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Putting the "U" in Shore U: Expanding Postsecondary Education on Virginia's Eastern Shore

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Virginia Commonwealth University

Submitted in partial fulfillment of the requirements for: EDLP 798 Capstone Implementation

Presented to:

Dr. Gypsy Denzine, Dr. Brittany Gracik, and Dr. Jeffery Wilson

Spring 2023

Putting the "U" in Shore U: Expanding Postsecondary Education on Virginia's Eastern Shore

A capstone project submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the Department of Educational Leadership at Virginia Commonwealth University

by

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Karen Belanger

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Takeya McLaurin

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Abstract

PUTTING THE "U" IN SHORE U: EXPANDING POSTSECONDARY EDUCATION ON VIRGINIA'S EASTERN SHORE

By Karen Belanger, Katy Jones, Takeya McLaurin, and Katharine Wise

A capstone project submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the Department of Educational Leadership at Virginia Commonwealth University

Virginia Commonwealth University, 2023.

Capstone Chair: Jeffery Wilson, Ph.D., Department of Educational Leadership The University of the Eastern Shore of Virginia Foundation (Shore U) submitted a Request for Assistance to examine opportunities to expand postsecondary education on Virginia's Eastern Shore. In response to this request, a doctoral research team conducted a mixed-methods study that explored potential pathways for a four-year degree option on the Eastern Shore. Eastern Shore Community College (ESCC) students, ESCC employees, and Eastern Shore community members were surveyed during the quantitative phase of the study. Secondary data was used to understand the postsecondary positionality of Eastern Shore high school students. The President of ESCC, Eastern Shore community members, and Virginia Commonwealth University (VCU) administrators were interviewed during the study's qualitative phase. A key finding from the quantitative data collection is that current ESCC students credit proximity to home as the primary reason for their enrollment and 71% of the ESCC students surveyed indicated that they would attend Shore U if it existed. A key finding from the qualitative data collection is that while there is support for expanding postsecondary opportunities on the Shore, that support is not necessarily for a four-year institution. In response to these findings, the doctoral research team created a five-year plan that outlines a path forward for Shore U through community and

political engagement, fundraising, internships, academic partnerships, and the provision of upper-division courses.

Keywords: postsecondary education, lower-division school, upper-division school, social mobility, satellite campus

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Chapter 1: Introduction

The Eastern Shore of Virginia

The scenic 170-mile-long Delmarva Peninsula lies off the eastern coast of the United States in the mid-Atlantic region and is shared by Delaware, Maryland, and Virginia (known as Delmarva). Located on the Delmarva Peninsula is the Eastern Shore of Virginia (also referenced as the Eastern Shore), measuring approximately 80 miles in length from the middle to the southern portion. Accomack and Northampton Counties occupy the southern tip of the peninsula.

According to the United States Census Bureau's 2020 Decennial Census Data, Accomack County's population is 33,413 (U.S. Census Bureau, Accomack County, Virginia, n.d.-a), and Northampton's is 12,282 (U.S. Census Bureau, Northampton County, Virginia, n.d.-c). Between the 2010 and the 2020 census, Accomack County's population grew by 267 (U.S. Census Bureau, Population Estimates, Accomack County, Virginia, n.d.-d), while Northampton's population decreased by 127 (U.S. Census Bureau, Population Estimates, Northampton County, Virginia, n.d.-e). Thus, the Eastern Shore of Virginia has had a population growth rate of 1% over ten years.

Approximately 25% of the Eastern Shore of Virginia citizens are 65 years of age and older. The median household income for Accomack (U.S. Census Bureau, Accomack County, Virginia, n.d.-a) and Northampton (U.S. Census Bureau, Northampton County, Virginia, n.d.-c) counties combined is approximately \$48,499; this is nearly 60% less than the total median household income in the Commonwealth of Virginia (U.S. Census Bureau, Virginia, n.d.-f).

Twenty percent of the Eastern Shore of Virginia population lives in poverty (U.S. Census Bureau, Accomack County, n.d.-a and Northampton County, Virginia, n.d.c), nearly double the poverty rate for the Commonwealth of Virginia (U.S. Census Bureau, Virginia, n.d.-f). Of those living in poverty, one-third are 18 and under (U.S. Census Bureau, Accomack County, n.d.-a and Northampton County, Virginia, n.d.-c). In Accomack County, 14% of the population lives without health care coverage (U.S. Census Bureau, Accomack County, Virginia, n.d.-a), as does 9.9% of Northampton County (U.S. Census Bureau, Northampton County, Virginia n.d.-c) of the population lacking the same coverage.

Living in poverty negatively affects educational attainment in multiple ways. High stress, learned helplessness, poor nutrition, and lack of financial means may impede learning (Johnston, 2022). Additionally, students from lower-income households are more likely to perform poorly academically and drop out of school (ChildFund, n.d.). Finally, fear of accumulating college student debt is a concern for lower and middle-class students, "students from families earning between \$40,000 to \$59,000 per year racked up 60% more debt than lower-income students and 280% more than their peers whose families earned between \$100,000 and \$149,000 per year" (Scholarship America, 2022, para. 8).

An examination of educational achievement on the Eastern Shore reveals that the percentage of people in Northampton County holding a bachelor's degree or higher is 26.1% (U.S. Census Bureau, Northampton County, Virginia n.d.-c). In Accomack County, this number is 19.7% (U.S. Census Bureau, Accomack County, Virginia, n.d.-a). Both are far below the 41.8% of the total population of the Commonwealth of Virginia who hold a bachelor's degree or higher (U.S. Census Bureau, Virginia, n.d.-f). According to the Northampton County Economic Development website, "most jobs available in the community require only a high school education, yet the labor force is better trained," and the "commutation data indicates that Northampton County has a significant out-commute of talent" (County of Northampton,

Economic Development, n.d.) to the Hampton Roads area. Addressing underemployment is a

significant concern linking education, industry, and economic growth.

Figure 1 details the side-by-side comparison of census data for Accomack County,

Northampton County, and the Commonwealth of Virginia.

Figure 1

US Census Date for Virginia and the Eastern Shore

	Accomack County	Northampton County	Commonwealth of Virginia
Population	33,413	12, 282	8,631,393
Median Age	45.8 years	49.8 years	38.8 years
65 Years and Older	23.5%	26.8%	16.3%
Employment Rate	51.3%	48.9%	60.3%
Median Household Income	\$46,178	\$50,819	\$80,963
Poverty Rate	19.8%	16.5%	10.2%
Without Health Care Coverage	14.0%	9.9%	6.8%
Education: Bachelor's Degree or Higher	19.7%	26.1%	41.8%

Note. Source: United States Census Bureau, 2020 Decennial Census (n.d.-b).

The DelMarVa Peninsula

Moving north from the Virginia portion of the DelMarVa peninsula will bring the traveler

to Maryland. Maryland has ten counties, with Somerset and Worcester counties being the closest

to Virginia, both bordering Northampton County. Maryland is home to three institutions of higher education, Wor-Wic Community College (Wicomico County), Salisbury University (Wicomico County), and the University of Maryland Eastern Shore (Somerset County). The University of Maryland Eastern Shore (UMES) is an HBCU, historically Black college or university. Like the Eastern Shore of Virginia, Maryland's primary economic drivers are agriculture, seafood, and tourism (Mcadory, 2020, para. 3).

Figures 2.1 and 2.2 detail the side-by-side comparisons of census data for Maryland overall and its nine counties.

Figure 2.1

Maryland Census Data Part 1

	Maryland Overall	Caroline County	Cecil County	Dorchester County	Kent County	Queen Anne's County
Population	6,177,224	33, 293	103,725	32,531	19,198	49,874
Median Age	39.3 years	39.2 years	41.3 years	44.1 years	47.1 years	44.7 years
65 years and older	16.3%	16.4%	16.7%	21.6%	26.0%	19.2%
Employment Rate	61.9%	61%	56.8%	56.5%	54.1%	63.7%
Median Household Income	\$90,203	\$63, 027	\$75,692	\$55,652	\$64,451	\$99,597
Poverty Rate	10.3%	12.6%	12.6%	15.0%	10.8%	7.2%
Without Health Care Coverage	6.1%	6.7%	5.8%	5.3%	4.0%	4.5%
Education: Bachelor's Degree or Higher	42.5%	19%	26.3%	19.9%	37.5%	37.0%

Note. Source: United States Census Bureau, 2020 Decennial Census (n.d.-g-l).

Figure 2.2

Maryland Census Data Part 2

	MarylandOverall	Somerset County	Talbot County	Wicomico County	Worcester County
Population	6,177,224	24,620	37,526	103,588	52,460
Median Age	39.3 years	37.0 years	51.0 years	35.9 years	50.4 years
65 years and older	16.3%	16.6%	29.1%	16.0%	27.4%
Employment Rate	61.9%	43.3%	54.9%	57.6%	54.8%
Median Household Income	\$90,203	\$48,661	\$79,349	\$63,333	\$71,262
Poverty Rate	10.3%	20.4%	8.1%	13.7%	9.1%
Without Health Care Coverage	6.1%	5.0%	4.3%	6.8%	6.3%
Education: Bachelor's Degree or Higher	42.5%	17.0%	41.0%	29.2%	30.6%

Note. Source: United States Census Bureau, 2020 Decennial Census (n.d.-g, m-p).

Delaware is the northernmost state on the peninsula. Its economic drivers are agriculture, fisheries, manufacturing (pharmaceutical and medicine), tourism, and finance (credit card companies) (Misachi, 2020). Delaware is home to three institutions of higher education, Delaware State University (Kent County), Wilmington University (New Castle County), and Wilmington University, Georgetown Kent County).

Figure 3 details the side-by-side comparisons of census data for Delaware and its three counties.

Figure 3

Delaware Census Data

	1: Delaware	2: Kent County	3: New Castle County *Not entirely on peninsula	4: Sussex County
Population	989,948	181,851	570,719	237,378
Median Age	41.6 years	38.8 years	39.1%	51.8%
65 years and older	20.1%	17.8%	16.6%	29.8%
Employment Rate	56.2%	53.3%	60.5%	48.9%
Median Household Income	\$71,091	\$64,308	\$73,854	\$70,556
Poverty Rate	11.6%	12.3%	11.3%	11.8%
Without Health Care Coverage	5.7%	6.8%	5.0%	6.7%
Education: Bachelor's Degree or Higher	35.6%	27.0%	39.7%	32.6%

Note. Source: United States Census Bureau, 2020 Decennial Census (n.d.-q-t).

Statement of the Problem

In terms of business and industry, the Eastern Shore of Virginia is most commonly associated with agriculture and seafood production, both of which have been negatively impacted over time by competition from other regions of the country, particularly those more accessible to the supply chain. Most associate the Eastern Shore of Virginia with tourism rather than agriculture and seafood production. In fact, in 2001, tourism and second-home development were thought to represent the future of economic development on the Eastern Shore of Virginia (Virginia Places, Eastern Shore, n.d.). According to the Virginia Economic Development Partnership (VEDP), this has been borne out. "The shore is one of Virginia's fastest-growing regions for tourism" (Virginia Economic Development Partnership, Regional Profile, Eastern Shore, n.d.).

However, tourism is not the only growth sector on the Eastern Shore of Virginia. According to the Virginia Economic Development Partnership, the Eastern Shore "is diversifying its economy by growing manufacturing and service sectors, enhancing tourism infrastructure, and supporting the advancement of aerospace and small businesses" (Virginia Economic Development Partnership, Regional Profile, Eastern Shore, n.d.). The VEDP cites the Eastern Shore Community College and workplace development facilities as sources of talent development on the Eastern Shore. Still, one must ask if these educational resources alone can meet the needs of the developing aerospace and small business industries, such as the growing art scene and art galleries, and the community of graphic designers working from the Eastern Shore.

The Delaware section of the Delmarva Peninsula is home to Delaware State University, a Historically Black College or University (HBCU). The Maryland section of the Delmarva Peninsula has the University of Maryland, Eastern Shore, and Salisbury University, with the former institution also being an HBCU. Both Delaware and Maryland have multiple, smaller two- and four-year institutions. Eastern Shore Community College is the only institution in the Virginia area of the peninsula. According to a University Press Release from February 2016, Salisbury University contributed \$480 million of annual economic activity, including \$80 million in taxes. This economic impact was attributed to "operations, construction, student spending locally, visitor spending locally, an educated workforce, outreach and entrepreneurship activities (Rush, 2016)". Salisbury University also estimated that 10% of its graduates would stay in the region after graduation. According to a study of more than 100 million social media profiles and

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resumes conducted by EMSI and the Wall Street Journal between 2008 and 2018, "on average, a student who attends a community college will stay within 300 miles of the college, and 61% live within 50 miles of the college. State university grads generally stay within state lines with an average distance of 330 miles from their alma mater" (EMSI, n.d.).

The University of the Eastern Shore of Virginia Foundation was established in 2018 to devise a path for founding a four-year degree-granting institution, University of the Eastern Shore of Virginia (Shore U). The Foundation asserts that establishing a university on the Eastern Shore of Virginia will benefit the region through economic stimulation, population retention, and growth. If the Salisbury University story is any indicator, they have good reason to anticipate such benefits if they are successful.

