast majority of rental units in the City of Virginia Beach have two or more bedrooms. Since there are very few efficiency and one-bedroom units, most estimates of these units by rent level are not reliable.

Table 28: Rents by Number of Bedrooms

Unit Type	Total Units	
Efficiency/SRO	1,379*	There are so few units of this type, we cannot reliably estimate the total number of units. There are between 603 and 2,155 single-room/efficiency units in the city with approximately 50% renting for less than \$1,200.
1 Bedroom	9,106	Approximately 89% of these units rent for \$750 or more. Approximately 4,500 units have monthly rents between \$750 and \$1,000.
2 Bedrooms	25,018	Approximately 1900 units rent for less than \$750 monthly; 5,200 have rents between \$750 and \$1,000; about 17,500 (71%) rent for \$1,000 or more.
3+ Bedrooms	25,287	Approximately 93% of these units rent for more than \$1,000 per month.

Source: VCHR tabulation of 2014 ACS 1-year estimates, Table B25068

*Estimate not reliable (coefficient of variation greater than 15% at a 90% confidence interval).

New Residential Construction

Single-family

Single-family housing development has waned since 2002. A number of factors may have influenced this trend including slower household formation, fewer opportunities for green-field development and in recent years, lower demand for single-family units and less available financing for single-family development. Three- and four-bedroom homes have been and remain the largest part of new construction since 2000, mirroring the composition of the existing stock. Four- and five-bedroom homes have increased in relative proportion in recent years, beginning in 2012.



Multi-family

The building trend of multifamily, for-rent units in Virginia Beach is less clear. Since units are counted in the graphs below at time of completion, multi-year construction projects may cause lulls in the trend. Nonetheless, construction of multifamily units has increased relative proportion to single-family construction since the recession. Availability of financing for multi-family construction has been relatively more accessible since the recession, so this trend in Virginia Beach is reflective of a national trend.



Virginia Center for Housing Research at Virginia Tech & czb, LLC Final Draft, February 2017



Construction Trends

When combining all of the material and equipment costs for the production of a single-family dwelling unit, the regions of the state show similar trends. On average, the state of Virginia experienced a 0.01% decrease from the national average, meaning the state average is equal to the national average.

Looking at the details, each region in the state has seen a decrease in *total housing production* costs over the last seven years. Costs across all regions increased until 2009 then decreased from 2009 - 2011. Costs again increased in 2012 (staying below their 2009 high) and then fell sharply until 2014, when each region hit their lowest costs. Total Costs then rose back up in 2015 for all regions except Richmond, who continued to see production costs lower. Richmond, Northern Virginia, Virginia Beach and Southside are the more expensive regions in the state in terms of 2015 production costs. Virginia Beach's *total housing production costs* were highest in only a few categories, though, while these categories pushed their average up to make them one of the most expensive locations in the state.

Indirect cost items refer to materials, costs and services that are required for the production of the building but are not directly included in the building's footprint. Since 2008, Virginia Beach's site development costs have decreased from 8% (above the national average) to 7%. These site development costs are above average compared to other localities across the state of Virginia. Based on a 2016 survey

of homebuilders in Virginia, land costs and fees and regulations rank as the top reasons for the inability to build affordable housing.

Direct items refer to materials, costs and services that are used in the production of the building and are included in the building's footprint. Map 6 below uses RS Means national cost data adjusted for local market rates to explain the cost of residential materials as a snapshot in 2015 across the state of Virginia. In this figure, the larger the circle, the larger the cost advantage for local materials, although the difference is 3% from highest to lowest local material cost. Based on these data, materials pricing contains advantage in the far southwest region, Southside, the peninsula and the northern neck region. Urban centers contain the least advantage in terms of material costs with Norfolk and Virginia Beach also having less advantage.

Map 6: Relative Advantage of Material Costs by Location Source: VCHR Tabulation of 2015 RS Means Cost Data



When the cost of residential labor is added into the material and equipment costs for the state, we get to

see a fuller picture of the overall price. Labor prices in each region were well below the national average and, when combined with material and equipment costs, brought the total cost of construction to below the national average. On average, between 2008 and 2015, Virginia was 85% of the national average while Northern Virginia, Central Virginia and parts of Hampton Roads tended to be the most expensive locations in terms of labor cost.

