

The Changing Demographics of Virginia's Middle Peninsula

FOR:

Mr. Lewis Lawrence Executive Director, Middle Peninsula Planning District Commission

PREPARED BY:

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EXECUTIVE SUMMARY

This study analyzes data from several sources to produce a list of priority investments for the future development of the Middle Peninsula. Research focused on investigating the stated living preferences of target demographics—millennials and retirement-age individuals—of the Middle Peninsula public and the successes of comparable communities on the east coast. The team employed three research/analytical methods. First, we reviewed census data to examine broad demographic and economic trends of Middle Peninsula counties, including investigating counties that the millennial and retirement population moved to if they migrated out of the Middle Peninsula. Second, we designed and implemented three surveys to capture living preferences of high school, communities similar to the towns and counties on the Middle Peninsula to find patterns for successful development policies.

Census migration data reveal that both millennials and retirement age individuals moving out of the region migrated toward urban centers. Millennials clustered around education centers while retirement-age individuals headed towards better health services. However, both groups stayed just outside of the urban centers, seeming to prefer suburban or rural areas.

Survey data find that, for the most part, people enjoy living in the Middle Peninsula and appreciate its "rural" feel, which includes privacy, a sense of security, strong sense of community, and aesthetic environmental factors. However, millennials seek work opportunities and affordable living settings, and seniors are concerned about access to health services and retirement communities. General infrastructure needs of the Middle Peninsula include public water and sewer networks as well as broadband services. In contrast, environmental regulations have minimal impact on the average citizen's quality of living.

Finally, **Twin Towns** comparisons found that among similar rural communities on the east coast, the most successful municipalities employed policies that *actively* engaged and supported the growth of businesses. Small towns and cities became more successful when they helped businesses to navigate regulations, design business plans, and tackle administrative work to attain benefits. Most successful municipalities also had a well-designed website.

Based on these findings, our main recommendations include:

- Increase regional awareness of life and community activities in the Middle Peninsula
- Develop retirement communities and improve access to specialized healthcare needs
- Improve internet access and network coverage
- Actively pursue small business development and promote business incentives

The Middle Peninsula appears to be an excellent place to raise a family but is not attracting businesses with high-paying jobs. Future projects must not only look into ways to develop business incentives but also must focus on an aggressive marketing campaign to advertise the region. Opportunities abound, but only with good preparation.

1. INTRODUCTION

Building upon research identified in the 2013 Middle Peninsula Comprehensive Economic Development Strategy (CEDS) report and the 2015 Virginia Sea Grants (VASG) University Partnership report, the Middle Peninsula Planning District Commission (MPPDC) under Executive Director Lewis L. Lawrence approached a team of Master's of Public Policy candidates at William & Mary to conduct a study using an "outsider's perspective" on the demographic trends in the Middle Peninsula.¹ The MPPDC also requested that the students produce fact sheets that summarize the project for circulation throughout the Middle Peninsula.

Previous studies on trends in the Middle Peninsula have identified net outward migration, a lack of living-wage jobs, and an increasing number of environmental regulations as potential challenges and threats to the future economic sustainability of the region. Methods employed by these studies analyzed publicly available economic data, government policy documents, and consultations with officials and other experts of Middle Peninsula trends. Studies have also identified opportunities for development in multiple sectors. However, it appeared that relatively little data had been reviewed on the attitudes of those living in the Middle Peninsula. Moreover, little had been done to compare policies in the Middle Peninsula to similar rural communities that have met success in improving local economic conditions.

This study seeks to fill this gap by (1) examining where people move when they leave the Middle Peninsula, focusing on the characteristics of those areas and their similarities to and differences from the Middle Peninsula, (2) surveying the two groups who seem to be more frequently moving from the Middle Peninsula—millennials (15-30 year olds) and pre/post-retirees—to assess their living preferences and determine their general satisfaction with different aspects of the Middle Peninsula, and (3) a qualitative analysis of small towns and cities on the east coast that have demonstrated economic success in order to determine what methods they employed that the Middle Peninsula could replicate.

These three methods of analysis sought to answer the following questions posed by the MPPDC:

- 1. What demographic changes have occurred in the Middle Peninsula over the past 10 years?
- 2. If such trends continue, how are they likely to impact the regional economy in terms of employment, tax revenue, income, etc.?
- 3. What trends are other rural, coastal communities like the Middle Peninsula experiencing?
- 4. What are various generations looking for in a prospective community? How well do current offerings match those preferences?
- 5. How can communities identify and attract people, especially Millennials and other young adults? What public and private investments might be required?
- 6. What steps can communities take to mitigate the impacts of an aging population?
- 7. How might the demographic trends be used by businesses in making expansion and development decisions?
- 8. How might predicted sea level rise and increased regulation associated with cleaning up the Chesapeake Bay affect the demographics of the peninsula?

¹ This study was produced as part of the MPPDC's continuing efforts to leverage the resources of its University Partners through the Virginia Sea Grant. The MPP Candidates that participated in this study completed the work as required by their Policy Research Seminar (PRS), which serves as the capstone course and project for MPP Candidates at William & Mary, located in Williamsburg, Virginia. Students are given one semester to work in teams to address a policy challenge posed by a policy-oriented client, such as nonprofit organizations, and government agencies.

The MPPDC, of course, wants to maintain the Middle Peninsula's sense of community and historical charm while creating an atmosphere that will attract businesses and investments. Census data analysis and survey results from this study reveal that most people on the Middle Peninsula also appreciate the rural area. However, the lack of decent-paying jobs and senior living and health services have contributed to significant out-migration. A study of comparable municipalities (Twin Towns) to those on the Middle Peninsula identified several policies employed in growing and sustainable communities that the towns and counties on the Middle Peninsula could implement to attract more business and tourism.

Currently, the Middle Peninsula may be an excellent place to raise a family but perhaps not to grow businesses with high-paying or even decent paying jobs. Future projects must develop business incentives and focus on an aggressive marketing campaign to advertise the region to attract both tourists and permanent residents to the Middle Peninsula. Many of the investments needed are not only necessary to encourage millennials and others to move and stay in the region but are crucial to developing the region's business environment.

This paper is divided into six main parts. Section 2 will discuss in-depth the findings of previous studies on the Middle Peninsula and where this study fits in that context. Section 3 describes the methodologies employed for this study, and Section 4 reports those results. Section 5 will identify the policy implications for the results and provide investment suggestions based on the findings from each method. Finally, Section 6 concludes the paper with general recommendations as well as answers to the list of questions supplied by the MPPDC on key issues of interest in the region.

2. PREVIOUS STUDIES

Upon beginning our research of the Middle Peninsula, we reviewed several existing studies provided by the Middle Peninsula Planning District Commission. Many focused on the broad economic and demographic trends ongoing in the region and have already provided some policy suggestions to address the region's challenges. This study intends to complement these studies by providing insight on the perspectives of three target demographic groups in the region: **high school students**, **community college students**, **and retirement-age individuals**. In addition, this study will provide examples of economic development **other rural**, **coastal communities** in the eastern U.S. to identify potentially high-returns investments for the Middle Peninsula.

Virginia Economic Commission

The Virginia Economic Commission's report on the Middle Peninsula included an in-depth analysis of the economic statistics and demographics, as well as trends, of the area. It presented data on the population demographics, education quality, migration trends, employment trends, and top employers in the region, as well as employment and business development projections. Overall, this source created a solid foundation for the research of the project by providing context.

Comprehensive Economic Development Strategy Report

The Comprehensive Economic Development Strategy Report (CEDS) was created in part by the Middle Peninsula Planning District Commission and focused largely on the economic fabric of the

Middle Peninsula of Virginia (MP). It emphasized natural resources as the "traditional and historic foundation of the region's economy." However, because of the growing economic opportunities in D.C., Fredericksburg, Richmond, and Hampton Roads (the "urban crescent"), the Middle Peninsula has increasingly become a "bedroom community" for these metropolitan areas, to the detriment of the region. Accordingly, 71% of the workers on the Middle Peninsula commute to other areas for work, effectively making the MP as a source of intellectual capital and labor *for other places*. In reality, the average wage of those *working in the Middle Peninsula* is approximately \$30,000 year, placing Middle Peninsula last in Virginia for average wage. \$30,000 would hardly be enough to support an individual, let alone a standard family of four.² Wage statistics mask this discrepancy, creating an illusion of well-paying jobs available in the Middle Peninsula. In fact the region has pockets of isolated distressed communities with higher than average Supplemental Nutrition Assistance Program (SNAP) participation. Health statistics showed less than positive conditions, with counties like King and Queen ranking 92nd out of 131 localities in Virginia. Four of the six Middle Peninsula counties are in the 10-15% poverty rate. Overall, there is a discrepancy between the perception of Middle Peninsula by outsiders and the reality for its residents.

Nevertheless, the study also found several opportunities for economic development in the region. For example, where there is adequate municipal water/sewer networks, the government employment is the largest employer. Growing tourism and providing retiree services, including housing, were other areas of economic development, as well as converting forests and commercial fisheries into residential areas and converting waterfront communities into marinas. The study also looked at the prospect of commercial development along routes 33 and 360. However, recurrent flooding events, more frequent hurricanes, subsidence, and new and ongoing regulations necessitate planning.

A "Strength, Weakness, Opportunity, and Threat" (SWOT) analysis of the Middle Peninsula revealed a variety of topics in need of further exploration and corroboration. Specifically, the areas of concern identified in the SWOT analysis include health care access as a potential source of high wage employment and meeting community needs, unreliable network access, limits to the natural resources through regulation, limited public transportation (or a public transportation network that is unused and unfamiliar to the public), limited municipal utilities, and a need for more job or career development opportunities. The conclusions of the CEDS could be summarized as follows: natural resources are the biggest strength, limited infrastructure is the main weakness, tourism is a major opportunity for jobs, and environmental regulations are a threat to business development.

Middle Peninsula-Virginia Sea Grant Partnership Project Summary Report

The Virginia Sea Grant (VASG) study explored opportunities to engage Virginia universities in researching the challenges facing the Middle Peninsula. The report addressed two main questions: First, how can VASG partner institutions engage with the Middle Peninsula and what might that partnership look like? Second, what do private sector entities identify as barriers to growth in the Middle Peninsula's major employer sector clusters?

Most notably, the VASG report provided a list of specific analyses in need of completion by other VASG partner institutions such as William & Mary.³ Project topics include:

² For more data on the living wage in Virginia, see the Living Wage Calculator, presented by the Massachusetts Institute of Technology, at http://livingwage.mit.edu/states/51/locations.

³ The Policy Research Seminar project that completed this report actually formed as a follow up to the VASG study.