Purpose of the Study

The purpose of this study is to outline a comprehensive five-year plan that lays out the steps necessary to create a new, attractive postsecondary education option on the Eastern Shore of Virginia. Our literature review will address how establishing a four-year degree-granting institution on the Eastern Shore of Virginia will benefit the region, specifically the potential socioeconomic impact, including population growth through retention of recent high school and college graduates. The literature review will also investigate the issue from the perspective of likely partner institutions of higher education, examining the pros and cons, or successes and failures, of satellite campuses, centers of excellence, destination institutions, and transfer programs.

The Shore U Foundation has been collaborating with Virginia Commonwealth University (VCU), particularly those associated with the School of Business, the School of the Arts, and the School of Education, to establish a partnership to investigate the feasibility of a new institution

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on the Eastern Shore. The College of Engineering has recently communicated with the Wallops Island Space Community about opportunities for its students. As a result, it may be another natural source of collaboration for Shore U. VCU is a public research university in Richmond, located approximately four hours from the heart of the Eastern Shore. VCU's strategic plan aligns with the mission of Shore U Foundation, "student success, national prominence, collective urban and regional transformation, and diversity driving excellence" (Virginia Commonwealth University, Quest 2028: One VCU: Together We Transform, n.d.-d).

This study, using a mixed-methods research approach, seeks to answer the following: (1) how will a Shore U fulfill the educational pursuits of Eastern Shore residents, (2) what postsecondary programs will be attractive to college students from the Eastern Shore, and (3) what ways can business and industry contribute to promote the Eastern Shore and support of Shore U. Our qualitative research plan includes focus groups, interviews, and surveys to develop our understanding of the educational interests and motivations of Eastern Shore high school students. We will also seek to understand the educational interests and motivations of Eastern Shore Community College students and other college or university students doing internships and living in the area. Our qualitative research explores the benefits to colleges and universities that may partner with the Foundation to move this plan forward, explicitly considering the potential benefits for VCU. Our quantitative research includes interviews and secondary data sources to understand the demographics and economic profile of the Eastern Shore of Virginia (versus similarly rural or economically disadvantaged areas). We also sought to determine academic programs and majors that are most likely to succeed at the Shore U. Specifically, the research questions that we aimed to answer were:

 A. How can expanded postsecondary education offerings stimulate economic development on the Eastern Shore?

B. What potential economic impact could Shore U have on the Eastern Shore of Virginia?

- 2. How can a proposed partnership with the local community college and a four-year institution keep Eastern Shore residents from leaving the area for higher education?
- 3. What academic programs would be a good fit for an academic partnership on the Eastern Shore?

Organization of the Study

This study is organized into five chapters. This chapter, Chapter 1, states the problem and contextualizes the purpose of the study by offering an introduction to the Eastern Shore of Virginia. Chapter 2 reflects a synthesized literature review to include research on the current system of higher education in Virginia, the educational and economic challenges of rural and low socioeconomic regions, and the idea of higher education as an economic stimulator for its peripheral region. Chapter 3 highlights the methods used for data collection and a discussion of the study's framework. Chapter 4 reflects a discussion and analysis of the data collected, a summary of the research findings, as well as a discussion of the study's limitations. The final chapter, Chapter 5, includes recommendations for a path forward for the University of the Eastern Shore of Virginia, suggestions for future research, and concluding thoughts.

Definition of Terms

The following definitions for key terms are used in this study:

• **Destination Campus:** Destination campus describes a college or university that is highly sought after by students and faculty due to the beauty of its campus and facilities (Rose,

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2018) as well as for its cultural, academic, and research distinction (University of New Mexico, n.d.).

- Eastern Shore: The "Eastern Shore" is the eastern side of the Chesapeake Bay and it includes parts of Maryland and Virginia (Eastern Shore Visitor, n.d.). When referenced as part of this study, "Eastern Shore" refers specifically to the Eastern Shore of Virginia.
- **Higher Education Center:** A higher education center is an educational institution that provides physical infrastructure for partnerships with public and private colleges and universities to provide degree programs, certificates, and professional development courses (Kim, 2019).
- Institutional Review Board (IRB): "An appropriately constituted group that has been formally designated to review and monitor biomedical research involving human subjects. In accordance with FDA regulations, an IRB has the authority to approve, require modifications in (to secure approval), or disapprove research. This group review serves an important role in the protection of the rights and welfare of human research subjects" (US Food and Drug Administration, 1998).
- **Poverty:** Poverty is a state where one lacks access to basic needs such as food, clothing, and shelter. It also describes living conditions that prevent being able to acquire education, seek medical help, secure a stable job, and participate in recreational activities due to a lack of money (World Vision, 2022).
- Satellite Campus: A satellite campus (also referred to as a branch campus) is a campus of a college or university that is geographically separated and independent from the main campus (Burke, 2017).

- State Council of Higher Education for Virginia (SCHEV): Established in 1956 by the Governor and General Assembly in Virginia to "promote the development and operation of an educationally and economically sound, vigorous, progressive, and coordinated system of higher education in the Commonwealth" (SCHEV, n.d.).
- **STEM:** This abbreviation refers to science, technology, engineering, and mathematics.
- Upper-Division School: An upper-division school is one that requires its students to have already completed their first two years of undergraduate study at another institution (Altman, 1969).

Chapter 2: Literature Review

To better understand how to expand postsecondary education on Virginia's Eastern Shore, the capstone team conducted a scholarly review of the literature. Chapter Two reflects the literature and research on the current system of higher education in Virginia. It identifies the educational and economic challenges of rural and low socioeconomic regions, as well as the idea of higher education as an economic stimulator for its peripheral region. To better understand the potential pathways for the establishment of Shore U, our literature review also explores the modalities that currently exist for administering higher education and examines the academic considerations. These include undergraduate transfer students, transfer pathways, transfer student support, and exemplar degree curriculum and transfer maps.

Higher Education in Virginia

To date, there are approximately 15 public colleges and universities in the Commonwealth of Virginia. The oldest institution of higher education in Virginia is the College of William and Mary, though not originally a public college. Also distinguished as the second-oldest institution of higher education in the United States (William & Mary, n.d.), William and Mary has contributed to the establishment of two public universities in the Commonwealth — Christopher Newport University (CNU) and Old Dominion University (ODU). CNU was initially a two-year, branch-campus of William and Mary (Christopher Newport University, n.d.). ODU was established through a partnership between William and Mary and Virginia Polytechnic Institute (more commonly known as Virginia Tech) (Old Dominion University, n.d.). Founding father and former President of the United States, Thomas Jefferson, who studied at William and Mary, founded the University of Virginia (UVA), which happens to be the first public university in the Commonwealth (University of Virginia, n.d.). UVA has yielded two other public institutions, George Mason University (George Mason University, n.d.) and the University of Virginia at Wise (UVA-Wise) (UVAWise, n.d.).

The Commonwealth of Virginia has two land grant universities — Virginia State University and Virginia Tech. Land grant universities were established by the Morrill Act of 1862 and 1890, respectively, "to teach agriculture, military tactics, and the mechanic arts, as well as classical studies so members of the working classes could obtain a liberal, practical education" (Association of Public & Land Grant Universities, n.d.). VA Tech was part of the original 1862 land grant institutions, and Virginia State was established in the 1890 passage of an amended Morrill Act that called for the creation of HBCU land grants in the south. Virginia Tech and Radford University, both located in Virginia's Blue Ridge Mountains, merged during World War II for financial reasons (Radford University, n.d.). However, the Radford University – Virginia Tech Collaborative Partnership for Master of Engineering students (Virginia Tech, n.d.) continues to connect the schools.

Virginia Commonwealth University (VCU) resulted from the merger between the Medical College of Virginia (MCV), formerly the Medical College of Hampden-Sydney (an all-male university in Hampden-Sydney, Virginia), and the Richmond Professional Institute (Virginia Commonwealth University, n.d.-c). There are also two public historically black colleges or universities (HBCUs) in the Commonwealth —Virginia State University (VSU) and Norfolk State University. In 1944, the Virginia Legislature merged Norfolk State College (now NSU) with Virginia State College (now VSU). Norfolk State University achieved its independence from VSU in 1969 (Virginia State University, n.d., Norfolk State University, n.d.). There are two institutions in the Commonwealth of Virginia that do not tie their founding to other colleges or universities, Longwood University (Longwood University, n.d.) and the Virginia Military Institute (VMI) (Virginia Military Institute, History, n.d.a). VMI was the first state-supported all-male military college in the United States (Virginia Military Institute, Quick Facts, n.d.b). VMI began admitting women in 1997.

According to the Community College Baccalaureate Association (CCBA), there are 24 U.S. states where community colleges are awarding bachelor's degrees (CCBA, n.d.). The Commonwealth of Virginia is not among those states; thus the above represents the complete list of public, four-year degree institutions in the Commonwealth.

Education in Rural and Low Socioeconomic Regions

According to the National Center for Education Statistics ([NCES], 2016), college attendance and completion rates in the United States have increased. In the early 1990s, 45% of high school graduates enrolled in a two- or four-year college; by the early 2000s, this figure had increased to 48% (Wells et al., 2019). Between the 2002–03 and 2012-13 academic years, the total number of postsecondary credentials conferred also increased at all degree levels (Wells et al., 2019). While college attendance and degree completion have increased overall, the gap between postsecondary attendance and completion among students from rural communities and their urban counterparts continues to persist. College enrollment and degree completion rates are much lower among rural high school students; 41% of urban adults have a college degree as compared to only 28% of rural adults (Ratledge et al., 2020). This disparity exists even though students are just as likely to attain a high school diploma whether they live in a rural or an urban environment (Ratledge et al., 2020).

The reasons for the educational disparities between rural and urban students are well-documented: rural communities are laden with unique challenges that make access to education difficult (Drescher et al., 2022; Ratledge et al., 2020; Wells et al., 2019). Many rural

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areas lack public transportation, and often there are long distances between campuses and social service providers (Ratledge et al., 2020). The lack of adequate internet infrastructure is also a significant challenge, with only 63% of rural adults reporting that they have access to the Internet at home, compared with 75% of urban adults (Ratledge et al., 2020). Geography also significantly influences rural students' postsecondary options and opportunities. From an educational policy standpoint, the needs of rural schools are often overlooked because rural students are geographically dispersed, making it difficult to target and effectively change their learning circumstances (Johnson et al., 2021). The literature also tells us that most students choose to study close to home (Johnson, 2019). For example, at public four-year colleges, the median distance students live from home is 18 miles; this increases to 46 miles for private, nonprofit four-year colleges and eight miles for public two-year colleges (Wexler, 2016). Where rural colleges are available, attracting specialized faculty and staff is a challenge, and rural colleges often do not enroll enough students to fill courses or programs every semester (Johnson et al., 2021; Ratledge et al., 2020; Wells et al., 2019).

Disparities in the educational pathways of rural and nonrural students can also be attributed to the fact that rural families tend to be less supportive of postsecondary education (Ratledge et al., 2020). A study conducted by Byun et al. (2012) examining rural-nonrural differences in family background, community social resources, and academic preparation in high school showed that the percentage of parents having a bachelor's degree was 20% among rural students, 34% among suburban students and 36% among urban students. The proportion of parents expecting their child to have a bachelor's degree or higher was also significantly lower among rural (70%) than suburban (80%) and urban (84%) samples (Byun et al., 2012). Results of the study (Byun et al., 2012) also confirmed that rural students lagged behind nonrural students in attaining a bachelor's degree due to their lower socioeconomic background. Rural parents have little time, money, or energy to devote to developing their student's human capital or earnings potential (Weemaes, 2021). Rural parents are less likely to encourage higher education out of fear that their children will ultimately leave to seek better-paying careers elsewhere, an additional challenge to attaining postsecondary education for rural students (Ratledge et al., 2020).

Higher Education as a Means of Increasing Social Mobility

A report by the National Center for Education Statistics (2022) on the status of education in the United States purports that individuals with a college degree continue to enjoy greater annual earnings than those with lesser levels of education. According to the report, the median earnings of people with an associate degree were 20% higher than the median earnings of those with a high school education, and the annual earnings for those with a bachelor's degree were 63% higher than those with a high school education (NCES, 2022). The annual earnings for those with a master's or higher degree were 17% higher than the earnings of those whose highest level of education was a bachelor's degree (NCES, 2022). While there is still some debate about the economic value of postsecondary education, this data confirms the influence a college degree has on one's economic success. It also confirms that higher education remains a proven pathway to increasing one's social mobility. Social mobility is experienced when one's economic status changes in a way that affects their social class. Mobility shifts upward or increases when one moves from a lower to a higher socioeconomic status (Connerly et al., 2021). Although access to higher education theoretically enables social mobility, the research tells us that "higher education participation rates are generally much higher for children of professional and upper-income families compared with those of working class and lower income homes" (Ilie et al., 2021, p.

1237). Since students from rural areas tend to be from families with a lower socioeconomic status, postsecondary attendance and completion have profound consequences for their social mobility and communities.