Map 7 below uses RS Means national cost data adjusted for local market rates to explain the cost of residential installation (labor) as a snapshot in 2015 across the state of Virginia. In this figure, the larger the circle, the larger the cost advantage for local labor rates. Based on these data, labor pricing contains advantage in the far southwest region, Southside, central Virginia and the peninsula and parts of the

Hampton Roads region. Again, urban centers contain the least advantage in terms of labor costs with Norfolk and Virginia Beach also having less advantage.



Map 6: Relative Advantage of Installation Costs by Location Source: VCHR Tabulation of 2015 RS Means Cost Data

Virginia Beach is similar to the rest of Virginia: generally speaking, all trades have significantly decreased in number of establishments and number of employees while significantly increasing in wages since 2008. During that time, Virginia Beach was the highest wage increase in one category: electrical trades. For example, a substantial change in the electrical code (which just happened) could mean additional costs for housing in Virginia Beach due to the wages of this trade. Otherwise, Virginia Beach did not have the highest increase in wages across other trades.

Soft items refer to materials, costs and services that are required for the management of the building process but are not directly included in the building's footprint nor indirectly applied to the development itself. Based on NAHB cost data reported since 1998, soft costs have increased 59% since 2011. For example, green certification and construction has infiltrated the code and is a pre-requisite to competing in today's construction market. The cost of green certification and construction, once reported as a financial burden, has largely diffused into the market and is considered a cost of doing business while the level of certification can still increase soft cost for a housing project.

Appendix 11: Qualitative Data: Focus Groups and Survey Results

Focus Groups

VCHR facilitated three public focus groups with 37 attendees. City staff also posted the focus group questions on the Virtual Town Hall and received 43 forum responses. VCHR coded and analyzed the focus group and Virtual Town Hall responses to draw out themes. VCHR ranked the themes based on the number of mentions.

City residents identified many housing-related challenges. Transportation was the most widespread concern. Many participants felt that there should be more transportation options connecting housing to employment opportunities and amenities. Participants discussed their own transportation challenges as well as transportation challenges faced by community members with low incomes. Residents explained the importance of expanded transportation options to attract new residents and suggested that expanded transportation options in terms of biking, bus, and light rail would improve access to affordable housing, services and amenities. A number of participants also mentioned that housing should be developed near existing hubs.

Many participants identifies aging and poorly maintained housing as a challenge. While some participants saw the housing stock's age as the main challenge other suggested that poor maintenance as the primary challenge. A number of participants reported that renters and bad landlords do not maintain housing. Participants discussed expanded or more stringent code enforcement as a potential solution, although a few participants felt that code enforcement infringes on their property rights. A few participants suggested that communities, neighborhoods, and HOAs take more responsibility for encouraging yard and home maintenance.

Many residents identified affordable housing as a challenge for the city. Participants mentioned the need for more affordable housing for a variety of groups: millennials, young professionals, workers, low-wage workers, seniors, retirees, military personnel and veterans. The need for housing to that is affordable and desirable to young, professional millennials was the concern voiced most often. Participants discussed the need to attract and retain millennials and gave personal anecdotes about their kids' challenges finding affordable housing.

Focus group participants also discussed solutions to housing challenges. Many were in favor of redevelopment and revitalization as long as it does not drastically impact neighborhood character or reduce the amount of affordable housing. Participants explained that land scarcity makes redevelopment a necessity should the City continue to grow. A few participants felt that the city should not continue to grow. Likewise, a couple of participants preferred new green-field development to occur beyond the greenline. A number of participants were concerned that luxury units are replacing affordable units. Participants noted that redevelopment should add amenities, include affordable housing a solve transit problems. Participants favored mixed use and mixed income developments. Participants warned against redevelopment that exacerbates challenges mentioned above.

Survey

czb published an on-line, non-scientific, non-statistically valid survey that was promoted to Virginia Beach stakeholders, though principally aimed at Virginia Beach residents. On August 19, 2016 it went on-line, and was closed on September 6, 2016.

During that period of time, there were 807 opening views taken of the survey, which means that the URL was accessed 807 separate times by an undetermined number of accessors. 530 actually started the survey, and of these, 85% or 451 completed it. The average start to finish time was five minutes.

- 68% of respondents said that Virginia Beach has improved as a city as compared to when they first moved in.
- 69% said that standards of care are the same or better as compared to when they first moved to Virginia Beach.
- A majority (55%) of respondents said that school quality affects housing prices in the city.
- A majority (53%) did not believe that the city was succeeding in attracting college-educated young adults to move into Virginia Beach
- a significant majority (72%) of respondents believe that affordable housing is an issue in Virginia Beach
- 69% of these believe local government should play a role in addressing it