- Broadband analysis, particularly for the government and maritime sectors
- Marketing and branding for tourism and retail sectors
- Land use taxation analysis for agriculture and forestry
- Climate change and sea level rise
- Export technical assistance for agriculture and forestry
- Land use policies for aquaculture and seafood
- Demographics for government, retail/finance, insurance and real estate
- Health care service delivery analysis

Like the CEDS, the VASG study reaffirmed the broad scope of the challenges in the Middle Peninsula as well as the highlighted the lack of studies conducted on these challenges.

Contributions of this Study

The findings of the studies outlined above clearly illustrate where policy makers and researchers have investigated in terms of the Middle Peninsula's economic growth. However, while many policy recommendations and opportunities have been identified, there seems to be no consensus on which policies should take precedence. This report attempts to address this need through two methods:

Survey Target Demographics. First, there is a noticeable lack of information on behavior of the local population, particularly on the key out-migration populations: millennials and retirement-age individuals. This study intends to address that gap by examining the migration patterns of these two groups through census data. Additionally, the study also collects unique data on the living preferences of these target groups through surveys in order to identify which policies potentially would have more political support.

Analyze Comparable Communities. Second, qualitative research was conducted on the policies undertaken by similar communities across the eastern United States. Research examined demographic and economic statistics using Census data as well as the content of official government websites of these communities, when available. Based on these findings, the study produces a list of recommendations that may be economically beneficial and politically supported when combined with the survey data.

Overall, this study addresses the political component of these economic development programs by investigating the living preferences of **those about to join the workforce** and **those about to leave the workforce**. Table 2.1 below summarizes the literature review.

Study	Subject Matter	Methods	Findings
VEC	Demographic trends Economic trends Education quality	Study Census Data Study regional statistics	Job market limitations Educational attainment Wage limitations
CEDS	Economic opportunities Development policies	Study population movement Study available jobs	High out-commuting of working population Lack of high wage jobs SWOT Analysis
MPPDC-VASG	University Partnership opportunities	Study similar partnerships Study education opportunities Survey local universities Cost analysis of partnership	Infrastructure limitations Areas of concern for further research
W&M PRS	Demographic trends Economic Trends Generational Preferences	Study Census Data Study regional statistics Study population movement Study similar towns Survey target populations Identify marketing opportunities	Population preferences Movement trends Business development incentives Growth for target pop. Growth for specific towns

Table 2.1 Summary of Literature

3. METHODS

In order to more comprehensively understand the trends occurring in the Middle Peninsula, we employed three different analyses, using a combination of quantitative and qualitative research to paint a better picture of the region's prospects. Census data was collected to serve as an entry point for the rest of the project and to provide another avenue of studying demographic behavior. We then implemented a survey on living preferences to target demographic groups in the Middle Peninsula. Finally we studied policies of comparable U.S. towns to shed more light on successful economic policies.

3.1 Census Data Collection

All census data gathered for this portion of the study came from the American Communities Survey (ACS), administered by the U.S. Census Bureau. Sent to approximately 295,000 addresses monthly, the ACS is the second largest survey administered by the Census, surpassed only by the decennial census. Although not quite as robust as the decennial census, the ACS data has an advantage over its cousin because it is implemented on an ongoing basis; the production of its data is aggregated from responses over 1 year, 3 years, or 5 years, depending on the size of the localities of interest. For the

Middle Peninsula, we have collected data from year 2000 to present. Our variables of interest were population, median household income, and destinations of those who migrate outward.

3.2 Survey Collection Methods

Three surveys were developed and distributed to residents of the Middle Peninsula: high schoolers, community college students, and the pre/post retirement community.⁴ Surveys were intended to gauge living preferences of the populations and understand attitudes of residents towards the Middle Peninsula. Please see **APPENDIX A** for the full list of survey questions.

The surveys of the high school and community college students focused on the concerns of the age groups, including what career field they were pursuing, what type of area they want to live in after graduation, and what they consider important when deciding where to live. The pre/post-retirement survey focused on the respondents' career fields, their perception of business opportunities on the Middle Peninsula, and possible benefits and challenges to living in the region: environmental regulations, infrastructure, community involvement, health care services, etc.

In total, there were 445 respondents to the surveys (see **Table 2.2**): 274 high schoolers, 62 community college students, and 109 pre/post retirees. The distribution of responses by county shows that the surveys are not robustly representative of the Middle Peninsula. 75 percent of the high school responses came from Mathews county; nearly half of the community college responses came from Gloucester county; and nearly 75 percent of responses for the pre/post retiree survey came from Gloucester and Middlesex. Because of the representation issue, caution should be taken in generalizing survey results to the entire Middle Peninsula. However, the surveys do provide a snapshot of preferences and attitudes of residents of the area.

	High School		Community College		Pre/Post Retiree	
County	Number	Percent	Number	Percent	Number	Percent
Essex	24	8.76%	9	14.52%	9	8.26%
Gloucester	14	5.11%	30	48.39%	49	44.95%
King and Queen	14	14.11%	3	4.84%	7	6.42%
Mathews	210	76.64%	7	11.29%	10	9.17%
Middlesex	7	2.55%	8	12.90%	32	29.36%
TOTAL	274	100%	62	100%	109	100%

Table 2.2 Survey Responses

⁴ High school and community college combined form the "millennial" demographic of interest.

3.3 Twin Town Comparisons⁵

In beginning our qualitative analysis of trends in rural, coastal communities in the United States we referenced *Boomtown USA: The 7 ½ Keys to Big Success in Small Towns*, a book by Jack Schultz, CEO of Agracel, Inc., a firm that specializes in industrial development in small towns. Although published in 2004, the book provides one of the most comprehensive studies on growth in rural U.S. communities. The book identifies several strategies for helping small towns grow as well as provides the list of 300 towns from which Schultz draws his conclusions.

From Schultz's study we identified 53 rural (some coastal) communities in the eastern and southern United States that share demographic and geographic with the communities of the Middle Peninsula. We limited our study to this region of the United States in order to limit variability in the cultural and social backgrounds of our communities of interest that may arise in cross-regional studies. For each of these communities, we examined the factors or initiatives that helped make the community successful.

Further, in evaluating the success of the municipalities, we examined the economic factors of the cities and towns, comparing data from the decennial Census in 2000 and 2010. We specifically compared the population, per capita income, and household income changes over the decade. In order to account for possible state-specific economic change, we compared the per capita and household income percentage change to the the state average change for that time period.

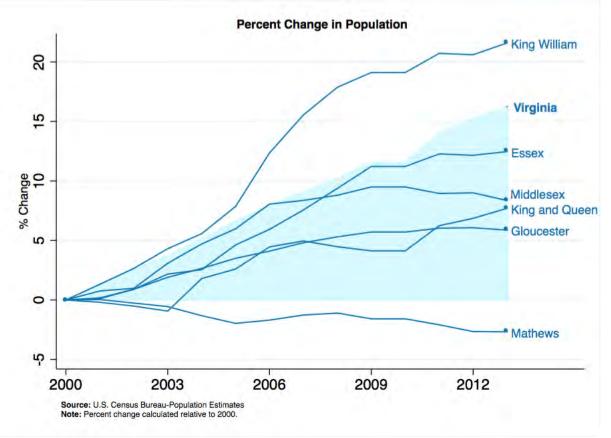
4. RESULTS

The results of our three methodologies provide a thorough picture of the living preferences of the Middle Peninsula's target demographics. The census data reveals that most people who leave the the region move to other rural and suburban communities in Virginia that are closer to other urban centers with amenities such as health care services and education. The survey results illustrate many of the preferences of the millennials and the older citizens of the Middle Peninsula, especially with regards to the areas of concern identified by previous reports, such as internet access and water and sewage services. Finally, the Twin Towns study provides concrete examples of policies that could potentially boost Middle Peninsula's economy.

4.1 Census Data

Using Census Data, the team identified potential trends of interest. **Figure 4.1** below displays the population growth of the Middle Peninsula's six counties using data from the American Communities Survey (ACS) from 2000 to 2013.

⁵ The municipalities chosen for the Twin Town comparisons were chosen by population size to ensure that they properly matched the towns and counties on the Middle Peninsula. Some of the municipalities chosen are classified as cities in their state, but for the sake of clarity, we refer to all localities as "towns" for the purpose of this report.





Most of the counties in the last fifteen years have experienced population growth at a rate that falls near but below the state average. King William County stands out as an exception and was the only county that consistently stayed above the state average by a relatively large percentage. In contrast, Mathews County was the only county that consistently saw negative population growth. This is particularly concerning because Mathews has the second lowest population in the region, after King and Queen County.

In general, the Middle Peninsula counties share similar age distributions: a somewhat small youth population, a very large pre-retirement/newly retired population, and a drop-off in population for those in their 20s, as depicted in **Figure 4.2**.

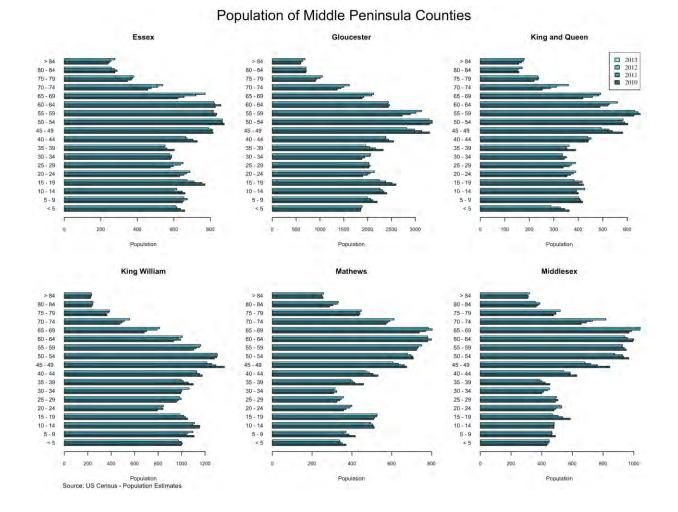
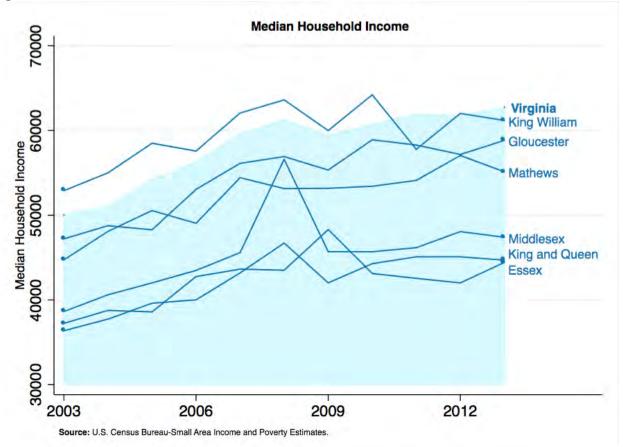


Figure 4.2 Population of Middle Peninsula Counties

Mathews County and Middlesex County both have much more extreme skews in the distribution of their citizens' ages. Both have a significantly large bulge in their early retirement aged individuals; there is a big spike in the number of individuals in their early 60s that is not seen in the younger portion of the population. On the other hand, King William County, Essex, and Gloucester have smoother distributions of ages for their populations; the "spike" around the 60s is not as pronounced. However, in all six counties there is at best a "hole" for individuals in their 20s. For some counties it seems that the population of millennials is just uniformly small.