Higher Education Institutions as Economic Stimulators

It is commonly accepted that those who attain a college degree generally earn more than those who do not. However, little attention is paid to the fact that the college earnings advantage also translates to greater economic activity at the regional and national levels (Holtz-Eakin & Leas, 2019; Rothwell, 2015). While the empirical relationship between economic growth and a highly educated population has been relatively unclear, a report on what colleges do for local economies (Rothwell, 2015) provides evidence of at least one direct channel through which education boosts the level of economic activity in an area: consumption. According to the report (Rothwell, 2015), highly educated households spend much more on the local economy than their less educated peers. Through direct spending throughout his or her lifetime, the average bachelor's degree holder contributes \$278,000 more to local economies than the average high school graduate; an associate degree holder contributes \$81,000 more than a high school graduate. Tax expenditures to state and local governments (primarily based on property, sales, and income taxes) also rise sharply as household education increases (Rothwell, 2015). Similarly, a study conducted by Holtz-Eakin and Lee (2019) on the economic benefits of educational attainment found that for every one percentage point increase in the portion of a state's population with at least a bachelor's degree, the state's real GDP growth rate increases by about 0.08 percentage points. The report also reveals that "if every state had increased its bachelor's degree-attainment growth rate by just one percentage point over the last decade, then

nationwide economic growth would have increased by about \$130.5 billion" (Holtz-Eakin & Lee, 2019, para. 4).

Furthermore, because of the increasing demand for workforce skills higher than those attained with a diploma, disparities in access to higher education between rural and nonrural students also translate to disparities in the distribution of jobs and opportunities. Employers in urban areas offer higher wages (Marré, 2017). According to the Economic Innovation Group (2018), of the 6.8 million net new jobs created between 2000 and 2015, 6.5 million were created in the top 20% of zip codes, which were predominantly urban. The Economic Innovation Group (2018) further found that 43% of residents in the top 10% of zip codes have a bachelor's degree or better, compared to just 11% in the bottom 10%. Consequently, the heavy concentration of highly educated workers in non-rural areas versus rural areas indicates an imbalance in economic opportunities. Greater opportunities for convenient, affordable higher education is needed in rural areas; this would allow more rural students to attain college degrees, thus qualifying them for higher-skilled, better-paying jobs. Institutions of higher education are also uniquely positioned to serve as engines of economic development for rural communities by working with businesses to turn out the skilled talent they need and providing research or other support.

Pathways for Shore U

Students are bound to their geographical region by choice or circumstance. Often, location-bound students with the ability and desire to earn their bachelor's degree cannot do so because there is no baccalaureate degree-granting institution nearby. While some community colleges have opted to offer baccalaureate degrees to interested students, this is not a current option for students who attend community colleges on or near the Eastern Shore of Virginia (McKinney et al., 2012). The proposed University of the Eastern Shore of Virginia would

provide for residents of the Eastern Shore (and its surrounding areas) as well as students currently enrolled in the Eastern Shore Community College, other national community colleges, and perhaps even students currently enrolled at four-year institutions, the opportunity to complete their four-year degree. While it is unrealistic to establish a new college, community college, or university in every rural area that needs one, there are a variety of models that offer creative, practical, and cost-effective alternatives for delivering higher education (Kim, 2019). The Commonwealth of Virginia has a rich history of educational pioneering, excellence, and partnerships. In addition to its traditional two and four-year colleges and universities, Virginia offers a variety of options for accessing higher education. Such options include higher education centers and satellite campuses. Shore U, as a destination campus, is another potential pathway for expanding postsecondary education on Virginia's Eastern Shore.

Higher Education Centers

Higher education centers throughout Virginia provide physical infrastructure for colleges and community colleges by offering classes and occupational training (Kim, 2019). In South Boston, Virginia, the Southern Virginia Higher Education Center has worked with more than 30 area industries and entrepreneurs to develop customized training for nearly 150 workers in local companies and to place 173 students into new jobs (Kim, 2019). Virginia is not the only state offering creative solutions to higher education. For example, the Northern Pennsylvania Regional College "operates six different 'hubs' scattered throughout the 7,000 square miles it serves plus numerous 'classrooms' using borrowed space from local high schools, public libraries, and other community buildings" (Kim, 2019, p. 4). The Southern Maryland Higher Education Center also offers specific courses from ten different institutions, including Johns Hopkins and the University of Maryland. Centers such as these expand the ability of workers to obtain high-quality occupational credentials that are more practical, affordable, and desirable than pursuing a two-year or four-year degree.

The New College Institute. Higher education centers provide a viable option as we explore ways to expand postsecondary education on Virginia's Eastern Shore. Specifically, the New College Institute (NCI) is a center of higher education in southern Virginia, setting a precedent for establishing Shore U on the Eastern Shore. Funded by the Commonwealth of Virginia, NCI provides access to bachelor's degree completion programs, master's degrees, teacher endorsement programs, teacher recertification courses, and more through partnerships with colleges and universities (State Council for Higher Education for Virginia, n.d.-a, n.d.-b). The New College Institute was formed in response to the loss of thousands of manufacturing jobs in southern Virginia in the 1990s. The subsequent financial impact on the area and historical geographic barriers (the closest public four-year universities are more than two hours' driving distance for most area residents) resulted in limited postsecondary education options in southern Virginia. In the early 2000s, local civic and political leaders identified the need for improved access to higher education and began to advocate for establishing a college in southern Virginia (NCI, n.d.). Located in Martinsville, NCI was designated an educational institution of the Commonwealth of Virginia in 2006. NCI's campus now includes three facilities within a one-block radius: the Baldwin Building, Fayette Lab, and King Hall. The New College Institute also provides community outreach services such as advising, assistance in completing admission/financial aid forms, and information for young people about college enrollment and the importance of higher education (NCI, n.d.).

A study by Edward Bowman (2009) posited that southern Virginia was the perfect location for founding NCI. Defining characteristics for the region, such as declining population,

lack of educational attainment, lower wages, and a higher unemployment rate as compared to other areas in Virginia, are consistent with the research (Drescher et al., 2022; Ratledge et al., 2019; Wells et al., 2019), that posits that accessible postsecondary education is the solution to revitalizing marginalized communities. While Bowman's study (2009, p. 217) suggested that "a supply of skilled labor would not necessarily lead to an increase in business activity and that southern Virginia communities do not have an occupational structure in place commensurate with placement of high skilled professions," the study affirmed the positive impact NCI has made on southern Virginia. According to Bowman (2009), NCI addresses the lack of educational attainment in the region by "creating an organizational path to postsecondary educational access and opportunities locally and to overcoming intergenerational neglect for higher education" (p. 217). The institute takes on depressed employment wages, not only through the creation of graduates, but in a "new labor consciousness and corresponding opportunity structure" (Bowman, 2009, p. 218). Furthermore, Bowman (2009) asserted that the "most thematic re-construction is found in a comparison of southern Virginia students planning to attend a four year college and the role NCI plays in replacing what was once hopelessness in the community with revitalization and rebirth" (p. 218). As the Southern Virginia region shares similar characteristics to Virginia's Eastern Shore (based on the characteristics described above), NCI is an admirable model for how to expand postsecondary education on the Eastern Shore of Virginia.

Satellite Campuses

An option for Shore U is to start as a satellite campus. Rossi and Goglio (2018) stated that satellite campuses "constitute a form of mainly geographical diversification, whereby existing universities decentralize part of their activities, very often to areas previously lacking a university" (p. 34). In other words, satellite campuses are usually established in locations that

lack other options for higher education, namely in geographically rural areas, such as in the case of UVA-Wise. In these instances, the parent university is typically located in an urban area. Satellite campuses are given a variety of different governance structures that range from little autonomy (the parent institution holds the sole decision-making power) to virtually autonomous (operating mostly independently from its host university) (Fraser & Stott, 2015). Commonly cited reasons that these university branch locations are created include accommodating increased student enrollment and a community's desire for campuses closer to home (Epps et al., 2015).

There are many benefits of establishing a satellite campus, such as widening access to higher education for residents who would not attend university due to an absence of options in the locality and the ability to stimulate and support the economic development of the campus site's peripheral region through research, business, tourism, and community engagement (Rossi & Goglio, 2020). There are, however, also considerations that universities should take into account before establishing a satellite campus and determining what programs to offer at the site. Epps et al. (2015) suggest that universities consider how to support student needs, allocate faculty resources, satisfy accreditation concerns, and meet student demand. To do so, parent institutions should conduct a needs assessment to determine which programs and curricula would be best suited for the existing and budding industries of the peripheral region. Additionally, the amount of financial and personnel resources to effectively run the satellite campus and individual programs should be regarded as major factors. Finally, parent institutions should think about the geographical and political impacts of establishing a satellite campus and selecting its site within the region (Epps et al., 2015).

Rehfuss et al. (2015) found that convenience (in regards to minimizing travel while maximizing flexibility), the prevalence of face-to-face interactions, and learning modality

preference are what students consider most when selecting whether to attend a parent institution, a satellite campus, or a virtual collegiate option. In areas with a similar geographical profile to the Eastern Shore region of Virginia, a satellite university campus could provide more convenience for students living in the rural area, especially since there is no higher education option outside of the region's community college within an hour of the peripheral area. Additionally, satellite campuses offer the ability to hold in-person classes for students who prefer face-to-face interaction and a classroom environment for their learning modality.

Starting as a satellite campus to a parent institution is an option for the Foundation to consider. As aforementioned, the Eastern Shore of Virginia is presently challenged with one of the commonly cited reasons for establishing a satellite, which is the community's desire for campuses closer to home. Additionally, if housed under another large institution, especially one that takes on or shares decision-making responsibilities, Shore U would have presently intact governance, systems, and structures from which to operate. With those essential functions already configured, the main objectives would then be to create business models and educational programs that embrace and attract local talent and the industries of the region, and that puts the proper personnel in place to be sound representatives of Shore U's mission and vision.

UVA-Wise. The University of Virginia's College at Wise (UVA-Wise) is a four-year public liberal arts college in the rural southwest city of Wise in Virginia. The institution was founded in 1954 and was originally named Clinch Valley College of the University of Virginia (Wills, 2004.). Similar to NCI, UVA-Wise was created to fulfill a need for postsecondary education opportunities in a region with a continually declining population and devoid of such educational options. Prior to the establishment of UVA-Wise, there was no college in Virginia west of Radford University- located roughly 140 miles northeast of Wise, Virginia. The project

to create UVA-Wise began when a group of local citizens within Virginia's western and southwestern regions petitioned UVA, a large four-year public research university located in Charlottesville, Virginia, to open a college in Wise. After support for a college in the southwest region of Virginia grew and gained the attention of the state government, Virginia's General Assembly appropriated \$5,000 for the institution's founding (Wise, n.d.). UVA Wise originally opened as a two-year junior college with 109 full-time students and two buildings on farmland to house classes and the college's operations. In 1966, UVA-Wise took on its present form as a four-year college, and in 1999, it was renamed the University of Virginia's College at Wise (Wills, 2004).

The University of Virginia's College at Wise is an example of how successful a branch, satellite, or division-specific institution can be with the support of a proposed institution's local residents, a host university, and the state government's backing. The institution now operates as a division of the University of Virginia and offers 31 majors, 31 minors, and 23 teaching specialties. There are over 2,100 undergraduate students studying at UVA-Wise with the intent of earning a baccalaureate degree, primarily in the fields of either science or liberal arts (UVA-Wise, n.d.). As the college campus and its peripheral region are situated in the Appalachian Mountains, an area known for its scenic views and abundance of natural resources, the college strives to use the beauty of the local area as a selling point to attract students and build partnerships and programs with the current and emerging industries of the region (UVA, n.d.). The Eastern Shore of Virginia is also defined by its natural beauty, and the main industries of the region work to showcase and preserve the natural resources within the area. With the growth of UVA-Wise since its inception and with its current goal to engage the students to learn,

work, and achieve within the local community, Shore U has a strong model of a successful small rural division of a large public university.

Destination Campuses

The University of the Eastern Shore has various options to structure and classify its institution. One such option is to become a Destination Campus. However, what exactly is a destination campus, and how could exemplar institutions inform the creation of Shore U? One definition of a destination institution includes the desirability of the physical campus location. According to an article in *Travel and Leisure* magazine, two Virginia institutions made the list of the top 25 most beautiful campuses in the United States, with UVA taking the 14th spot and the College of William and Mary claiming the 20th spot (America's Most Beautiful College Campuses, 2021).

In an article titled "Creating Destination Campuses Requires Destination Communities" in the *Victoria Advocate*, Glenn (2019) asserted that a university and the community in which it resides are interconnected and cannot be considered independently. This belief stems from the understanding that students will spend three to four years or more at a college or university, which means that students must be excited to spend multiple years of their lives at the institution. Therefore the city must also be an exciting place to live (Glenn, 2019). Similar to what is currently happening on the Eastern Shore of Virginia, the business owners in Victoria, Texas, expressed frustration about recruiting and retaining young talent. The struggle seemed not to be in recruiting young professionals but in getting them to stay. The newest chancellor of the University of Houston-Victoria (UHV) recognizes that transforming UHV into a destination campus will also require significant collaboration with the city of Victoria, Texas, and its citizens (Glenn, 2019).

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A Destination Campus, as defined by the University of New Mexico (UNM), can also describe an institution highly sought after for its prestige, student engagement opportunities, unique academic programs, and undergraduate and graduate research opportunities (University of New Mexico, n.d.). In the strategic plan for the UNM, *Goal 1* is to become a destination institution. In order to meet that goal, the school has designed smaller goals, including evolving programs and curriculum that will entice students, optimizing staff and faculty work environments to promote success, and implementing a capital revenue plan to modernize and revitalize. The strategic plan goes further to address international student recruitment, developing relationships with branch campuses, military-affiliated student support, increasing access to professional development for staff and faculty, and creating and managing capital projects (University of New Mexico, n.d.).