We then turn to the basic economic patterns in the region. **Figure 4.3** below shows the Median Household Income of the six counties.



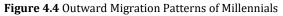


Each of the counties in the Middle Peninsula has experienced positive economic growth when compared to 2003. However, growth has not been constant, and the median household income for each county currently falls below that of the state. King William seems to have done the best in the last decade, as has Mathews County. Middlesex County, King and Queen, and Essex have not done as well, but it appears that on average their median household income has grown.⁶

Finally, we examined census data to determine where people relocated when leaving the Middle Peninsula. **Figures 4.4 and 4.5** show where both the millennials and the pre/post-retirement populations have moved to after leaving the Middle Peninsula.

Figure 4.4 depicts that people aged 18-34 tended, perhaps unsurprisingly, to migrate toward education hubs in Virginia. Millennials moved to the Washington, D.C. area, the Richmond area, Hampton Roads (William and Mary, Christopher Newport University), and Blacksburg (Virginia Tech). More research should be conducted regarding the locations of these individuals, but the fact that Blacksburg was one of the major destinations indicated that higher education opportunities are likely a contributing factor.

⁶ There is a spike in the Middlesex County median income data in 2008 that could be attributed to a statistical anomaly in the ACS data for the county.



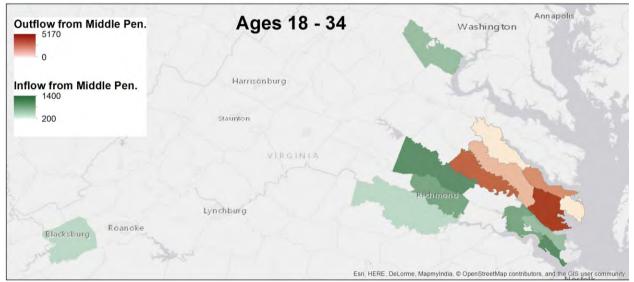
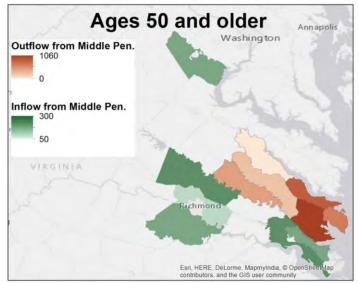


Figure 4.5. Outward Migration Patterns of Pre/Post-Retirement Individuals



Those of retirement age did not tend to travel too far outside the area surrounding the Middle Peninsula. However, they seem to be seeking areas with similar characteristics to the Middle Peninsula--the neighboring counties of Richmond have suburbs but also have large tracts of rural territory. It is quite possible that the former citizens of the Middle Peninsula resettled in places like home. Though residents moved around Richmond, they did not choose to move into the urban center, preferring instead to settle in the suburbs or rural areas.

Notably, data from the ACS indicate that no one left the state of Virginia after they moved out of the Middle Peninsula, another suggestion that people are not necessarily dissatisfied with the region but are just in search of better opportunities, in the case of millennials, or better services, in the case of retirees.

4.2 Survey

We present the results of the surveys in two parts. We first report the responses of the millennials high school and community college students. Then we turn to the pre/post-retirees. Each group was given a different survey -- though the high school and community college surveys are very similar which can be seen in **Appendix A**.

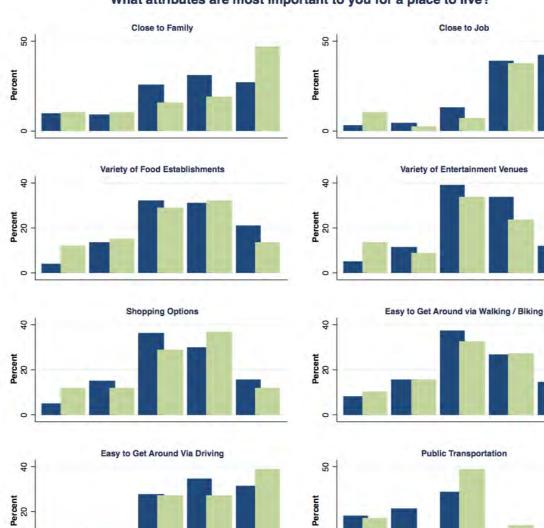
Millennial Population (High School and Community College Students)

Figure 4.9 presents the millennials' attitudes towards different community qualities and amenities. When choosing a place to live, the millennial population is most concerned about access to jobs and affordability. Most millennials are either neutral or have a preference towards living in an area where it is easy to get around via driving. The ability to get around via walking, biking or through public transportation appears less important than as believed to be in the case. In addition, millennials indicate that shopping options and entertainment venues are not an important feature that they evaluate when considering where to live.

Overall, millennials appear to have a favorable view of the area, as depicted in **Figure 4.10**. Most agree that the Middle Peninsula is an enjoyable place to live, would live there if it was close to their ideal job, and would raise a family there. However, a majority indicate that there is not enough to do in the Middle Peninsula nor is there adequate internet access and cell phone reception, corroborating the areas of concern identified in the CEDS and VASG.

Despite favorable views of the Middle Peninsula, millennials indicate a strong likelihood of *not* living in the area in both the short term (next five years) and the long term (the next twenty years). Though roughly half of the students are "likely" to live in the area in the next five years, they indicate that it is far less likely they will remain in the region in the next twenty years.⁷ Community college students are marginally less likely to live in the area in the long term compared but more likely to in the short term. High school students show a notable preference for wanting to live elsewhere in the next 20 years, with nearly 26 percent indicating it is very unlikely they will live in the area, and 64 percent indicating it is somewhat unlikely to very unlikely that they will live in the Middle Peninsula in the next 20+ years. Regardless, both high school and community college students still indicated that they could envision themselves living in a rural area in the future. **Figure 4.11** illustrates these results.

⁷ The question asks for students' perception of how likely they view themselves as being in the Middle Peninsula in the short term and the long term. This phrasing was chosen to capture the "preference" of the students to live in the region but allowed students to consider their personal circumstances -- economic, education, etc. -- when making the statement, creating a more realistic of where students might end up in the future. For the purposes of this report, "likelihood" approximates "preference."



Population of Similar Age Group

Neutrai

Figure 4.9 Millennial Attitudes

What attributes are most important to you for a place to live?

0

8-

Percent

Very Important

High School

0

Very Unimportant

Community College

Affordability

Neutral

Very Important

0

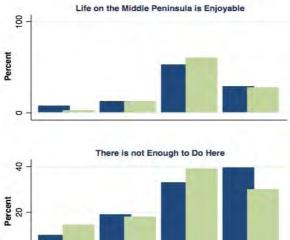
40

Percent 20

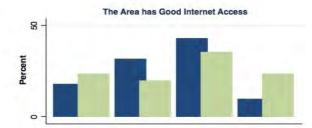
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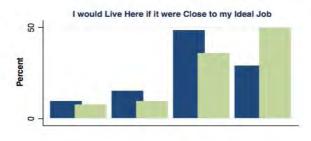
Very Unimportant

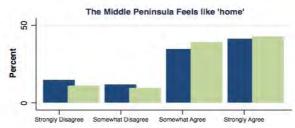
Figure 4.10 Millennial Attitudes



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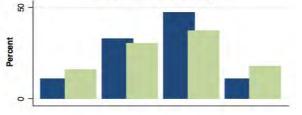


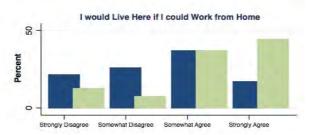
To what extent do you agree with the following statements?





The Area has Good Cell Reception







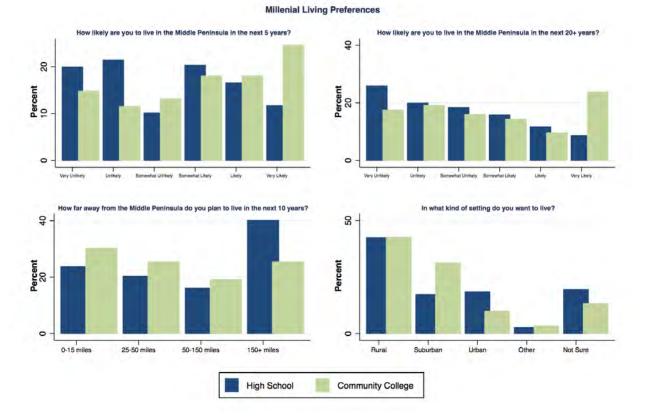
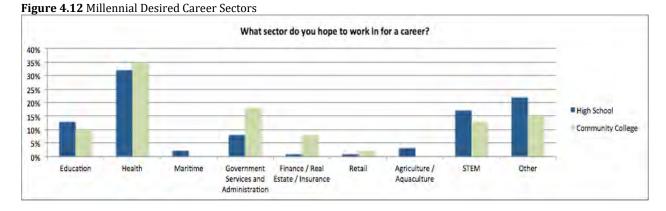


Figure 4.11 Millennial Living Preferences

Figure 4.12 indicates that the most sought after career paths for millennials on the Middle Peninsula are Education, Health, and the Science/Technology/Engineering/Math (STEM) sectors.



Taking this data, we then breakdown the results and examine how different attributes affect a respondent's' likelihood to live in the Middle Peninsula in **Figure 4.13**. Those who value living close to family were significantly more likely to indicate the possibility of living in the Middle Peninsula in the next 20 years. Other variables show slight differences in the likelihood of living in the Middle Peninsula based on attitudes about what is important in a place to live. Those who value the variety of food establishments, entertainment venues, ease of getting around via walking and biking, and living around a population of a similar age group are marginally less likely to indicate wanting to live in the Middle Peninsula.

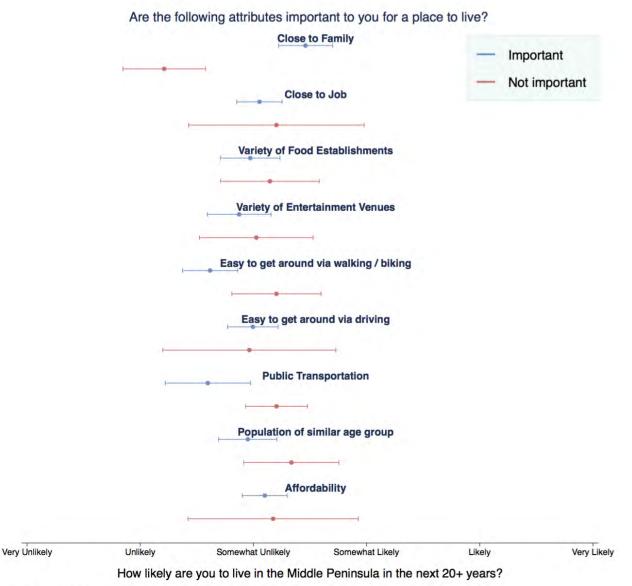


Figure 4.13 Attributes of place to live and likelihood of living in the Middle Peninsula

Mean reported with 95% confidence interval

Millennials who prefer to live in a rural setting are significantly more likely to want to live in the Middle Peninsula in the next 20 years. Those who have lived in the Middle Peninsula for more than 15 years were slightly more likely to prefer living in the Middle Peninsula long term. Those with unfavorable views of services--such as cell service, internet access, and recreational facilities, are all less likely to prefer living in the Middle Peninsula and would raise a family in the area are significantly more likely to prefer living in the Middle Peninsula. However, the likelihood that these individuals will live on the Middle Peninsula, on average, ranges from somewhat unlikely to somewhat likely.

Figure 4.14 Attributes of place to live a	nd likelihood of living in the Middle Peninsula
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		Living Pre	ferences		
		I want to live i	n a rural setting	-	Agree / Yes
				-	Disagree / No
	I have liv	red in the Middle Per	ninsula for more thar	n 15 years	
		F			
		The area has go	ood cell reception		
		The area has go	od internet access		
		—			
	Re	creational outlets an	e available and suffic	eient	
	-				
		Life on the Middle P	eninsula is enjoyabl	e	
4	• •				
		I would raise	e a family here		
(H	•				
Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

How likely are you to live in the Middle Peninsula in the next 20+ years?

Mean reported with 95% confidence interval

Figure 4.15 shows preferences for living in the Middle Peninsula according to education characteristics. High school students, in comparison to community college students--especially those who plan to attend a four year college after graduation--- are slightly less likely to want to return to the Middle Peninsula. There are not large differences in preferences toward living in the Middle Peninsula by the sector that students hope to work in. Those who hope to work in the education and health sector are slightly more likely to want to live in the Middle Peninsula, while those interested in STEM sectors are slightly less likely to want to live in the Middle Peninsula.

Figure 4.15 Attributes of place to live	and likelihood of living	in the Middle Peninsula		
	Education and	Career Goals		
Afte	r high school, I plan	to attend a 4 year col	llege	Agree / Yes
	·	-	-	Disagree / No
l an	n in High School (ve	rsus Community Colle	ege)	
	F	•		
	I hope to work in t	he education sector		
	⊢ •t			
	I hope to work in	the health sector		
,	I hope to work in th	e government sector		
	⊢ ●−1			
I hope to work in a sec	ctor involving scien	ce, technology, engine	eering or mat	hematics
	·•			
Very Unlikely Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Like

How likely are you to live in the Middle Peninsula in the next 20+ years?

Mean reported with 95% confidence interval

Interestingly, survey respondents gave attributes of the Middle Peninsula more favorable ratings than they believed their peer perceived the region. **Figure 4.16** compares how respondents agree with statements about the Middle Peninsula to how they believe their peers agree with the statements. On all questions respondents gave more favorable ratings to the Middle Peninsula than the ratings they would attribute to their peers.

		The Middle Peninsul	a Feels like 'home'	
			• •	
		I would Live Here if I co	uld Work from Home	
		I would Live Here if it wen	e Close to my Ideal Job	
		The Area has Good	Cell Reception	
		The Area has Good	Internet Access	
		1. S. 1.		
		I would Raise a	Family Here	
		There is not Enor	ugh to Do Here	
		Recreational Outlets are	Available and Sufficient	
-	Perception of Peers' Attitudes	Provide LO Market		
-	Respondent's Attitudes			
		Life on the Middle Per	insula is Enjoyable	
		Attitudes towards living in	the Middle Peninsula	

Figure 4.16 Respondent versus peer attitudes

Mean reported with 95% confidence interval

This question was included to gauge citizens' perceptions of the Middle Peninsula. The fact that, for the most part, people believe that their peers view living conditions less favorably than themselves presents an additional challenge. If people feel that their friends are going to leave, it may decrease their own desire to stay, effectively creating a self-fulfilling prophecy. Because people feel that other people, such as their peers and friends, dislike the area and are also likely to leave, they may feel more inclined to leave.

Pre/Post Retiree Community

Retirement Preferences

Largely, the residents of Middle Peninsula wish to retire there and remain there for the duration of their retirement, as **Figure 4.17** shows. However, given the movement trend of senior-aged residents moving from the area, it may be that their retirement needs are not being met by the Middle

Peninsula, and that those needs may not be fully accounted for until some years later. In other words, recent retirees may not expect some limitations that aging can produce, and may not be accurately predicting their needs before the limitations arise.

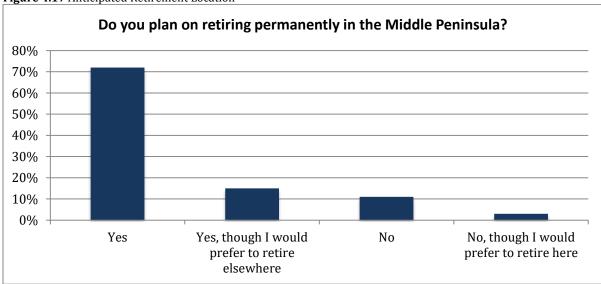


Figure 4.17 Anticipated Retirement Location

The limited retirement options on the Middle Peninsula may be one of the largest reasons residents depart for other areas, particularly given that the areas they move to (suburbs or rural areas nearer to urban centers) and the options available in those areas. **Figure 4.18** illustrates that many agree it would be easy to retire in the Middle Peninsula. They are also aware that there are not many retirement community options. Unsurprisingly, many are not overwhelmingly supportive of the idea of retiring in the Middle Peninsula permanently.

Retirement community options can come in many forms: independent living subdivision with age thresholds and community features, assisted living communities with independent homes or apartments, fully assisted living with suites and on-call medical staff, and nursing home arrangements. Many residents have spent their lives on the Middle Peninsula and would prefer to stay in the area, while maintaining some semblance of their habits in a rural community, with privacy and independence. No such community currently exists on the Middle Peninsula, although many are being built around the country to support increased demand as the Baby Boomer generation ages.

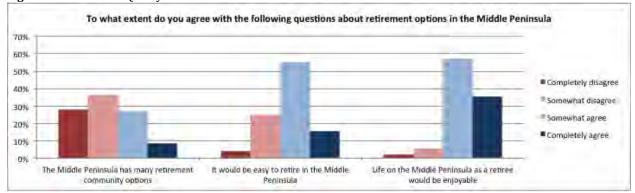


Figure 4.18 Perceived Quality of Life

In addition to providing the residents of the Middle Peninsula with retirement communities and senior lifestyle options, access to general health care and specialists for an aging demographic will become more and more important. In that respect, the survey results, as shown in **Figure 4.19**, were clear: current healthcare needs are met while future health care needs may be a concern. Planning ahead for an aging population by increasing access to healthcare (via shuttle or public transportation) or investing in local healthcare services for seniors will be a significant step in retaining the retirement population.

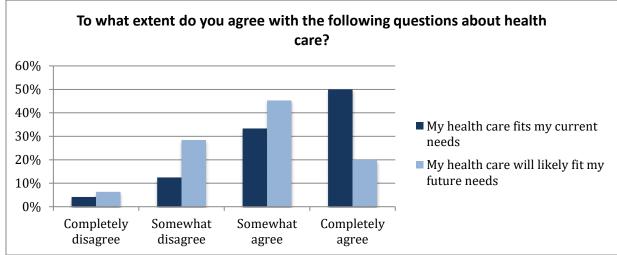


Figure 4.19 Health care access

On a more positive note, the retirement aged population of the Middle Peninsula very clearly indicated that community involvement is one of the most enjoyable benefits to living there (**Figure 4.20**). They overwhelmingly found it easy to get involved in the community and to meet new people. Here, the sense of pride in the community was clear: the Middle Peninsula is a place where people care about and actively enjoy being involved in their hometowns. The future of the Middle Peninsula matters considerably to the community and residents.

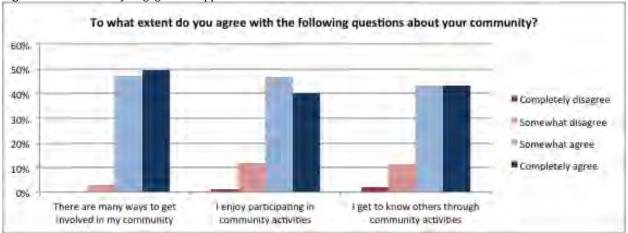


Figure 4.20 Community Engagement Opportunities

Attracting New Residents and Services in the Middle Peninsula

Figures 4.21-22 show the results from the pre/post retirement community's impression of challenges and attractors to the Middle Peninsula. Future research ought to consider these areas when looking at business development and resident movements, given local opinions.

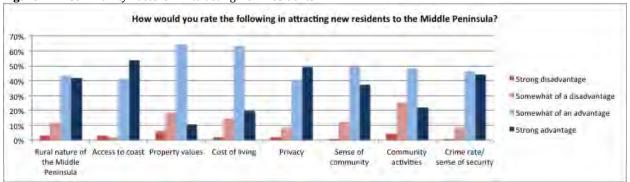
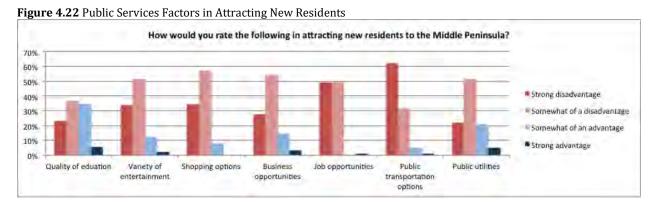


Figure 4.21 Community Factors in Attracting New Residents



The results for challenges to starting new businesses in the Middle Peninsula (**Figure 4.23**) were not selected specifically from business owners in the area, but from pre/post retirees generally.⁸ These indicate what the residents perceive as challenges through word of mouth, assumptions, or first-hand experience. However, perceptions can be as detracting as realities, and these challenges should be considered when approaching new businesses.