Lastly, the University of Wisconsin-Milwaukee (UWM) aims to turn its campus into a destination campus by expanding its focus on experiential learning (E.L.). They assert that students who engage in experiential learning are more satisfied with their workplace engagement and that experiential learning is a highly sought-after skill in potential employees. According to UWM, "UWM should become a premier destination campus for experiential learning, meaning all students, faculty, staff, and administrators will view E.L. as essential to the UWM experience. Further, parents, industry leaders, and legislators should associate experiential learning with the UWM experience and as part of the identity of our graduates (University of Wisconsin-Milwaukee, n.d.)." The school plans to offer opportunities such as undergraduate research, study away/abroad, leadership development, internships, creative and entrepreneurial experiences, service-learning, professional development, and technical and vocational training (University of Wisconsin-Milwaukee, n.d.). Furthermore, like the mission of the Foundation of

Shore U and UHV, UWM hopes to retain its graduates within the Milwaukee area to serve and thrive in their community ultimately. The UWM leadership feels that the university is a significant talent pipeline to the community and will be a vital source of civic leadership (Quirk, 2022).

Elon University. Over the last 30 years, Elon University, formerly Elon College, has repositioned itself from a small, struggling college to a university of increasingly national prominence. Elon College was founded in 1889 and is scarcely recognized outside of central North Carolina. Initially, the campus boasted very few buildings and its students mostly came from working-class religious families in nearby small towns. The college's academic program was solid but without distinction, and many of its students' required remediation before they could be successful at college-level work (Keller, 2004). Today, however, Elon University attracts affluent students of high academic standards from across the nation. The university's focus on experiential learning, student success, and innovation has earned them U.S. News & World Report's number-one ranking for undergraduate teaching in the nation for the past three years (Covington, 2021). Furthermore, Elon was the only college or university to be ranked in the top 20 of all academic program categories correlated with student success and positive learning outcomes. Part of this success stream forms Elon's 12:1 students-to-faculty ratio, making it the only college in the top 50 schools with class averages under 50 students (Elon University News Bureau, 2022).

In the 1990s, as part of a comprehensive plan to reinvigorate and grow Elon University, the college set one of its goals of recruiting 100 new students from wealthy and affluent backgrounds each academic year. To achieve this goal, the university focused on four main objectives: improving the physical aspects of the campus, creating a strategic marketing plan,

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equipping college admissions staff with the necessary skills and information for recruitment, and improving Academic and Campus Life programming. The university has more than doubled its enrollment over the last 30 years and has added twenty-seven new buildings since 1980. Within the last year, Elon has opened Founders and Innovation Halls, part of the Innovation Quad, which serves as a collaborative hub for STEM programs (Elon University News Bureau, 2022). They also built the state-of-the-art Belk Library and athletic facilities.

In addition to adding physical buildings, Elon created an extensive out-of-state and international student recruitment plan, increased the number of admissions staffs to numbers well above their peer institutions, invested heavily in new admissions technology, added graduate and professional degrees to its academic programs, and increased the number of athletic programs (Keller, 2004). Elon's dramatic transformation from a small, rural, associate degree-granting institution into the nation's top university for undergraduate teaching is a testament to its leadership, administration, staff, faculty, and students. Elon's commitment to excellence inside and outside the classroom will continue to promote Elon as a destination institution for new students.

High Point University. Situated in the idyllic town of High Point, North Carolina, High Point College began as a cooperative venture between the city of High Point and the Methodist Protestant Church, now part of the United Methodist Church. Renamed High Point University, the institution boasts more than 122 buildings, 300 full-time faculty members, and 4,600 students (High Point University, 2019). Currently, the university offers a variety of bachelor's degree programs, graduate degree programs, and two doctorate programs. Perhaps what High Point is most known for is its transformation into a premier institution under the leadership of millionaire entrepreneur Nido Quebein, now President of High Point University. In 2007, the university

announced that it would begin an ambitious campaign to double its investment in academic programs, new facilities, student life opportunities, and scholarships by doubling its investment of \$110 million to \$225 million within three years (High Point University, 2019). According to High Point University's Website (2019), since 2007, 90 new buildings have been added to the campus, and the campus has acquired more than 300 acres of land. Some authors have described High Point as the college that Walt Disney would have designed had he expanded into higher education. At the same time, some students refer to the university as a country club (The Huffington Post, 2014). Presently, High Point University's campus boasts a steakhouse, multiple pools, an ice-cream truck, a movie theater, superior food service, national chain restaurants, an arcade, a putting green, and a sports bar, all on-campus (The Huffington Post, 2014). Whether it is the academic opportunities, extracurricular activities, campus amenities, or a mixture of all three, High Point University stands out as a destination for students seeking a premier college experience.

Florida Institute of Technology. The Florida Institute of Technology (FIT) is a private college in Melbourne, Florida. It was founded in 1958 as the Brevard Engineering Institute by nuclear physicist Jerome P. Keuper. The school envisioned and brought to fruition by Keuper and three friends, held night classes in a junior high school to educate the "misslemen" from Cape Canaveral and the NASA Kennedy Space Center so that they may progress professionally without having to leave the area (Patterson, 1998). By 1966, when the name changed to Florida Institute of Technology, the school had undergone tremendous change and growth, including establishing a campus in Melbourne.

Though a private institution, FIT's path from inception to a tier-one-ranked institution may be instructive in developing the five-year plan for the Shore U Foundation. FIT's tagline is "Florida's STEM University." As previously noted, FIT was founded to fill a need, including retaining and developing talent for the nearby NASA facilities and programs. There are four academic colleges, Engineering and Science, Aeronautics, Psychology and Liberal Arts, and Business. Within the Liberal Arts, students can focus on the life sciences and sustainability studies. The Eastern Shore of Virginia, situated in the Chesapeake Bay and with its surrounding barrier islands, and having the Wallops Island Space Community offers some parallels to the needs filled by FIT. These parallels may inform Shore U as it develops its degree and program offerings. In addition to creating academic programs that cater to the region's needs, FIT also has an extensive network of internship opportunities for students. These experiences outside of the classroom no doubt support the 92% of graduates who have jobs or are in graduate school within six months after graduation. Thirty-nine percent of FIT's graduates remain in Florida (Florida Tech, n.d.). Shore U hopes for similar success for its students and similar retention for the Eastern Shore of Virginia.

University of West Florida. Located in Pensacola, Florida, on the idyllic Gulf of Mexico, the University of West Florida (UWF) offers more than 110 undergraduate, graduate, and professional degree programs (University of West Florida, n.d.-a). Comparatively, UWF is not as experienced as other colleges and universities in the state of Florida, having opened its doors to students in 1967. The University of West Florida was born out of a need, as a subsequent feasibility study, for a four-year degree-granting institution in Northwest Florida. It began as an upper-division college, a term for institutions requiring incoming students to have already completed their first two years of undergraduate education before enrolling. Shortly after opening, UWF established its first graduate programs in English, Education, and History. To promote student involvement and improve campus life, UWF allowed its first Greek-letter

organization onto campus, followed by its first Interfraternity Council organization and its first National Panhellenic Association organization in 1972-1974. In 1983, UWF established lower division schools and opened its doors to the inaugural freshman class. In 1994, UWF joined the NCAA (National Collegiate Athletic Association). In the 2000s and 2020s, it achieved numerous NCAA Division II championships in golf, tennis, soccer, football, and baseball (University of West Florida, n.d.-c).

Beyond UWF's impressive start-up and athletic success lies the key to the college's success: adaptability and responsiveness to the community, state, and national needs. In the short 65 years since the college's opening, the university has restructured its academic programs more than five times, including the addition of lower division classes, STEM majors, healthcare degrees and certificate programs, and a widening array of online programs (University of West Florida, n.d.-c). The University of West Florida's location on the Gulf of Mexico makes it a premier destination for students wishing to study biology, environmental science, marine biology, and maritime studies. The school also offers degrees that prepare graduates for jobs in other Florida industries and beyond through programs such as Supply Chain Logistics Management, Intelligent Systems and Robotics, Geographic Information Science Administration, and Earth and Space Science Teaching (University of West Florida, n.d.-d). The school is also known for developing workforce improvement specialists and educators through its fully online master's and doctoral programs in Human Performance Technology, distance education, technology leadership, and instructional design and technology (Huh & Kang, 2016). The school also offers minors and certificate programs that attract students nationwide. These include Air and Space Studies, Aviation Supply Chain Logistics, Cybersecurity, Managing

Sustainability and Resiliency, Military Science and Leadership, and Social Media for Public Relations and Advertising (University of West Florida, n.d.-d).

The University of West Florida is also a significant driver of economic impact, generating more than one billion dollars in sales each year throughout Northwest Florida and beyond. Of that, \$1.1 billion is categorized as industry output for the regional economy, and an additional \$703 million in value added to Florida's economy. Furthermore, the institution supports more than 11,500 jobs in the local economy and generates \$1.2 billion in income and wages for workers. Ultimately, for every dollar invested into the university, UWF returns \$5.39 (University of West Florida, n.d.-b).

Upper-Division Schools

An upper-division school, as defined by Athens State University in Alabama, is an institute of higher education offering junior and senior-level coursework to undergraduate students (Athens State University, 2022b). Upper-division schools do not offer first- and second-year classes, nor do they offer remedial classes. The unique position of upper-division schools means that they allow students to complete their bachelor's degree while the school is not directly competing with the local community college(s) for student enrollment. This peaceful coexistence may lead to a natural partnership between a local community college and the upper-division school. The two could create articulation agreements and transfer pathways for students pursuing their associate degrees.

Athens State University. Athens State University is located in Athens, Alabama, and is the oldest institution of higher learning in Alabama, founded in 1822. The 200-year-old institution began as Athens Female Academy, a four-room schoolhouse offering classes for women (Athens State University, 2022a). Presently, the school prides itself on its destination for

transfer students and students who want to complete their education after stopping out for some time, especially those who are balancing multiple responsibilities such as full-time work, families, and more. Many Athens University students are working adults seeking a flexible degree option. Currently, more than 90% of students take at least one online class, and more than 80% of classes are offered online or in a hybrid format (Athens State University, 2022b). Nestled within the university's mission, vision, and values lie its student learning goals, including effective communication, global understanding, lifelong learning, practical and intellectual skills, ethical responsibility, civic engagement, and human diversity (Athens State University, 2022c).

While students wishing to enroll at Athens State University must have at least 36 hours of transferable college credit upon admission, transient students and students from other institutions may also elect to take classes at Athens State (Athens State University, 2022d). Students at Athens State University have a wide range of options for degree programs in disciplines such as Business, Aerospace, Arts, Science, Behavioral Science, Education, Humanities, Health, and Information Technology (Athens State University, n.d.). The university also offers Technical Education programs that merge scholar learning, within the classroom, with experiential learning outside of the classroom. This unique degree type is an excellent option for students with full-time career experience in the field of study they are applying for, as the program provides students with the most flexible opportunities to complete their degree (Athens State University, n.d.).

Oak Point University. Formerly known as Resurrection University, Oak Point University is a private, upper-division school in Oak Brook, IL. The university's provocative motto is "Built to be Badass" and has the mission to help students complete their degrees in healthcare, particularly in nursing and radiology (Oak Point University, 2020). The school was

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founded in 1917 after the citizens of Oak Brook, Illinois, decided to build a hospital for their community. The first cohort of nursing students was admitted in 1914, and the school served as a training center to staff the hospital. The university's name has changed many times, often coinciding with a partnership between the school and other institutions such as Wheaton College and Concordia University. The university adopted its current name, Oak Point University, after ending its partnership with Resurrection Healthcare in 2010 (Oak Point University, 2020).

Applicants to Oak Point University must have completed two years of college coursework rooted in a liberal arts education model. Currently, students may apply to one of two bachelor's degree programs: the Bachelor of Science in Nursing (BSN) or the Bachelor of Imaging Technology (BSIT) program (Oak Point University, 2022a). The BSN program is designed for students who have no prior nursing education and focuses on a curriculum based in liberal arts and sciences. The school also offers the Interprofessional Education Scholar Program with Micro-credentials. Students who complete the program receive an official notation on their transcript and also earn eight badges for display on their resumes and professional networking sites. The program focuses on roles, responsibilities, communication, values, ethics, teamwork, and lab experience (Oak Point University, 2022b). Lastly, the university offers graduate programs in nursing, allowing students to pursue their Master of Science in Nursing (MSN) degree and Doctor of Nursing Practice (N.P.) degree. Oak Point University also offers post-master's certificates. These certificates are offered in nurse education, family nurse practitioner, adult gerontology primary care nurse, adult gerontology acute care nurse practitioner, or psychiatric mental health nurse practitioner (Oak Point University, 2022a).