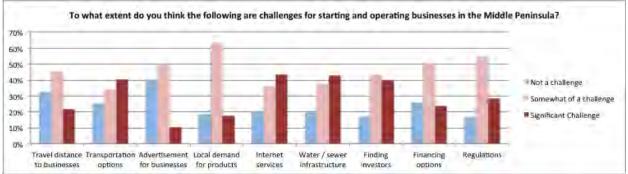
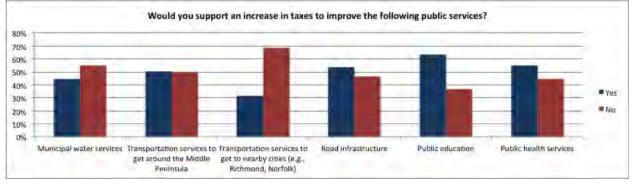
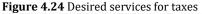


Figure 4.23 Business Constraints

⁸ This data is available in the dataset that we provided to the MPPDC but its analysis was beyond the scope of this report, which focuses broadly on the trends among millennials and retirement-age individuals.

Figure 4.23 shows areas where the seniors of Middle Peninsula would support tax increases. Most notably, many respondents indicated that they would support an increase in support for public education and a decrease in support for public transportation. This might be contrary to other results from the same survey indicating that public transportation needs improvement, but it seems to coincide with the millennial perspective that public transportation is not as important a priority when deciding where to live. **Figure 4.24** highlights that as seniors view municipal water services, public transportation, and road infrastructure as greater challenges, they are more likely to support an increase in taxes. Those who somewhat agree that health care will meet their future agree are more likely to support tax increases to improve public health services.





In **Figure 4.25** below, we breakdown responses to desired services in the Middle Peninsula by willingness to pay for those same services via a tax increase. This helped to distinguish projects that people wanted the public sector to support from projects that the people felt should still be put in place but not by the local government using public funds.

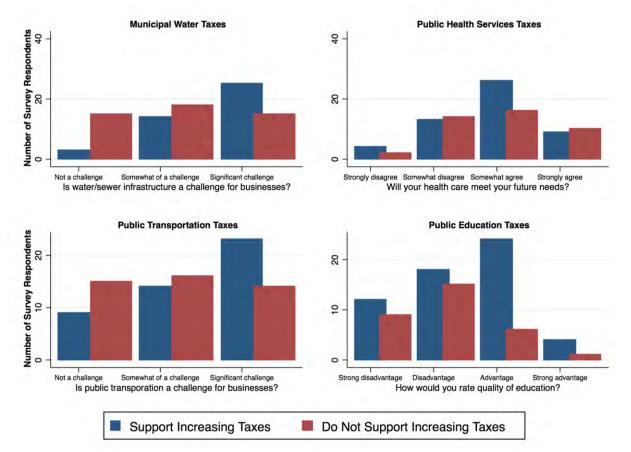


Figure 4.25 Desired services for taxes and attitudes towards services in the Middle Peninsula

As expected, people who viewed an issue as important generally were willing to support an increase in taxes to help pay for that service; likewise, if they viewed an issue as not a challenge they were more likely to not support tax financing. Those on the border about the value of issue were on the fence about using taxes for a public project, reflecting the ambiguous nature of having an opinion in the middle. Overall, it seems that public education may be the most popular, followed by public transportation, municipal water systems, and health services.

Environmental Results

In the environmental section of the survey pre/post retirement age individuals, the study sought to determine whether the changes in environmental regulations, increases in flooding and flood insurance, or other environmental factors were driving residents' decisions to depart or remain on the Middle Peninsula. As it turns out, the survey results indicate that most pre/post-retirement residents do not base their planning or decisions on environmental regulations or concerns when it comes to remaining on the Middle Peninsula.

Figures 4.26-27 illustrate these results below.

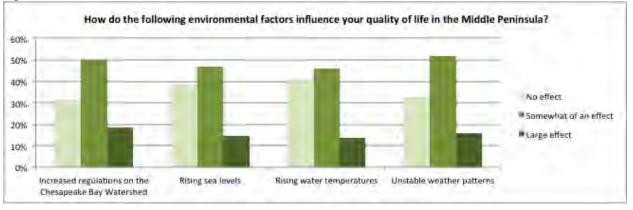
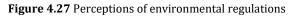
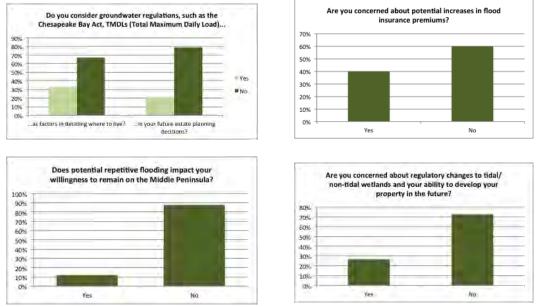


Figure 4.26 Effects of Environmental Factors





4.3 Twin Towns Comparison

Of the 53 identified "twin towns," 24 had per capita income growth that outpaced their respective states; 22 had positive per capita income growth, but not greater growth than their state average; and seven communities had negative per capita income growth. Taking a similar look at population, we see that 16 towns and cities had greater population growth than their states; 22 had positive population growth but less growth than their states; and 16 had negative population growth. Of the communities with negative population growth, only two had negative per capita income growth, with the average per capita growth at approximately 26.4%. The state growth average for the municipalities with negative growth of 24.4% and an average growth of 10.9%, despite having four municipalities with negative population growth (Urbanna, Gloucester Point, King and Queen County and Mathews County).

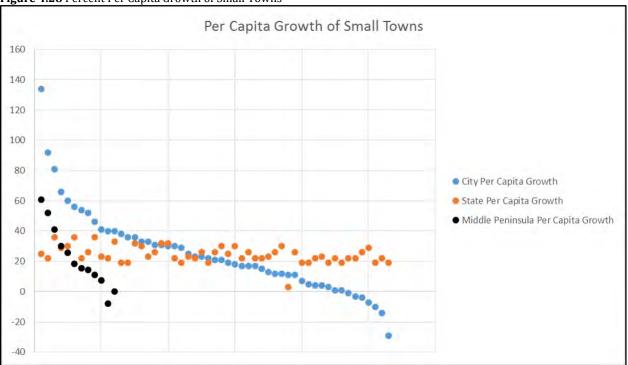
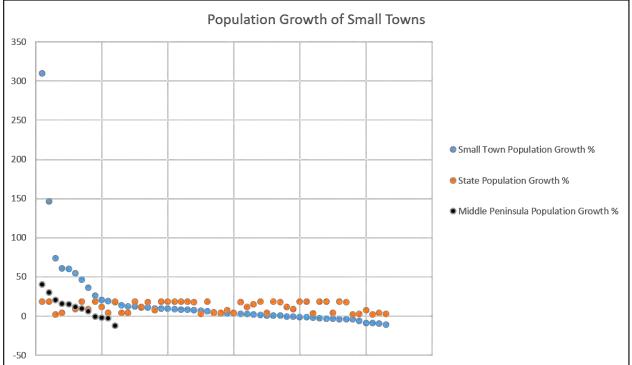


Figure 4.28 Percent Per Capita Growth of Small Towns





Examining the programs and information for each town revealed specific trends in the thriving towns: (1) investment in local business development, (2) attractive websites, and (3) an emphasis on "main street rejuvenation."

Investment in Business Development

Many of the small towns and cities have marketed themselves as "small business friendly" and have developed programs and incentives to encourage business owners to make the town a home for their business. These programs include seminars and conferences, drawing on the knowledge and expertise of other successful business owners in the area, and incentivizing business development in specific areas, like the town's main street or historic district. Often, these businesses are advertised on the town's website.

More aggressive business incentives may be needed to encourage businesses to invest in the Middle Peninsula. A survey of the comparable small towns showed that business incentives need to go beyond the reach of merely linking to a town or county's business license form or mentioning state-level tax incentives. Many small towns offer site selection assistance or business parks/corridors, local incentives for the town and county, mentorship from other business owners, small business development guides and workshops to provide continued support, advertising on the municipality's website, and licensing assistance. The more support a business gets from a town or county, the more likely the business is to succeed.

Attracting larger businesses to the area can be done through a show of available incentives, but it takes marketing and advertising to reach the businesses. Richmond is an expensive area to host larger businesses, especially industrial businesses, but the Middle Peninsula has a much lower tax rate and lower cost of living, with access to highways. Offering job training or technical skills training at high school or community colleges will go a long way in attracting businesses that rely on specialized skills. There's a shortage of highly skilled technical workers for industrial machinery, the kind of machinery that is quite familiar to the residents of the Middle Peninsula, from West Point's paper mill equipment to John Deere tractors and fishing boat engines. Capitalizing on the resources available to the Middle Peninsula can help the area to grow in a way that is natural for the residents.

Attractive Websites

In the digital age, a town without a decent website is a town that isn't going to draw a crowd from outside the "word of mouth" area. Urbanna's website is a great example of an attractive website: it immediately lays out the reasons people should visit Urbanna and offers the town a brand and a way to market itself. What we see on the website tells us what is most important to that town, and in many cases, its small business growth, outdoor recreational assets, and historic main streets.

Main Street Rejuvenation

Towns that invested in their main street - restoring the facade, encouraging attractive businesses and restaurants, and capitalizing on the town's history and charm - provided an attractive area both for businesses and for potential residents.

Gloucester Courthouse has embraced the "main street rejuvenation" movement by encouraging small businesses to occupy existing buildings in the downtown area, creating a hub for social activities and businesses in a walkable area while maintaining and highlighting the historic charm of the street through streetscaping and facade improvements. This movement is becoming more popular for small towns, and preliminary research shows it as being accomplished in many of the more successful "twin towns" through internally and externally funded grants and trusts.

5. POLICY IMPLICATIONS

Our surveys found that most residents of the Middle Peninsula, in both the senior and millennial populations, would prefer to live on the Middle Peninsula indefinitely if it could provide for their most immediate needs: jobs for millennials and better access to healthcare for seniors. Our surveys also found that a large portion of the job-seeking millennials are seeking careers in the healthcare field. The pre/post retiree population would like to see expanded retirement living options and senior communities that allow an independent lifestyle but provide scalable services to fit their needs. As the baby boomer population continues to age, their need for healthcare fields, with the willingness of the millennial population to fill the jobs in healthcare, the Middle Peninsula has considerable potential for development. Partnerships with universities that offer medical training should be a consideration for the Middle Peninsula, though perhaps a goal that will take years of planning to reach.

More immediately, our study of the "Twin Towns" allows us to make several specific and actionable recommendations. From most easily implemented to more challenging policies: Website improvement, town branding and marketing, small business incentives, business development support, and "Main Street Rejuvenation."

Despite being the smallest municipality in the Middle Peninsula, Urbanna's website is the most engaging and attractive. It brands the town as a "Historic Port with Old Fashioned Flavor." The town may claim to be historic and old-fashioned, yet the navigability and graphics of the page tell millennials that it will be up-to-date and the mention of "flavor" gives the town the potential to be a foodie destination. This is a great example of marketing and branding for a town, telling visitors to the site what the town can offer. Some of the other municipalities in the Middle Peninsula have no website at all, and others have websites that are more utilitarian than attractive. With more and more millennials turning to internet research before they travel somewhere to visit or live, an area's website is essentially a town's face to the rest of the world. A website that features merely links to the latest council meeting and zoning laws is unlikely to invite a demographic seeking work-life balance with outdoor recreation and dining options in the places they choose to live. The millennial survey revealed that they are first and foremost seeking an affordable location near their jobs. Middle Peninsula has affordability and is actively working to draw in and expand available jobs. Let these things be known on town and county websites and give them a fighting chance to attract new residents or visitors.

When it comes to attracting new businesses, incentives can be key. Richmond, the very city that is drawing away many Middle Peninsula residents, recently had to battle with new business development shortfalls. Richmond's leaders made difficult and expensive decisions, sacrifices in the short-term for gains in the long-term. They offered some of the most aggressive business incentives to encourage businesses to choose them over another area. The Middle Peninsula, while very different from Richmond, must also be aggressive. Many of the similar rural small towns that we studied offered business incentives in the form of tax breaks from the state (sometimes local) level, mentorship opportunities from successful and established business owners to help new businesses navigate the pitfalls of development, small business conferences and seminars to ensure owners have a strong base of knowledge, site selection assistance, grant awareness and grant writing assistance, workforce training programs, and partnerships with local education centers to ensure capable employees are available for skilled jobs. Some of these incentives are more costly than others, and some are already available in the Middle Peninsula.

6. CONCLUSION

In conclusion, our recommendations for the Middle Peninsula are:

- Increase regional awareness of life and community activities in the Middle Peninsula
- Develop retirement communities and improve access to specialized healthcare needs
- Improve internet access and network coverage
- Actively pursue small business development and promote business incentives

Finally, we answer the original questions posed to the team by the MPPDC below.

What demographic changes have occurred on the Middle Peninsula over the past 10 years?

The Middle Peninsula has experienced slower population growth in Essex, Gloucester, and Middlesex counties than Virginia as a whole, with negative growth in Mathews County and King and Queen County. King William County grew by 21%. Millennials and post-retirement aged adults are the two largest subsets of the population that are departing the Middle Peninsula.

If such trends continue, how are they likely to impact the regional economy in terms of employment, tax revenue, income, etc.?

Fewer working-age residents in a region will result in a smaller tax base, fewer available employees for any businesses looking to start up, and less incentive for businesses to move to the area. Fewer businesses will also limit the tax base. Fewer residents, regardless of age, will also shrink the tax base through sales tax and property tax losses. As the tax base shrinks, investments into the area will have to be reduced, further disincentivizing businesses from moving to the area. It becomes a vicious cycle: fewer people discourages business, fewer businesses means fewer jobs and less shopping or dining options, which results in more people leaving the area.

What trends are other rural, coastal communities like the Middle Peninsula experiencing?

Small towns all over the US are facing a similar cycle of residents moving away to seek jobs or amenities, which reduces the desirability of the area for businesses to develop. Many of these small towns are teaming up with their counties to bring economic incentives to the table to attract new businesses. They are also marketing their "small town charm" and capitalizing on their natural resources by advertising outdoor recreation and "escape and relaxation" opportunities. Most small towns that do not possess an education center see their millennial populations departing for higher education opportunities, then to larger cities for dense job opportunities.

What are various generations looking for in a prospective community? How well do current offerings match those preferences?

According to the survey results, supported by census trends, millennials are seeking areas with concentrated job opportunities and education centers. They prefer areas that are easy to get around via driving, and have less of an interest in public transportation. More than any other factor, millennials are seeking areas with affordability in terms of cost of living. People at or near retirement

age are seeking areas with senior-focused health care options and senior living communities. The residents of the Middle Peninsula would prefer to remain there, and most plan to do so, but may be forced to seek areas with more options for senior lifestyles that are a step between independent living and assisted living.

How can communities identify and attract people, especially Millennials and other young adults? What public and private investments might be required?

Millennials largely noted that the network coverage of the Middle Peninsula leaves something to be desired. With more people relying on access to the internet for many aspects of their lives, from working to banking, a lack of network access via cell phone is a detriment. Additionally, many millennials on the Middle Peninsula are planning to seek higher education in the fields of health care, STEM, government affairs, and information technology. Communicating these desires to community colleges on the Middle Peninsula might open up opportunities to retain those students rather than lose them to colleges offering degrees in those areas. Millennials are also seeking job opportunities. particularly skilled, high-wage jobs or jobs that may lead to high-wage positions in time. Bringing businesses to the area that offer careers and long-term employment would be the best thing the Middle Peninsula could do to retain Millennials, although probably one of the most challenging obstacles. A promising trend revealed by the surveys is the interest of many high school and college students in the healthcare industry. Further research is needed to determine which aspects of the industry are drawing the most attention, but if we combine that interest with the need for investment in retirement options, the Middle Peninsula likely has a viable investment and growth opportunity. Private or public investment in retirement communities with jobs in healthcare for the younger generation could allow for the growth the Middle Peninsula is looking for.

A significant challenge lies in the region's lack of high speed internet service. Businesses run much more efficiently with the use of high-speed internet. Investment in broadband would further allow an opportunities for residents to telecommute (work from home, communicating with the office via the internet). Possibly companies would be able to open a branch in one of the Middle Peninsula communities, again maintaining a link to their other branches via internet. King and Queen County has already made the investment, despite a lack of private investment and no federal financial support.⁹ The county found it necessary to provide broadband to ensure residents can reap the benefits of an ever-growing digitizing world; schools can leverage online resources, patients can access health record information from electronic health systems, and citizens can submit for benefits for social services—such as SNAP and Medicaid—online. Other Middle Peninsula counties should investigate avenues to replicate King and Queen County's initiative, especially as public and private sectors increasingly rely on the internet to provide services.

What steps can communities take to mitigate the impacts of an aging population?

As generations age, they impact the types of services in demand, like health care, nursing care, living arrangements, and public transportation. They also often qualify for tax benefits or exemptions that can lower the revenue for a municipality. To mitigate these impacts, a region could capitalize on the new needs of the generation by encouraging the development of aging-specific health care specialty clinics, senior living areas, and transportation options via shuttle or bus to grocery stores, clinics and

⁹ Richard Foster, "The Digital Divide: Lack of High-School Internet can Hamper Growth of Rural Areas," *Virginia Business,* June 28, 2014, Accessed December 11, 2015, http://www.virginiabusiness.com/news/article/the-digital-divide.

pharmacies, and community centers. Keeping an aging population involved in the community is a good way to offset the loss of tax revenue that may also come about. Consider encouraging them to volunteer to support visitor centers, tours of the area, museums, and events.

How might the demographic trends be used by businesses in making expansion and development decisions?

Businesses looking to expand to the Middle Peninsula should take note of the survey results showing the interest in certain job markets. Workers that don't have to relocate to more costly areas, like Richmond, don't have to have compensating salary increases to sustain the higher costs of living. Millennials that responded to the survey indicated they would prefer to live somewhere rural to somewhere urban, making the Middle Peninsula on that measure alone preferable to Richmond or other major cities where costs of running businesses would also be higher. Businesses should also note that the senior community of the Middle Peninsula is hungry for more retirement living options: subdivisions with age thresholds or complexes with condo-style homes. Health care clinics, even emergency clinics, would do well to locate near a senior community to assist with their needs. It is also worth noting that lower taxes and affordability make the Middle Peninsula ideal for businesses to move here, while still maintaining a short route to Richmond, DC, and Norfolk/Virginia Beach.

How might predicted sea level rise and increased regulation associated with cleaning up the Chesapeake Bay affect the demographics of the peninsula?

The senior population that was surveyed expressed an awareness of the increased regulations, as well as the increases in flood insurance requirements, but indicated that these were not impacting their decision about whether to retire on the Middle Peninsula. Millennials may be much more concerned about future efforts to clean up the Chesapeake Bay, but did not indicate so in the survey. This could be because they are less of aware of its impact on them as young adults, but that perception may change as they become homeowners or enter the workforce in certain fields that deal with environmental concerns.

Selected References

Glasmeier, Amy K. Living Wage Calculator. Massachusetts Institute of Technology, April 2015.

- Middle Peninsula Planning District Commission (MPPDC). *Comprehensive Economic Development Strategy*. December 2013.
- Schultz, Jack. *Boomtown USA: The 7 ½ Keys to Big Success in Small Towns*. (Herndon, VA: National Association of INdustrial and Office Properties, 2004).
- Virginia Sea Grant (VASG). *Middle Peninsula-Virginia Sea Grant Partnership Project Summary Report*. June 19, 2015.
- Virginia Employment Commission (VEC). *Virginia Community Profile: Middle Peninsula PDC*. August 22, 2015.

Appendix A. Surveys

SURVEY 1: HIGH SCHOOL STUDENTS

GENERAL INFORMATION

Q1 In which county do you live?

- -- Essex
- -- Gloucester
- -- King and Queen
- -- King William
- -- Mathews
- -- Middlesex

Q2 What is your home zip code? _____

Q3 How long have you lived in the Middle Peninsula?

- --1-4 years
- -- 5 10 years
- -- 11 15 years
- -- 15+ years

EDUCATION AND ACADEMIC INTERESTS

Q4 What is your current level of education?

- -- Freshman (9)
- -- Sophomore (10)
- -- Junior (11)
- -- Senior (12)

Q5 I will graduate from a _____ school.

- -- Public
- -- Private
- -- Homeschool

Q6 Is there a particular academic subject which interests you?