Texas A&M at Central Texas. Texas A&M University at Central Texas (henceforth referred to as Central Texas), founded in 2009, is a Texas A&M University system branch

campus. Central Texas is an upper-division school, fully aligned with Texas community colleges, and offers bachelor's and master's degrees (Texas A&M University at Central Texas, 2022). In the mission statement for the university, Central Texas aims to provide an innovative, high-quality, and rigorous education to meet the needs of a diverse student population. Furthermore, the university is dedicated to serving the community at large, the local military community, and community colleges throughout Texas (Texas A&M University at Central Texas, 2020). Texas A&M at Central Texas offers courses beyond its main campus in Killeen, Texas. It partners with Temple College and Texas State Technical College at the East William County Higher Education Center to increase access to higher education and provide continuing education courses for residents in Williamson County (Texas A&M University at Central Texas, 2022).

The school offers many degrees, including Bachelor of Arts (B.A.), Bachelor of Applied Arts (BAAS), Bachelor of Science (BS), Bachelor of Nursing (BSN), Bachelor of Social Work (BSW), and Bachelor of Business Administration (BBA). Undergraduate majors allow students to study various academic disciplines such as history, computer information systems, biology, aviation science, computer science, political science, finance, and more (Texas A&M University at Central Texas, 2022). The Admissions website provides numerous transfer pathways for students entering the university. The transfer guide lists core-course requirements, lower-division courses, and upper-level coursework required at Central Texas. Some degree programs have flexible course requirements for course selection, while others have a more prescribed curriculum. For example, a student studying English must earn 21 credit hours in upper-level English courses, but the student may choose which courses to take to fulfill the requirement. However, a finance student has a more prescribed curriculum and only has nine credit hours open for upper-level elective courses (Texas A&M University at Central Texas, 2019).

Walsh College. Founded in 1922, Walsh College is in Troy, Michigan, with satellite campuses in Clinton Township and Lake Huron. The college began when Mervyn Walsh, formerly the accountant of Thomas Edison, started the Walsh Institute in Detroit, Michigan, teaching the Pace Method of Accounting. In 1968, Walsh College officially became a private upper-division school offering junior and senior-level coursework for students who had completed two years at community colleges or four-year institutions. Walsh College expanded into the community in 1986 by offering courses at Macomb Community College, Royal Oak Shrine High School, and the Detroit Renaissance Center. In 2009, Walsh College strengthened its commitment to serving its community by offering 102 free skill-building workshops for displaced workers and expanding its course offerings at St. Clair County Community College and Wayne County Community College (Walsh College, 2022b).

Presently, Walsh College offers in-person, online, and hybrid courses and has multiple undergraduate, graduate, and doctoral programs. The college also offers a unique classroom option, called a connected classroom, where faculty can engage with students in the classroom and virtually in real time (Walsh College, 2022a). The college offers two undergraduate degrees, a Bachelor of Business Administration and a Bachelor of Accounting, with majors in finance, human resources, marketing, information technology, and management. Students may also pursue certificates in cybersecurity, data analytics, program management, human resources management, and strategic communication (Walsh College, 2022d). Walsh College offers clear and direct transfer pathways for its students by providing a seamless transfer experience through the Michigan Transfer Network, including Delta College, Henry Ford College, Schoolcraft College, and numerous community colleges (Walsh College, 2022c). To further assist transfer students, Walsh College provides a database of transfer course equivalents from more than 100 colleges and universities across the United States. This database is invaluable to students and positions Walsh College as a stand-out institution for transfer students (Walsh College, n.d.).

Academic Considerations

Expanding options for postsecondary education comes with its share of academic considerations. What is the student demand for certain academic programming? What is the market need for relevant careers? Choosing a viable pathway for Shore U will inevitably involve choosing existing academic programs or developing new ones. Being cognizant of how to proceed in this regard will be an important part of growing enrollments, maintaining relevance in the curriculum, and differentiating Shore U. Understanding the student population Shore U will serve, transfer pathways, viable academic partnerships and curricula will also be vital to its success, regardless of the chosen pathway.

Undergraduate Transfer Students

Transferring to a four-year institution is essential for community college students aspiring to complete their bachelor's degree. Transfer students may also include students currently at a four-year degree-granting institution who wish to transfer to a different college or university for degree completion. Students choose to transfer for various reasons, including a broader choice of academic program offerings, a desire to live in a different geographic area, a better sense of belonging, and more. While there is a plethora of research on undergraduate transfer students, the following will detail important information about transfer students, the relationship between community colleges and partner institutions, transfer pathways, and Virginia's Community College System.

In a study by Wang (2009), the National Educational Longitudinal Study of 1988 was analyzed to determine predictors of baccalaureate degree attainment after attending community

college. The study found that the likelihood of obtaining a bachelor's degree was significantly associated with the student's gender, socioeconomic status, previous high school curriculum, and educational expectations. Other factors include their GPA while in community college and math remediation courses. According to the data, a female student is more likely to obtain a bachelor's degree than a male student. Students in an academic versus a vocational high school curriculum were more likely to complete a four-year degree. Furthermore, a student's perceived locus of control, the extent to which a person believes that situations are within their control (internal) or outside of their control (external), and community college GPA were significantly correlated with student persistence toward the attainment of a bachelor's degree (Wang, 2009).

Moreover, in proportion to their total enrollment, community colleges enroll more students from underrepresented demographic groups, including racial minorities and low-income, first-generation, and nontraditional-age college students (Xu et al., 2018), compared to four-year institutions. Included in the underrepresented populations are first-generation college students or students who are the first in their families to attend college. Brawner and Mobley's (2018) study explored the experiences of fifteen first-generation community college students majoring in engineering at a four-year institution. They utilized the theory of community cultural wealth and the concepts of experiential capital and transfer student capital to find that it is critical to shift from a deficit-based lens of transfer students to a success-based lens. Familial support was significant to the students in this study and often served as the basis of their educational aspirations (Brawner & Mobley, 2018). Even for non-first-generation students, familial and peer support was the top way students gained transfer student capital (Hayes & Maliszewski Lukszo, 2019). The community college experience was also critical to student success as it increased the students' experiential capital and provided a stepping stone between high school and their

four-year institution. To best serve students in the future, the researchers suggest focusing on dual-enrollment programs to clearly articulate the transfer pathway. They also suggest creating opportunities for STEM-aspiring students at community colleges to meet current STEM students at four-year colleges and universities and create more ways for transfer students to connect at their new institutions (Brawner & Mobley, 2018).

Focusing on a success-based narrative, research by Buenaflor (2021) used the concept of self-efficacy. The Conceptual Framework for Transfer Efficacy describes how students develop their self-efficacy and beliefs around their ability to navigate the transfer process successfully. Self-efficacy is a critical part of the transfer student's process. It includes mastery experiences (undergoing a challenging task), vicarious experiences (observing the success of their peers), social persuasion (students who are verbally persuaded that they can succeed), and reduction of stress (Buenaflor, 2021). Interestingly, students with higher levels of self-efficacy are more likely to view stressful situations as a positive growth experience and a source to facilitate their performance (Buenaflor, 2021). Practical implications from this study recommend that community colleges provide practical, hands-on experience as soon as possible, including experiences inside and outside the college. Students in the study reported the impact of internships on their self-efficacy-building journey, including being better prepared to work with their career centers at their four-year institution of transfer (Buenaflor, 2021). Additional research on transfer student self-efficacy has shown that while faculty and transfer advisors may give important information about the transfer process, their most important role lies in building students' self-efficacy for the transfer process (Hayes & Maliszewski Lukszo, 2019).

The Community College Partnership

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Relationships with local community colleges are vital to transfer students' completion of four-year degree programs. While 80% of community college students enroll with the intent to complete a four-year degree, only a third of community college students successfully transfer to a four-year institution, and only 15% of those students graduate with a bachelor's degree within six years (Dundar et al., 2018) (Buelow et al., 2021). Furthermore, a study comparing the educational outcomes of community college students at four-year colleges found no significant differences in bachelor's degree attainment, retention, or grade point average between students who received their associate degree versus those who did not (Chuang et al., 2017). Students who received their associate degree before transferring to a four-year college or university earned fewer credits at a four-year institution due to their associate degree status than their counterparts without an associate degree. Huffman (2012) also found that students with an associate degree before entering a teacher preparation program at VCU were more likely to complete their bachelor's degree and do so in fewer courses than those who did not previously obtain an associate degree. Chuang and colleagues (2017) recommend that community colleges emphasize pretransfer credential attainment to increase baccalaureate degree completion. This emphasis will require community colleges and four-year colleges and universities to work together on the transfer of courses and support upon admission to their four-year institutions (Chuang et al., 2017).

Transfer Pathways

When assessing and creating transfer pathways, it is crucial for institutions to consider which programs will be offered and the modality of instruction, including fully-online synchronous and asynchronous models, hybrid classes, and traditional face-to-face instruction. Even before the Covid-19 pandemic, community colleges considered various options for their

students. Information from the National Survey of Community College Baccalaureate Institutions showed that institutions were already planning to offer more online programs and projected programs focused on technology to grow the most (McKinney et al., 2012).

While there is a wide array of studies about community college transfer students and transfer students at baccalaureate degree-granting institutions, less research on the type of college students choose to transfer to is available. Wang (2016) found that while very few community college students transfer to highly-selective colleges, students with high baccalaureate degree expectations and intent to transfer benefited the most in successfully transferring to a highly selective college. Rigorous course-taking distinguished those who went on to transfer to any college and those who transferred to highly selective colleges and universities. Contrary to some research, first-year grade-point average and involvement in integrative experiences did not correlate with the upward transfer. However, the study did find that employing part-time faculty at the community college level did not affect the upward transfer of its students. Considering the large number of part-time faculty employed by community colleges allows staffing and faculty structures to be unaffected by transfer opportunities (Wang, 2016).

Certain states have created formal partnerships between community colleges and baccalaureate degree-granting institutions in their state. For example, the North Carolina Comprehensive Articulation Agreement allows North Carolina students to guarantee the transfer of courses to a North Carolina four-year institution upon their successful completion of a two-year college transfer program at any North Carolina community college (DeSantis et al., 2021). These programs help minimize excess credits and reduce the time to completion. The study analyzed credit-earning behaviors at the 16 University of North Carolina System colleges

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and universities and found that within four years of the Comprehensive Articulation Agreement program, excess credit accumulation decreased by two to five credits by graduation (DeSantis et al., 2021). Programs such as the North Carolina Comprehensive Articulation Agreement show the importance of establishing clear and structured transfer pathways for community college students and their intended baccalaureate degree institutions.

Four-year STEM Degrees. When considering the types of degrees students pursue when enrolling in community college and subsequently transferring to four-year institutions, science, technology, engineering, and mathematics (STEM) are highly sought after by both students and potential employers. Research by Wang (2015) found that students who began their degree journey at a community college versus those who began at a four-year college or university were less likely to succeed when pursuing a four-year degree in a STEM field. Furthermore, the concept of "STEM momentum" is introduced to describe the positive student experiences in early STEM courses that often lead to a greater chance of pursuing a STEM-related degree in the future. Students who successfully completed a STEM course in their first semester of community college were more likely to pursue a STEM degree upon transferring to a four-year institution. The author posits that the "STEM momentum" of these successful students reduced some of the adverse effects of community college on attaining STEM degrees at four-year institutions (Wang, 2005). Zhang (2019) further explores academic momentum in their study that explores how early academic momentum, along with students' demographic information, impacts their degree attainment in STEM fields. The study found that associate degree completion, number of community college credits completed, and early academic performance at the four-year institution were significantly related to STEM degree completion. First-semester grade point average and math and English preparedness were also highly related to STEM degree

completion. Women were less likely than their male counterparts to complete a four-year STEM degree, and students less than 24 years old were more likely to complete their degrees. Students from higher-income households were more likely to complete their degrees than those from lower socioeconomic backgrounds (Zhang, 2019).

Enrolling students in STEM classes early on may not be the only solution to increasing underrepresented populations in the STEM field. A study by Bahr et al. (2016) found that while many students from underrepresented populations enrolled in introductory and beginning STEM courses, few progressed to enroll in advanced coursework in the STEM fields. The researchers found that some students were in math classes at a lower level than where the students qualified, leading to over-enrollment in developmental math courses. Students placed in mid-level math courses and above, versus those placed in developmental classes, were more likely to persist in STEM degree programs. Therefore more accurate placement tests and criteria are needed to mitigate this barrier to completion (Bahr et al., 2016).

Further research shows the role of community college on four-year degree completion in the STEM fields. In a McKinney et al. (2012) study, the four most common baccalaureate degrees offered by community colleges were in business, healthcare/nursing, and information technology. These degrees align with the current needs of the businesses and services on the Eastern Shore of Virginia and projected needs within the next five years. Furthermore, a four-year degree-granting institution focusing on STEM fields would help mitigate the current projection that within the next decade, the United States will require at least 1 million additional STEM professionals to meet the needs of the future workforce. Therefore, a four-year, STEM-focused degree-granting institution would not only meet the needs of the Eastern Shore of Virginia but would also positively impact the national and global workforce (Bahr et al., 2016).

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A systematic review of literature conducted by Borrego et al. (2018) focused on the STEM field degree attainment of LatinX students at two and four-year colleges and universities. An analysis of more than 60 qualitative, quantitative, and mixed-method research studies showed that various programs could be implemented to assist students at two-year institutions in transferring to four-year colleges and universities to complete their baccalaureate degree in a STEM field. These successful interventions included mentoring, culturally sensitive advising, academic assistance programs, tutoring, study groups, counseling, orientation, scholarships, and more (Borrego et al., 2018). It is evident that while the curriculum of science, technology, engineering, and mathematics are important in the successful attainment of a baccalaureate degree in these fields, other student support programs and services are vital in the successful transfer of students from two-year to four-year institutions and persistence towards degree completion.