- -- Science, Engineering, Mathematics
- -- Information Technology
- -- Social Sciences (Government, Politics, Law, Economics)
- -- Business Administration (e.g., Finance, Marketing)
- -- Health Sciences
- -- Education / Teaching
- -- Environmental / Agricultural Science
- -- Humanities (History, Philosophy, English / Literary Studies)
- -- Performing Arts, Visual Arts, Music, Fashion, etc.
- -- Other (please specify) _____

- Q7 What sector do you hope to work in for a career?
- -- Education
- -- Health
- -- Maritime
- -- Government Services and Administration (e.g., public library, fire rescue, police force, board representative)
- -- Finance / Real Estate / Insurance
- -- Retail
- -- Tourism
- -- Agriculture / Aquaculture
- -- Science, Technology, Engineering, Mathematics (STEM)
- -- Don't know
- -- Other (please specify) _____

Q8 What is your mother's highest completed level of education?

- -- Less than high school degree
- -- High school degree or equivalent (e.g., GED)
- -- Some college but no degree
- -- Associate degree
- -- Bachelor's degree
- -- Graduate degree
- -- Don't know

Q9 What is your father's highest completed level of education?

- -- Less than high school degree
- -- High school degree or equivalent (e.g., GED)
- -- Some college but no degree
- -- Associate degree
- -- Bachelor's degree
- -- Graduate degree
- -- Don't know

POST-GRADUATION PLANS

Q10 What are your (intended) next steps after high school?

- -- Join the workforce
- -- Community college
- -- 4-year college
- -- Other
- -- Don't Know

Q11 How likely are you to live in the Middle Peninsula after graduation (or within the next 5 years)?

- -- Very Unlikely
- -- Unlikely
- -- Somewhat Unlikely
- -- Somewhat Likely
- -- Likely
- -- Very Likely

Q12 How likely are you to live in the Middle Peninsula in the next 20+ years?

-- Very Unlikely

- -- Unlikely
- -- Somewhat Unlikely
- -- Somewhat Likely
- -- Likely
- -- Very Likely

Q13 How far away fro--the Middle Peninsula do you plan to live in the next 10 years?

- -- 0-15 miles: I plan to stay local.
- -- 25-50 miles: Richmond, Norfolk, Williamsburg, Virginia Beach, etc.
- -- 50-150 miles: Fredericksburg, Washington D.C., Raleigh etc.
- -- 150 miles+: other states, other countries etc.

LIVING PREFERENCES

Q14 In what kind of setting do you want to live?

- -- Rural
- -- Suburban
- -- Urban
- -- Other
- -- Not sure

Q15 What attributes are most important to you for a place to live?

	Very unimportant	Somewhat unimportant	Neutral	Somewhat important	Very important
Close to Family					
Close to Job					
Variety of Food Establishments					
Variety of Entertainment Venues					
Shopping Options					
Easy to get around via walking / biking					
Easy to get around via driving					
Public transportation					
Population of similar age group					
Affordability					

	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Life on the Middle Peninsula is enjoyable				
Recreational outlets are available and sufficient				
There is not enough to do				
I would raise a family here				
The area has good internet access				
The area has good cell reception				
I would live here if it was close to my ideal job				
I would live here if I could work from home				
The Middle Peninsula feels like "home"				

Q16 To what extent do you agree with the following statements:

Q17 To what extent do you believe YOUR PEERS agree with the following statements

	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Life on the Middle Peninsula is enjoyable				
Recreational outlets are available and sufficient				
There is not enough to do				
I would raise a family here				
The area has good internet access				
The area has good cell reception				
I would live here if it was close to my ideal job				
I would live here if I could work from home				
The Middle Peninsula feels like "home"				

SURVEY 2: COMMUNITY COLLEGE STUDENTS

GENERAL INFORMATION

Q1 In which county do you live?

- -- Essex
- -- Gloucester
- -- King and Queen
- -- King William
- -- Mathews
- -- Middlesex

Q2 What is your home zip code?

Q3 How long have you lived in the Middle Peninsula?

- --1-4 years
- -- 5 10 years
- -- 11 15 years
- -- 15+ years

EDUCATION AND ACADEMIC INTERESTS

Q4 Are you a full time student?

--Yes

-- No

- Q5 What year of community college are you in?
- -- First
- -- Second

Q6 I graduated from a _____ school.

- -- Public
- -- Private
- -- Homeschooled

Q7 Is there a particular academic subject which interests you?

- -- Science, Engineering, Mathematics
- -- Information Technology
- -- Social Sciences (Government, Politics, Law, Economics)
- -- Business Administration (e.g., Finance, Marketing)
- -- Health Sciences
- -- Education / Teaching
- -- Environmental / Agricultural Science
- -- Humanities (History, Philosophy, English / Literary Studies)
- -- Performing Arts, Visual Arts, Music, Fashion, etc.
- -- Other (please specify) _____

Q8 What sector do you hope to work in for a career?

- -- Education
- -- Health
- -- Maritime

-- Government Services and Administration (e.g., public library, fire rescue, police force, board representative)

- -- Finance / Real Estate / Insurance
- -- Retail
- -- Tourism
- -- Agriculture / Aquaculture
- -- Science, Technology, Engineering, Mathematics (STEM)
- -- Don't know
- -- Other (please specify) _____

Q9 What is your mother's highest completed level of education?

- -- Less than high school degree
- -- High school degree or equivalent (e.g., GED)
- -- Some college but no degree
- -- Associate degree
- -- Bachelor's degree
- -- Graduate degree
- -- Don't know

Q10 What is your father's highest completed level of education?

- -- Less than high school degree
- -- High school degree or equivalent (e.g., GED)
- -- Some college but no degree
- -- Associate degree
- -- Bachelor's degree
- -- Graduate degree
- -- Don't know

POST-GRADUATION PLANS

Q11 What are your (intended) next steps after graduation?

- -- Join the workforce
- -- 4-year college

-- Other (please specify) _____

Q12 How likely are you to live in the Middle Peninsula after graduation (or within the next 5 years)?

- -- Very Unlikely
- -- Unlikely
- -- Somewhat Unlikely
- -- Somewhat Likely
- -- Likely
- -- Very Likely

Q13 How likely are you to live in the Middle Peninsula in the next 20+ years?

-- Very Unlikely

- -- Unlikely
- -- Somewhat Unlikely
- -- Somewhat Likely
- -- Likely
- -- Very Likely

Q14 How far away fro--the Middle Peninsula do you plan to live in the next 10 years?

- -- 0-15 miles: I plan to stay local.
- -- 25-50 miles: Richmond, Norfolk, Williamsburg, Virginia Beach, etc.
- -- 50-150 miles: Fredericksburg, Washington D.C., Raleigh etc.
- -- 150 miles+: other states, other countries etc.

LIVING PREFERENCES

Q15 In what kind of setting do you want to live?

- -- Rural
- -- Suburban
- -- Urban
- -- Other
- -- Not sure

Q15 What attributes are most important to you for a place to live?

	Very unimportant	Somewhat unimportant	Neutral	Somewhat important	Very important
Close to Family					
Close to Job					
Variety of Food Establishments					
Variety of Entertainment Venues					
Shopping Options					
Easy to get around via walking / biking					
Easy to get around via driving					
Public transportation					
Population of similar age group					
Affordability					

	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Life on the Middle Peninsula is enjoyable				
Recreational outlets are available and sufficient				
There is not enough to do				
I would raise a family here				
The area has good internet access				
The area has good cell reception				
I would live here if it was close to my ideal job				
I would live here if I could work from home				
The Middle Peninsula feels like "home"				

Q16 To what extent do you agree with the following statements:

Q17 To what extent do you believe YOUR PEERS agree with the following statements

	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Life on the Middle Peninsula is enjoyable				
Recreational outlets are available and sufficient				
There is not enough to do				
I would raise a family here				
The area has good internet access				
The area has good cell reception				
I would live here if it was close to my ideal job				
I would live here if I could work from home				
The Middle Peninsula feels like "home"				

SURVEY 3: PRE/POST RETIREE SURVEYS

GENERAL INFORMATION

Q1 In which county do you live?

- -- Essex
- -- Gloucester
- -- King and Queen
- -- King William
- -- Mathews
- -- Middlesex

Q2 What is your home zip code? _____

Q3 How long have you lived in the Middle Peninsula?

- -- < 5 years
- -- 6 10 years
- -- 11 20 years
- -- 21 40 years
- -- 40+ years

Q4 What is your age range?

- -- 17 or younger
- -- 18-20
- --21-29
- -- 30-39
- -- 40-49
- -- 50-59
- -- 60 or older

Q5 How much total combined money did all members of your household earn in 2014? This includes money from jobs; net incomes from business, farm, or rent; pensions; dividends; interest; social security payments; and any other money income received by members of your household that are eighteen (18) years of age or older. Please report the total amount of money earned - do not subtract the amount you paid in taxes or any deductions listed on your tax return.

- -- Less than \$20,000
- -- \$20,000 to \$34,999
- --\$35,000 to \$49,999
- -- \$50,000 to \$74,999
- -- \$75,000 to \$99,999
- -- \$100,000 to \$149,999
- --\$150,000 or more

EDUCATION, WORK, AND BUSINESS

Q6 What is the highest level of school you have completed?

- -- Less than high school degree
- -- High school degree or equivalent (e.g., GED)
- -- Some college but no degree
- -- Associate's degree
- -- Bachelor's degree
- -- Graduate degree

Q7 Given your training and degree, how would you describe your job?

- -- Definitely beneath my level
- -- Somewhat beneath my level
- -- Appropriate for my level
- -- Too advanced for my level

Q8 Which of the following categories best describes your employment status?

- -- Employed, working 1-39 hours per week
- -- Employed, working 40 or more hours per week
- -- Not employed, looking for work
- -- Not employed, not looking for work
- -- Retired
- -- Disabled, not able to work

Q9 What best describes your career field?

- -- Student
- -- Education
- -- Health
- -- Maritime (Industry, Shipping, etc.)
- -- Government Services and Administration (e.g., public library, fire rescue, police force, board representative, etc.)
- -- Real Estate
- -- Insurance
- -- Retail
- -- Tourism
- -- Agriculture/ Aquaculture/ Forestry
- -- Technology/ Engineering
- -- Other (please specify) _____

Q10 How long is your commute to work?

- -- Work fro--home
- -- Less than 20 minutes
- -- 20 60 minutes
- -- Greater than 1 hour
- Q11 Do you own a business?
- --Yes
- -- No

If you answered YES to "Do you own a business," answer questions 12-14. If you answered NO, skip questions 12-14.

Q12 Does your business operate mainly in the Middle Peninsula?

--Yes

-- No

Q13 Is your business your sole source of income?

-- Yes

-- No

Q14 If you supplement your income, does this additional income come fro--employment in the Middle Peninsula?