Transfer Student Support

Transfer students face many barriers and challenges in building their self-efficacy and maximizing their capital as transfer students. One study analyzing community college students who transferred to a four-year institution found that transfer students struggled with obtaining accurate information about the transfer process, which equates to transfer student capital. Students who had already established support networks at their transfer institution faced fewer challenges than those who did not have an established support system (Buelow et al., 2021). The researchers suggest that both the community college and the transfer institution simplify the information about the transfer process through articulation agreements, aligning pre-requisite courses, and developing academic plans for student success. Colleges and universities can also increase ways for new transfer students to connect with current transfer students, including peer

mentoring programs to build supportive networks (Buelow et al., 2021). These strategies will help boost student self-efficacy and help more students be successful in their baccalaureate degree journeys.

Creating easy-to-navigate transfer degree programs and building relationships with partnering four-year institutions is the first step in supporting students transferring from community colleges and other four-year institutions. Colleges and universities must also consider the unique needs of transfer students once they have arrived on campus. These students do not fit into the traditional first-year, first-term focus of most new student orientation and first-year experience programs. They are also not considered returning students because they are, in fact, new to the institution. A study by Dundar et al. (2018) identified three crucial transfer practices for two-year and four-year institutions, including prioritizing transfer options, providing clear programmatic pathways and high-quality instruction, and providing transfer-specific academic advising. A study at Appalachian State University (App State) in Boone, North Carolina, found the need for transfer student-specific library services and the importance of cross-departmental collaboration in providing transfer student support services (McBride et al., 2017). Librarians from three libraries at App State hold faculty status that allows them to participate in faculty governance, serve on university task forces, and serve on three critical initiatives. These initiatives include the General Education Task Force, Office of Transfer Articulation, and the Transfer Services team. These initiatives have expanded informational literacy into general education coursework and provide online workshops and library credit coursework. Appalachian State University librarians further developed the Transfer Students and the Library workshop and created a research-based plan for closing the information literacy gap for transfer students (McBride et al., 2017).

Students are much more likely to succeed when their needs are considered above all else, even financial revenue and institutional prestige (McKinney et al., 2012). Moreover, socially and academically engaged students are more likely to persist toward graduation and attaining a baccalaureate degree at four-year degree institutions. Student engagement within the first year of a student's degree program significantly impacted their persistence toward graduation. Following their first year, students can continue the benefits of student engagement through academic or social engagement (Flynn, 2013). Student involvement is also positively correlated with four-year degree attainment by community college students (Wang, 2009). One researcher looked at community college students' perceptions of time and place and their impact on campus involvement. According to Ippolito (2021), some students act as "stone-steppers," or those who have firmer boundaries around campus activities, including academic and work activities, and are more likely to have a detailed plan for the future. In contrast, "place makers" tend to have less segmented views of on-campus activities and more flexibility in their plans for the future (Ippolito, 2021). Community colleges may wish to appeal to both types of students by offering a wide array of activities and events designed to meet the needs of students who fall into both categories.

Virginia's Community College System

The Virginia Community College System (VCCS) reports serving 218,985 students earning community college credit each year, with 55% taking at least one distance learning course each year (VCCS, 2022). These students represent 46% of all Virginia undergraduate students, including 44,926 high school students earning college credit through dual enrollment. Forty-three percent of students who graduated with a bachelor's degree in the past year had earned credit from a Virginia Community College at some point in their academic journey.

Roughly 59% of current community college students are in college transfer programs and plan to transfer after receiving their associate degree (VCCS, 2022). While students may choose to attend community colleges for many reasons, the VCCS reports that financial circumstances may play a role in students' decision-making. Tuition at a Virginia community is approximately \$4,620 per year, while the average cost of a traditional four-year public college or university is \$13,699. Furthermore, 34.7%, or 78,206 students, received financial aid in the 2019-2020 school year with a total disbursement of more than 380 million dollars. Lastly, in the 2021-2022 school year, 25,738 students received a graduation credential, while 32,898 students received a certification credential (VCCS, 2022).

Like many other states, the VCCS has worked with more than 30 four-year, baccalaureate degree-granting institutions to provide transfer opportunities for students currently enrolled in a Virginia community college. The Commonwealth of Virginia has gone a step further to obtain admissions agreements with colleges outside the Commonwealth of Virginia, including, but not limited to, Regis University, Western Governors University, Southern New Hampshire University, and Strayer University (VCCS, 2022). According to the VCCS website, "Through system agreements, students who graduate from one of Virginia's 23 community colleges with an associate degree and a minimum grade point average may obtain guaranteed admission to more than 30 of the commonwealth's colleges and universities (VCCS, 2022)." Two parts of the guaranteed admissions agreements are critical for students to understand. First, students wishing to use the guaranteed admissions process must have completed their associate degree at a Virginia community college. Students who have completed some, but not all, coursework are not guaranteed admission into one of the four-year schools in the agreement; however, they may pursue admission to these institutions on their own through the transfer application process at the

institution of their choice. Secondly, completing an associate degree with a satisfactory grade point average does not guarantee admission to all four-year colleges and universities in the Commonwealth of Virginia.

While students are guaranteed admission to at least one Virginia institution, the admissions criteria vary by school. For example, Radford University requires a 2.8 cumulative grade point average (GPA), while the College of William and Mary requires a 3.4 grade point average (VCCS, 2022). Furthermore, specific degree programs require different grade point averages in particular coursework, even within the same institution. For general admission into the UVA, a community college transfer student must have a cumulative 3.4 GPA. A student transferring to the College of Arts and Sciences must have received a "B" or better in English 111 and 112. A student wishing to transfer to the UVA School of Nursing must also have earned a grade of "B" or better in Math 157, 240, and 241. Lastly, a student wishing to transfer to the UVA School of Engineering shall have an overall 3.4 GPA and must have earned a "B" or better in *all* math, physics, and chemistry courses (VCCS, 2022).

Additionally, the VCCS supports the Virginia Passport Program and the Uniform Certificate of General Studies, allowing students to maximize their transfer credits at a four-year institution without receiving their full associate degree. The Virginia Passport program requires students to complete 16 hours of college credit and is considered a component of the Certificate of General Studies, which requires 30 to 32 hours of college credit. The courses are "blocked" based on the subject matter, including written communication, natural sciences, social and behavioral sciences, history, and mathematics (State Council of Higher Education for Virginia, 2021). Unlike the guaranteed admissions agreements mentioned previously, the Virginia Passport and the Certificate of General Studies do not guarantee students admission into a Virginia

institution but help students maximize the transferability of their lower division coursework. The State Council of Higher Education for Virginia (SCHEV) has also mandated that these two programs be entered into all dual enrollment agreements between high schools and community colleges in Virginia (State Council of Higher Education for Virginia, 2021).

Eastern Shore Community College. Eastern Shore Community College (ESCC) offers transfer degree programs and career and technical degree and certificate programs in the two counties located on the Virginia portion of the peninsula known as the Eastern Shore. The student body is predominantly female (70%), with the majority, 79%, of students attending part-time (Eastern Shore Community College, 2022). Sixty percent of the student body is considered traditionally college-aged, between the ages of 18 and 24, while ten percent is over 60 (Eastern Shore Community College, 2022). Of all currently enrolled students, approximately 50% receive financial aid (Eastern Shore Community College, 2022). As mentioned, transfer degree programs are associate degrees that prepare students to transfer to a baccalaureate institution in Virginia and beyond. Students wishing to transfer may pursue an Associate Degree in Arts and Sciences (AA&S) with majors in Business Administration, General Studies, Liberal Arts, Liberal Arts Education, and Science. Those interested in transfer credit courses may also pursue a Certificate of General Studies, which allows students to take a subset of general education courses (Eastern Shore Community College, n.d.). Eastern Shore Community College also offers an Associate Degree in Applied Sciences with an emphasis on career and technical coursework, allowing graduates to enter full-time employment in their field upon graduation. Currently, students may pursue applied degrees in early childhood education, electronics technology, management, nursing, electricity, welding, and heating, ventilation, and air conditioning (HVAC). Furthermore, ESCC offers career certificates in practical nursing,

electronics technology, medical assisting, small business management, and more (Eastern Shore Community College, n.d.).

Exemplar Degree Curriculum and Transfer Maps

Depending on which four-year institution a current Virginia community college student wants to attend and the intended major, each student will need to choose coursework during their associate degree that will "map" onto the curriculum at their transfer institution. Many schools in Virginia have set up transfer student support services to include students using the VCCS' Guaranteed Admission program. They also provide support services to students currently enrolled in Virginia community colleges not utilizing the Guaranteed Admission program and students from in-state, out-of-state, and international students. One helpful tool for students currently enrolled in a Virginia community college is the Transfer Map, or the charting of coursework from coursework at the community college level to the completion of a four-year degree program. Two examples of Transfer Maps from VCU follow.

Bachelor of Science Degree in Biology. Students wishing to use the VCCS' Guaranteed Admissions agreement to transfer and pursue an undergraduate degree in Biology from VCU must complete an Associate of Arts and Sciences or Associate of Science degree and meet all eligibility criteria. The Transfer Map guides students through the courses they should take at their community college and provides them with planning resources to chart their academic journey. The site also provides a course-by-course conversion chart so students can simultaneously plan courses at different institutions. For example, English Composition I, or ENG 111 at the community college level, directly translates to UNIV111 College Composition at VCU. Calculus I at Virginia Community Colleges is labeled as MAT 163 and counts as MATH 200 at VCU. The rest of the baccalaureate degree plan will follow the coursework mapped out for the community college level. The Transfer Map shows the required coursework for degree completion at VCU, including foreign languages, genetics, comparative biology, physics, capstone courses, and major electives (Virginia Commonwealth University, n.d.-a).

Bachelor of Science Degree in Electrical Engineering. The transfer mapping process for obtaining a degree in electrical engineering at VCU is similar to the process for completing a Biology degree, with a few notable differences. Students wishing to use the VCCS' Guaranteed Admissions agreement to transfer and pursue an undergraduate degree in Electrical Engineering from VCU must complete an Associate of Arts and Sciences or Associate of Science in Engineering degree and meet all eligibility criteria. The Transfer Map shows the courses a student needs to complete for their associate degree and the corresponding VCU course. For example, Differential Equations, or MTH 267 at the community college level, is the equivalent of MATH 301 at VCU. To fulfill the requirement of VCU's EGRE 101, the community college student must take EGR 121 *and* 122. As mentioned previously, students wishing to transfer into an Engineering major must complete all their math, science, and engineering degree will need to complete additional courses such as Advanced Engineering, Introduction to Microelectronics, and a Senior Design Studio class (Virginia Commonwealth University, n.d.-b).

Conclusion

Despite the influence a college degree has on one's economic success, the lack of equal access to higher education remains a prevalent issue in American society. The issue of college accessibility is even more daunting in rural and desolate communities. While a variety of literature exists in support of the need to increase access to higher education, the academic literature is limited when it comes to the decision-making process involved in expanding access

in a particular area. The literature is also limited when it comes to what definitively makes for a successful expansion effort. This study sought to address this gap by proposing a conceptual framework for future decision-makers in the establishment of Shore U, a public four-year institution on Virginia's Eastern Shore. In Chapter Three, we detail the research design that was used to develop this conceptual framework, study participants, data collection and analysis methods, as well as the role of the researchers.

Chapter 3: Methods

In research, methodology is defined as how the researchers will collect, analyze, and interpret data as a response to a problem or need. There are a variety of methods researchers may choose from when conducting their study; however, the methods should be chosen carefully and intentionally to achieve the best possible results and outcomes. The following outlines the purpose of our research, the research questions, design, implementation plan, trustworthiness and legitimacy measures, roles of the researchers, and limitations of research.

Background

Annually, the VCU School of Education puts out a call to K-12 education systems, institutions of higher education, and community organizations for problems of practice that third-year Doctor of Education (Ed.D.) students can assist in addressing as their capstone project. In response, members of the Shore U Foundation submitted a Request for Assistant (RFA) in the Spring of 2022. Specifically, the problem of practice that the Foundation asked for assistance in addressing is the creation of a five-year plan for the institution they envision. They asked that the five-year plan address establishing collaborative relationships with VCU, ESCC, and the Wallops Island Space Community, as well as addressing curricula, staffing, and funding for the institution. In response to this request for assistance, the research team developed research questions and a plan for data collection in furtherance of the Foundations' intentions to establish a four-year degree-granting institution on the Eastern Shore of Virginia.

The purpose of this capstone study was to understand what college-bound and college-aged students consider most when selecting a postsecondary institution and what would attract them or is currently attracting them, to remain on the Eastern Shore to complete their baccalaureate degree. The goal of this mixed-method research design was:

- to understand the demographic and economic profile of the Eastern Shore of Virginia and how it compares to other rural or economically-disadvantaged areas with a similar profile to the Eastern Shore,
- to determine which academic programs and majors are most likely to succeed at Shore U,
- to understand the educational interests and motivations of high school and postsecondary students studying or working on the Eastern Shore,
- to unearth benefits for a host institution to take on the project of creating Shore U.

Research Questions

The data collected in the mixed method research was designed to explore the research questions listed below. All data collected are connected to the proposed research questions in chapter four. The research questions were:

 A. How can expanded postsecondary education offerings stimulate economic development on the Eastern Shore?

B. What potential economic impact could Shore U have on the Eastern Shore of Virginia?

- 2. How can a proposed partnership with the local community college and a four-year institution keep Eastern Shore residents from having to leave the area for higher education?
- 3. What academic programs would be a good fit for an academic partnership on the Eastern Shore?

Research Design

This study sought to answer the research questions proposed by the team. Research may be conducted using quantitative methods, qualitative methods, or a mixture of both, called mixed methods research design (Burkholder et al., 2019). In the simplest form, quantitative data focuses on numbers, while qualitative data focuses on words (Creswell, 2022). Quantitative research is primarily deductive in nature and is often used in experimental, quasi-experimental, and observational studies. Qualitative research is used to deeply explore a current phenomenon and when validating or creating a new theory. Unlike quantitative research, often bounded by the requirements of experimental or quasi-experimental design, qualitative research is open to exploration and the pursuit of understanding (Burkholder et al., 2019). A mixed methods approach combines both qualitative research and quantitative research that approaches the problem statement from a holistic lens and is rooted in the belief that using both types of research provides insight beyond what can be found using only one type of research (Burkholder et al., 2019) (Creswell, 2022). While researchers have used different terminology, such as synthesis, integrating, quantitative and qualitative, and multimethod, to describe mixed methods research in the past, for the sake of this research study, the term mixed methods is used by the capstone team (Creswell, 2022).

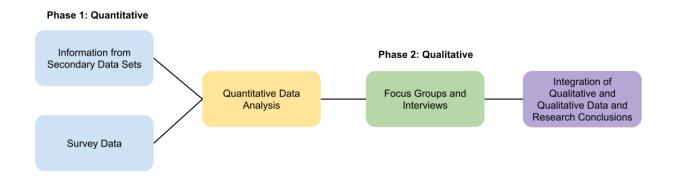
The capstone team used a mixed-method research design to investigate the interest of several groups of key stakeholders whose opinions were essential to the success of establishing Shore U. This design allowed the researchers to gain a stronger understanding of the research problem as opposed to just a quantitative or a qualitative study. A mixed-methods design minimizes the limitations of both research approaches and allows the researchers to maximize the benefits of both quantitative and qualitative methods for a more thorough understanding of the research problem (Creswell, 2022). Furthermore, mixed methods research allows the research allows the mixed-methods research allowed the researchers to develop different options for the University

of the Eastern Shore and compare them based on quantitative and qualitative data. The mixed-method approach entailed qualitative research (interviews, focus groups, and a survey) and quantitative research (interviews, survey data, and secondary data sources).

Explanatory Mixed-Methods Design

An explanatory mixed-methods design involves two phases of data collection, a quantitative phase followed by a qualitative phase (See Figure 4). Results from the quantitative phase are analyzed, and the results are used to plan the qualitative phase (Creswell, 2022). One strength of an explanatory mixed methods design is that data gleaned from quantitative research can be explained and expounded upon by qualitative research. Additionally, conducting the quantitative research portion first allows the researcher to purposely and intentionally select participants for the second qualitative phase. It is common in an explanatory mixed methods design for researchers to select participants for the qualitative phase to help explain contradictory, unusual, confusing, or notable responses in the quantitative data (Creswell, 2022). One challenge of the explanatory mixed methods research design is determining which study participants to follow up with during the second qualitative phase of the research study.

Figure 4



Two-Phase Explanatory Mixed Methods Research Plan

Note. The figure shows the process the researchers will employ for the research study utilizing both quantitative and qualitative research methods.

Theoretical Perspectives

Burkholder et al. (2019) explain that a research paradigm is a set of beliefs and values that guide the research process. Quantitative paradigms are usually positivist or post-positivist with a focus on objectivity, generalizability, and in some cases, causality. Qualitative research, however, is rooted in constructivism or interpretivism with a focus on using specific contexts and different constructions of reality (Burkholder et al., 2019). However, when using a mixed methods approach, the pragmatism paradigm, which focuses on practicality, purpose, context, and the consequences or implications of the research, is the guiding framework.(Burkholder et al., 2019).

Research Setting

All research was conducted within the Commonwealth of Virginia, with a particular focus on the Eastern Shore. Some study participants, however, were located on the Virginia Mainland, such as the VCU personnel interviews; and other interviewees who worked on the Eastern Shore of Virginia but resided in Maryland. Because the Eastern Shore of Virginia is in a remote location, away from the researchers' home cities, all focus groups and interviews were conducted virtually through Zoom. All participants were provided with the consent agreement form (Appendix B) prior to their interview, and each participant either returned a signed copy of the form to the capstone team or gave verbal consent at the beginning of their interview.

Participants

Using purposive sampling, the first phase of research using quantitative methods, students at ESCC and local high school students were invited via email to participate in the

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study. Email communication was limited to researchers' VCU email addresses so as not to confound the study or risk participant data being shared on unsecured servers. After analyzing the survey data and responses, phase two participants were identified based on their willingness to participate in an interview or focus group. All surveys and consent forms can be found in Appendices A-P. Additionally, the researchers identified key community and state stakeholders recruited to complete the study through email and through referral by the Foundation. Participation was voluntary, and names and identifying information have been removed for anonymity in the findings section.

Business professionals and administrators from VCU, ESCC, and the high schools on the Eastern Shore of Virginia received requests for study participation via email and chose to remain anonymous in the study. The researchers had difficulty getting in contact with both Northampton and Accomack school districts to assist with getting the surveys distributed to students. A parent or guardian permission form was created for students under the age of 18; however, without active participation from the school districts, no surveys were provided through the local high schools. Furthermore, because participation in interviews was precipitated upon participation in the survey, no high school students were interviewed. However, the capstone team was able to acquire secondary data related to high school students from the Eastern Shore of Virginia, and that research has been included in the overall findings of the study. All research documents and forms were scanned and stored on Google Drive via the VCU secure servers to maintain study integrity.

Sample Size

In research terminology, statistical power refers to the probability of correctly concluding that a study outcome was not due to pure chance, meaning it is a true conclusion. Generally, more power is better, with most scholars agreeing that a study needs to have a power of at least .80, or a 20% or less chance that a conclusion is the result of an error. Higher levels of power require high levels of sample size (Burkholder et al., 2019). For the results of the study to be generalizable, a certain number of responses will be required. According to the website Community College Review (2023), Eastern Shore Community College currently serves approximately 677 students, including full-time and part-time students. According to the resources provided by the Office of Institutional Research at Wake Forest University, to confidently generalize our findings with a margin of error of 5%, we would need a response rate of at least n=245. However, researchers have found that even low response rates, even as low as five to ten percent, in higher education student surveys with sampling sizes of at least 500 produced reliable estimates of several measures of student engagement (Wake Forest University, 2023). The capstone team partnered with the Eastern Shore Community College President, Dr. James Shaeffer, to solicit as many responses as possible. While the study did not receive 245 survey responses from ESCC students, the capstone team felt confident in their findings outlined in chapter four.

Phase One: Quantitative Methods

Phase one of the study began with a quantitative survey to collect data from participants and secondary data sets that were analyzed for additional quantitative data. This data was used to inform the second phase of research, which employed qualitative data collection. The following outlines the researcher's plan and process for data collection and data analysis in phase one.

Data Collection

First, quantitative data was collected through seminal and secondary research. Secondary datasets were used to substantiate or reject the claim that the Eastern Shore of Virginia's

geographic, demographic, and educational profiles necessitate the Foundation's desire to expand postsecondary education on the Shore. Data was pulled from a variety of sources, such as the US Census Bureau's website, the Virginia Department of Education (VDOE) website, and the websites for Accomack and Northampton Counties, to gain a robust view of the region's socioeconomic, industrial, political characteristics, as well as the positionality of Eastern Shore high school students for postsecondary education. Additionally, data was collected from the State Council of Higher Education for Virginia's (SCHEV) website, which provides enrollment information for small postsecondary institutions located in regions of Virginia with similar profiles to the Eastern Shore.

A quantitative survey was developed and sent to all currently enrolled students at Eastern Shore Community College. Survey distribution and dissemination were carried out in partnership with Eastern Shore Community College's President, Dr. Shaeffer. The survey collected demographic information, personal background, GPA, course of study or intended major, collegiate aspirations, opinions of the Eastern Shore of Virginia, and more. The survey was created using the survey tool *Survey Monkey* and features a variety of question types, including Likert scales, check-all, multiple choice, and ranking. All surveys are included in the appendices. Students from the Eastern Shore Community College were incentivized to participate in the survey with a drawing for one of three Amazon gift cards. The student winners were notified by email upon the completion of the study.

Data Analysis

Secondary datasets were used to analyze data about high school students on the Eastern Shore of Virginia and to fill in research gaps where surveys and interviews were unattainable. Survey data was cleaned to check for errors and then analyzed using descriptive statistics and

inferential statistics. Descriptive statistics help to reduce the data's complexity while also summarizing the information into central tendency and variation (Burkholder et al., 2019). Analyzing data in this study produced frequencies, means, and standard deviations, which provided the researchers with information to create the phase two participant criterion and interview and focus group questions (Creswell, 2022).

From the secondary data sets and survey results, the researchers identified the parameters and criteria for selecting participants for the second qualitative phase of the study. The capstone team chose to follow up with participants who indicated in their surveys that they would be open to participating in an individual or group interview. Some of these participants provided results to follow up on, including outlier responses, significant variable questions, or demographic characteristics (Creswell, 2022). Quantitative data was also used to inform the interview and focus group questions used in phase two of the research study.

Phase Two: Qualitative Methods

Upon completion of phase one of the research study, the researchers initiated the second phase focused on qualitative research principles. The data collection methods included individual interviews and group interviews, and the questions for these methods were determined based on the results of phase one data. The following sections outline the qualitative processes the researchers used to further explore the research problem, as well as how data was integrated to draw comprehensive conclusions and provide recommendations.

Data Collection

The qualitative-focused phase two used interviews and focus groups to expand upon the data collected during phase one. Additionally, the data collected from the open-ended questions on the initial survey were added to the qualitative data. Both individual and focus group

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interviews were semi-structured, and the length of the conversation for both formats was 45 to 60 minutes. With permission from the participants, all focus group and individual interviews were recorded via Zoom, and all recordings will be kept on Google Drive on secure VCU Servers. Two interviews were not recorded due to technical errors on the researcher's part, but copious notes were taken throughout the interview, including direct quotations. During the interviews, participants were asked demographic, qualitative, and quantitative questions, and the overall interview was structured to gain insight into addressing the project's central research questions. Interview questions differed depending on the audience, and researchers asked secondary questions to allow participants to provide more information about a particular topic, further explain a point, or expound upon a certain answer. At least one member of the capstone team was present at each interview, but some interviews had two members present as schedules allowed. All interview and focus group notes are stored with other research materials on Google Drive. Participants were provided the capstone team's contact information at the end of each interview to offer the participants the opportunity to submit additional thoughts on the topics discussed in the interviews or any comments that they may not have felt comfortable sharing in front of other participants or in verbal conversation.

Data Analysis

All interviews and focus group sessions were conducted using Zoom video conferencing technology. Zoom has the capability to transcribe the sessions and provides a transcript at the end of each session. After each interview, the team edited the interview and focus group transcripts for clarity and accuracy. The transcripts were then hand-coded by the team; all codes, themes, and sub-themes are included in the appendices. In reviewing the notes and interview transcripts, researchers looked for themes, commonalities, and discrepancies in the qualitative data.

According to Burkholder et al. (2019), coding can be deductive, inductive, or a mixture of both. Deductive coding is when predetermined topics or codes are used based on a researcher's prior knowledge with the review of literature and analysis of other data. Inductive coding is used when codes and themes are unexpected, or they emerge from the data as the researcher is working with it (Burkholder et al., 2019). For example, in our study, the theme of partnerships with the local community college and other local businesses was a deductive code that emerged from the capstone team's review of the literature, meetings with the Foundation, and the data from the quantitative surveys. An example of an inductive approach in our study was the emergence of the importance of workforce development and trades such as HVAC, plumbing, and electrical services. None of our prior research had indicated that this topic would be emergent, but after analyzing the qualitative data, it became clear that it was important to the people of the Eastern Shore. Employing both types of coding provided the capstone team ample data to synthesize with the quantitative data from phase one and produce the recommendations in chapter five.

After the qualitative data analysis was completed, the researchers then combined both the quantitative and qualitative data results using an integrative process to connect the two data sets to one another. According to Burkholder et al. (2019), mixed methods research focuses on integration which refers to the systematic and intentional combination of both types of data (quantitative and qualitative) and methods, methodologies, paradigms, and results. This process led to the study's conclusions and recommendations for the Foundation. All quantitative and qualitative and qualitative in the creation of the five-year plan for the Foundation presented in chapter five.