--Yes

-- No

Q15 In your experience living and working in the Middle Peninsula, to what extent do you think the following are challenges for starting and operating businesses in the Middle Peninsula?

	Not a challenge	Somewhat of a challenge	Significant Challenge
Travel distance to businesses			
Transportation options			
Advertisement for businesses			
Local demand for products			
Internet services			
Water / sewer infrastructure			
Tax/ legal constraints			
Finding investors			
Financing options			
Legal assistance			
Regulations			

Q16 If you think regulations are <u>somewhat of a challenge or a significant</u> challenge, which regulations pose a challenge to starting and operating businesses?

[Free Response]

QUALITY OF LIFE IN THE MIDDLE PENINSULA

	Strong disadvantage	Somewhat a disadvantage	Somewhat an advantage	Strong advantage
Rural nature of the Middle Peninsula				
Proximity to cities				
Access to coast				
Quality of education				
Variety of entertainment				
Shopping options				
Property values				
Cost of living				
Business opportunities				
Job opportunities				
Public transportation options				
Road conditions				
Public utilities				
Privacy				
Sense of community				
Community activities				
Crime rate/ sense of security				

Q17 How would you rate the following in attracting new residents to the Middle Peninsula?

Q18 To what extent do you agree with the following questions about health care?

	Completely disagree	Somewhat disagree	Somewhat agree	Completely agree
My health care fits my current needs				
My health care will likely fit my future needs				

	Completely disagree	Somewhat disagree	Somewhat agree	Completely agree
There are many ways to get involved in my community				
I enjoy participating in community activities				
I get to know others through community activities				
We need more community activities				
We have sufficient activities for people of all ages				
It is easy to find out about community activities				

Q19 To what extent do you agree with the following questions about your community?

Q20 Do you consider yourself active in the community?

--Yes

-- No

Q21 If you answered YES to the above question, please list your main community activities.

[Free Response]

Q22 In your experience, how do the following environmental factors influence your quality of life in the Middle Peninsula?

	No effect	Somewhat of an effect	Large effect
Increased regulations on the Chesapeake Bay Watershed			
Rising sea levels			
Rising water temperatures			
Unstable weather patterns			

PUBLIC SERVICES AND TAXES

Q23 Would you support an increase in taxes to improve the following public services? "Taxes" refers to any type of tax (e.g., real estate, personal property, etc.)

	Yes	No
Municipal water services		
Transportation services to get around the Middle Peninsula		
Transportation services to get to nearby cities (e.g., Richmond, Norfolk)		
Road infrastructure		
Public education		
Public health services		

Q24 Are there other services you would like additional tax dollars to support?

[Free Response]

Q25 To increase tax revenue for local services, which of the following would you support being raised? <u>Select all the apply</u>.

-- Real Estate Tax

-- Personal Property Tax

-- Local Options Sales Tax

-- None

Q26 Do you think the private sector should play a larger role in providing financial support for improving public services?

--Yes

-- No

ENVIRONMENTAL REGULATIONS

Q27 Do you consider groundwater regulations, such as the Chesapeake Bay Act, TMDLs (Total Maximum Daily Load), <u>as factors in deciding where to live?</u>

--Yes

-- No

Q28 Do you consider groundwater regulations, such as the Chesapeake Bay Act, TMDLs (Total Maximum Daily Load), <u>in your future estate planning decisions?</u>

-- Yes

-- No

Q29 Are you concerned about potential increases in flood insurance premiums?

-- Yes

-- No

Q30 Does potential repetitive flooding impact your willingness to remain on the Middle Peninsula? -- Yes

-- No

Q31 Are you concerned about regulatory changes to tidal/non-tidal wetlands and your ability to develop your property in the future?

--Yes

-- No

Q32 Do you expect the state or federal government may pass additional regulations to improve the environmental quality of the Chesapeake Bay?

-- Yes

-- No

Q33 Do you think additional regulations to improve the environmental quality of the Chesapeake Bay will affect your ability to develop or sell your property?

-- Yes

-- No

RETIREMENT PREFERENCES

	Neutral	Not important at all	Somewhat important	Very important
Weather				
Utilities				
Closeness to family				
Health care facilities				
Transportation options				
Cost of living				
Social opportunities				
Crime rate/ sense of security				
Close proximity to neighbors				
East of home upkeep				
Variety of senior living options				
Repetitive flooding				

Q34 Rate the following factors on how important they are when considering where to retire

Q35 To what extent do you agree with the following statement: The Middle Peninsula meets my needs or will meet my retirement needs for the following factors.

	Strongly disagree	Disagree	Agree	Strongly agree
Weather				
Utilities				
Closeness to family				
Health care facilities				
Transportation options				
Cost of living				
Social opportunities				
Crime rate/ sense of security				
Close proximity to neighbors				
Ease of home upkeep				
Variety of senior living options				

Q36 What type of home are you looking for upon retirement?

- -- Small house, not part of a retirement community
- -- Apartment, not part of a retirement community
- -- Small house in a retirement community
- -- Apartment community for retirees
- -- Nursing home
- -- Other (please specify) _____

Q37 Do you plan to retire in the home where you currently live?

--Yes

-- No

Q38 To what extent do you agree with the following questions about retirement options in the Middle Peninsula

	Completely disagree	Somewhat disagree	Somewhat agree	Completely agree
The Middle Peninsula has many retirement community options				
It would be easy to retire in the Middle Peninsula				
Life on the Middle Peninsula as a retiree would be enjoyable				

Recreational outlets are available and sufficient	 	
Recreational activities are easily accessible	 	
There is not enough to do here	 	

Q39 Do you plan on retiring permanently in the Middle Peninsula?

-- Yes

-- Yes, though I would prefer to retire elsewhere

-- No

-- No, though I would prefer to retire here

If you answered NO or NO, THOUGH I WOULD PREFER TO RETIRE HERE to question 39, answer questions 40 – 42.

Q40 If there were more retirement options, would you retire in the Middle Peninsula?

--Yes

-- No

Q41 Where will you most likely retire?

-- Elsewhere in Virginia

-- Out-of-state

-- Don't know

Q42 If you know the city/ state where you plan to retire, please specify here:

[Free Response]

Q43 Where does most of your family live? -- In the Middle Peninsula -- In Virginia -- Out-of-state

Q44 Do you have kids?

--Yes

-- No

Q45 Do you have grandkids? -- Yes -- No

Appendix B: Twin Towns

TOWN, STATE	City Per Capita Income Growth %	State Per Capita Income Growth %	City Population Growth %	State Population Growth %
Apalachicola, FL	32.9	23.2	-4.41	17.60
Belfast, ME	21.2	30.0	4.5	4.20
Berkeley Springs, WV	65.5	28.9	-6.18	2.50
Blairsville, GA	28.8	18.8	-1.06	18.30
Blue Hill, ME	60.1	30.0	12.38	4.20
Brevard, NC	29.8	21.9	12.08	18.50
Brunswick, GA	38.3	18.8	-1.39	18.30
Calhoun, GA	-9.8	18.8	46.71	18.30
Chipley, FL	4.1	23.2	0.36	17.60
Cleveland, TN	40.5	22.3	11.01	11.50
Clewiston, FL	12.6	23.2	10.76	17.60
Collins, MS	51.8	26.0	-3.62	
Cooperstown, NY	36.4		-3.02	4.30
Corning, NY		32.3		2.10
	29.7	32.3	74.03	2.10
Crossville, TN	3.9	22.3	20.2	11.50
Dawsonville, GA	3.2	18.8	309.69	18.30
Douglas, GA	5.3	18.8	8.93	18.30
Dunn, NC	-0.6	21.9	0.73	18.50
Easton, MD	46.4	36.1	36.19	9.00
Eatonton, GA	0.8	18.8	-4.2	18.30
Elizabethtown, NC	-14.4	21.9	-3.11	18.50
Georgetown, SC	18.8	24.7	2.38	15.30
Greeneville, TN	16.7	22.3	-0.89	11.50
Greensboro, AL	22.7	26.4	-8.57	7.50
Hendersonville, NC	17.2	21.9	26.07	18.50
Highlands, NC	92.3	21.9	8.25	18.50
Jefferson, GA	35.8	18.8	146.59	18.30
Kitty Hawk, NC	54.3	21.9	9.39	18.50
Lake Placid, NY	30.7	32.3	-4.44	2.10
Lavonia, GA	22.1	18.8	18.01	18.30
Leonardtown, MD	80.7	36.1	54.54	9.00
Lucedale, MS	21.2	26.0	18.92	4.30
Monticello, GA	6.6	18.9	9.43	18.30
Moore Haven, FL	24.7	23.2	2.75	17.60
Moorefield, WV	-7.0	28.9	7.12	2.50
Ocean City, MD	56.1	36.1	-0.99	9.00
Oxford, MS	31.5	26.0	60.91	4.30
Oxford, NC	22.8	21.9	1.48	18.50
Picayune, MS	16.6	26.0	3.26	4.30
Ridgeland, SC	134.1	24.7	60.29	15.30
Rumford, ME	12.2	30.0	-9.75	4.20
Russellville, AL	11.9	26.4	9.58	7.50
Sopchoppy, FL	41.2	23.2	7.28	17.60
Sylva, NC	0.8	21.9	6.28	18.50
Talladega, AL				
Tazewell, TN	-3.7 -2.9	26.4 22.3	3.52	7.50
Thomaston, GA			2.45	11.50
	-28.7	18.9	-2.56	18.30
Tupelo, MS	11.2	26.0	0.98	4.30
Waterville, ME	18.1	30.0	13.57	4.20
Wellsboro, PA	32.9	29.5	-1.95	3.40
White River Junction, VT	40.0	33.2	-11.02	2.80
Wilkesboro, NC	14.7	21.9	8.04	18.50
Wiscasset, ME	10.5	3.2	3.58	4.20

Middle Peninsula	Municipality Per	State Per Capita	Municipality	State
Town or County	Capita Income	Income Growth	Population	Population
·	Growth %	%	Growth %	Growth %
Essex County	51.91	39.70	11.58	9.70
Gloucester County	60.81	39.70	5.97	9.70
Gloucester Courthouse	30.23	39.70	30.06	9.70
Gloucester Point	18.47	39.70	-2.79	9.70
King and Queen County	41.15	39.70	-0.45	9.70
King William County	10.95	39.70	20.73	9.70
Mathews County	14.40	39.70	-2.29	9.70
Middlesex County	25.68	39.70	9.88	9.70
Saluda	-	39.70	40.33	9.70
Tappahannock	15.40	39.70	14.85	9.70
Urbanna	-7.92	39.70	-12.50	9.70
West Point	7.38	39.70	15.58	9.70