Roles of the Researchers

Burkholder et al. (2019) hold that an essential part of qualitative research is that the researchers serve as the "primary data collection instrument" (p. 94) through direct observations, participation in interviews, and analysis of data and documents. Depending on the setup of a research design and what is the most appropriate and effective degree of engagement for the individuals conducting the research with the individuals participating in the study, researchers can assume a range of data collection roles from complete participant to complete observer. On one side of the spectrum, a complete participant will be fully engaged with participants to build trust and gain membership. This allows researchers to attempt to share the experiences of the study participants but presents difficulties in data collection due to being fully immersed in participant activities in lieu of leaving room for observation. On the other end of the spectrum of the potential roles of researchers is a complete observer. Complete observers do not interact with study participants and typically collect data remotely or from archived documents or recordings (Kawulich, 2005).

In this study, the researchers assumed the roles of participant observers. This allowed researchers to be present for the study participants' activities and to engage, interview, and share pertinent information with participants, but primarily with the interest of data collection and participant observation. Participant-observers have the opportunity to gain membership with and trust from participants, similar to a complete participant role, but also balance engagement with the observation of the participants' activities (Burkholder et al., 2019). Engaging as participant observers was most appropriate for this study because this role helped the researchers build rapport with the participants while collecting data for analysis. Balancing the roles of participant and observer also limited the potential influence of observer presence on participant behavior that is oftentimes experienced with the observer-participant and complete observer roles

(Burkholder et al.,2019). Participant observation gives researchers the opportunity to take part in or observe events such as the Shore U Foundation meetings, engage in activities and meetings with administrators and business professionals, and interview members from the study's key stakeholder groups.

Study Legitimacy and Trustworthiness

In quantitative research, researchers use internal validity, external validity, reliability, and replicability to legitimize their study (Burkholder et al., 2019). Reliability means that the instruments used to collect data, in our case, the survey, will produce consistent results over different administrations. Internal validity refers to whether the data collected matches the research questions of the study (Burkholder et al., 2019). External validity refers to whether the findings of the study are applicable or generalizable to the population of interest (Burkholder et al., 2019). One strength of quantitative research is the objectivity provided by removing the research from the data as much as possible. This reduces or eliminates researcher bias from the results as they are not subject to researcher interpretation (Burkholder et al., 2019).

In contrast, qualitative researchers use dependability, credibility, transferability, and confirmability to legitimize their study (Burkholder et al., 2019). Dependability is the qualitative version of reliability. Dependability means that there is consistency in data collection methods, analysis of the data, and reporting of the results (Burkholder et al., 2019). Credibility is the qualitative version of internal validity and means that the findings of the study and conclusions of the research are in line with the research questions proposed by the study. As a parallel to external validity, transferability refers to the ability to apply the findings to different populations.

While the goal of qualitative research is not to generalize to a sample as one would with quantitative research, the study must still hold meaning beyond the scope of the singular

study(Burkholder et al., 2019). Quantitative research requires substantially more researcher involvement in the interpretation of the data, making complete objectivity nearly impossible. However, in qualitative research, the researcher acknowledges the subjectivity of the research but also bases the methods on verifiable procedures, analyses of the results, and conclusions of the study (Burkholder et al., 2019). Burkholder et al. (2019) further clarifies that confirmability requires that, given the same qualitative data, multiple researchers would arrive at the same conclusions.

The capstone team engaged in a variety of practices to increase the legitimacy of the quantitative and qualitative results. Reliability can be determined using statistical methods, but the researchers also employed inquiry audits and triangulations of the data to ensure dependability (Burkholder et al., 2019). Triangulation also increases credibility along with member checking, reflexivity, and peer debriefing (Burkholder et al., 2019). Achieving the required sample size for sufficient external validity for phase one was attempted by the researchers; however, the total number of surveys needed for the statistical validity was not achieved and may be a goal for future studies by the Foundation. The information in our audit allows the reader to make an informed decision about whether or not the study is applicable to their needs. The use of rich, thick descriptions and maximum variation further supports our findings (Burkholder et al., 2019). While lastly, as recommended by Burkholder et al. (2019), the capstone team conducted a confirmability audit which is the best method to establish confirmability, the findings of our mixed-methods research design are further explained in Chapter Four, followed by our recommendations for the Foundation in Chapter Five.

Figure 5 summarizes the trustworthiness measures taken throughout the study.
Figure 5

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Confirmability Audit

Strategy	Criteria	Application
Credibility	Triangulation	Member checking from Phase One participants who opted for a qualitative interview in Phase Two by clarifying and elaborating on responses
		Reflexivity was used to consider researchers' positionality and potential biases as related to study design and outcomes
	Peer debriefing	 Debriefing meetings were held: Once weekly amongst capstone team Once weekly with capstone team + Chair Once monthly including capstone team, Chair, + the Foundation
	Participant quotes	Used participants' quotes in research findings based on transcribed interviews
Transferability	Data saturation	Utilized descriptive statistics and built a codebook to repeated themes in interviews
	Consistency in collection method across different participant groups	All but one interview was conducted and recorded virtually. In-person interview (requested by participant) was recorded in the same manner as all other interviews. All interviews were manually transcribed and coded.
Dependability	Rich, thick description of study design	Prepared and updated drafts of study protocol and methods throughout study

	Audit trail	Detailed the data collection process and maintained record of each collected survey or interview, external communication, and secondary data source used
	Group interview option for repetition	Offered interview participants from same study group the ability to opt for a group rather than one-on-one qualitative to ensure consistency in interview questions and methods
Confirmability	Reflection after interviews	Reflection was used after each interview to consider researchers' positionality and potential biases
	Interview flow	Researchers crafted questions before each individual or group interview, but allowed interview to flow with participant, and asked clarifying questions and inquiries related to research questions if conversation strayed beyond study
	Sample size	Researchers utilized a variety of techniques to solicit interview participation

Note. This chart represents the steps in the confirmability audit conducted by the capstone team.

Chapter 4: Data Analysis & Research Findings

The purpose of this study is to outline a comprehensive five-year plan that details the steps necessary to create a new, attractive postsecondary education option on the Eastern Shore of Virginia. To accomplish this, our team developed and implemented a mixed-methods research design to answer the following research questions:

1. A. How can expanded postsecondary education offerings stimulate economic development on the Eastern Shore?

B. What potential economic impact could Shore U have on the Eastern Shore of Virginia?

- 2. How can a proposed partnership with the local community college and a four-year institution keep Eastern Shore residents from leaving the area for higher education?
- 3. What academic programs would be a good fit for an academic partnership on the Eastern Shore?

To most effectively answer these questions, the research design for this study consisted of two phases of data collection. For the first phase, we collected quantitative data through the use of web-based surveys. This data was collected from current students and employees of the Eastern Shore Community College (ESCC), high school administrators, as well as community members on Virginia's Eastern Shore. For the second phase of data collection, we collected qualitative data through the use of structured interviews with ESCC students and employees, Eastern Shore community members, and VCU administrators. Participants for both phases of the data collection were selected based on their vested interest in the expansion of postsecondary education on the Eastern Shore. The outcomes of this research will allow us to design a path forward for the University of the Eastern Shore of Virginia Foundation for how to best expand postsecondary education on Virginia's Eastern Shore.

Quantitative Phase

Data Collection Process

As noted previously, we used a mixed methods approach for our data collection. One aspect of the quantitative phase was the collection of data via surveys that included demographic questions, Likert-type scale questions, multiple-choice questions, and open-ended questions. The responses to the open-ended questions were used to identify interviewees for the qualitative phase of our data collection, as well as to inform the questions posed during the interviews and small-group discussions.

Definitions

Demographic Questions

"Common demographic questions explore participant age, sex, race, ethnicity, education, and employment, but can include background characteristics that a researcher believes are essential to the research project (Dobosh, 2017, p. 1702)." An example of a demographic question in our surveys is this question in figure 6.1 from the Eastern Shore Community survey.

Figure 6.1

Demographic Survey Question

2. I have lived on the Eastern Shore of Virginia (Eastern Shore): ${f igar }$ 0

- () N/A
- 0-5 years
- 🔿 6-10 years
- 11-15 years
- 16-20 years
- O More than 20 years

Note. This figure shows a demographic question from the quantitative survey.

Likert-type Scale Question

"The traditional Likert scale consists of a set of declarative statements, each followed by a series of ordered response options that measure the extent to which a person agrees or disagrees with the statement (Gracyalny, 2017, p. 1555)." Several of our survey questions ask respondents to rate their level of concern about an issue from very unconcerned to very concerned, with a mid-point of not sure/have no opinion. An example of a Likert-type scale question in our surveys is question seven (in section three) from the ESCC Administration/Faculty/Staff survey shown in Figure 6.2.

Figure 6.2

Likert Scale Question

3. As a resident of or a professional on the Eastern Shore ...

For each of the six (6) questions in this section, select the ONE option that best describes your level of concern.

7. I am _____ about low population growth on the Eastern Shore, only 1% between 2010 and 2020. \heartsuit 0

- O Very unconcerned
- O Unconcerned
- Somewhat unconcerned
- O Not sure/have no opinion
- Somewhat concerned
- O Concerned
- Very concerned

Note. Likert scale question from the quantitative survey.

Multiple Choice Questions

"For closed-ended questions, one of the most common types is multiple-choice questions, which provide respondents with a certain number of specific response options as possible answers (Chatham-Carpenter, 2017, p. 1712)." Respondents may be given the option to select one or more answer choices. Question six from the ESCC student survey is an example of our use of a multiple-choice question and is shown in Figure 6.3.

Figure 6.3

Multiple-choice Question

6. What factors influenced your decision to enroll at ESCC (select ALL that apply): \heartsuit 0

Cost
Family responsibilities
Eeeling undecided about future goals/plans
Friends/peer group
Specific trade or certificate program
Parental/guardian support
Proximity to home
Other (please specify)

Note. Multiple-choice style question from the quantitative survey.

Open-ended Questions

"Open-ended questions are questions that do not provide participants with a

predetermined set of answer choices, instead allowing the participants to provide responses in

their own words (Albudaiwi, 2017, para. 1)." The final question on the VCU

Administration/Faculty/Staff survey is an example of an open-ended question, one that was, in

fact, repeated in multiple versions of the surveys.

Figure 6.4

Open-Ended Question

23. Is there anything more that you would like to share regarding the Foundation's desire to establish a four-year degree-granting institution on the Eastern Shore? \bigcirc 0

Note. Open-ended question from the quantitative survey.

Survey Design and Intent

Initially, seven surveys were developed to gather responses from Eastern Shore community members; ESCC administration, faculty, and staff, and ESCC students; Eastern Shore high school administrators and Eastern Shore high school students; the Wallops Island space community, and VCU administration, faculty, and staff. An eighth survey was created and launched specifically for VCU College of Engineering students who participated in a site visit to the Eastern Shore and Virginia Space/MARS during the fall 2022 semester. Though there is overlap in questions within each survey, there are questions unique to each survey intended to understand each stakeholder group's particular perspectives on the concerns motivating the University of the Eastern Shore of Virginia Foundation (the Foundation) and their goal of expanding options for postsecondary education on the Eastern Shore, as well as to provide insights to assist us in answering our research questions.

Regarding the surveys targeting Eastern Shore community members, members of the capstone team contacted the Eastern Shore and Chincoteague Chambers of Commerce, the VCU Alumni Hampton Roads Chapter, the United Way of Virginia's Eastern Shore, the Boys and Girls Club, as well as several churches and businesses to distribute and gather responses to the surveys. These outreach efforts were a blend of cold calls, directed emails, and the "contact us"

form on the organizations' websites. Multiple organizations indicated that they would promote the survey in their weekly newsletter. The University of the Eastern Shore of Virginia Foundation members also distributed the surveys to their contacts on the Eastern Shore. We received 50 surveys that registered responses.

The President of the ESCC, Dr. James Shaeffer, being familiar with the Foundation, met with the capstone team to discuss the RFA and our research goals. Dr. Shaeffer also provided some useful insights into the challenges and opportunities on the Eastern Shore and agreed to participate in a qualitative interview to expand upon his views. To support us in our data collection efforts, Dr. Shaeffer agreed to publish an announcement to the ESCC community referring them to the Foundation's webpage to respond to surveys (See Appendix I). At Dr. Shaeffer's suggestion, the capstone team worked with the Foundation's website curator to develop a landing page with links to the surveys. Figures 7.1 and 7.2 show the landing page and the content a reader would encounter as they scrolled down the webpage, including the links to the surveys, information about the capstone team, and an executive summary of the study (See Appendix H).

Figure 7.1

Shore U Website Landing Page



WHAT DO YOU WANT IN EDUCATION ON THE EASTERN SHORE OF VIRGINIA?

WHAT DO YOU WANT IN EDUCATION ON THE EASTERN SHORE OF VIRGINIA?

Tell us in this survey

The Foundation believes that expanding educational opportunities on the ESVA will benefit population growth, economic development, and overall opportunity in the region.

FEEDBACK FROM THE COMMUNITY IS CRITICAL.



Please only complete the survey that best aligns with your role - only one submission per individual.

Note. This figure depicts the website page for Shore U, specifically when users click on the

"survey" button on the website's home page. Source: (ShoreU.org/survey, N.D.)

Figure 7.2

Shore U Website Survey Page

Survey

EASTERN SHORE COMMUNITY COLLEGE

Administration/faculty/staff

Students

EASTERN SHORE OF VIRGINIA HIGH SCHOOL

Administration

Students

EASTERN SHORE OF VIRGINIA COMMUNITY

Residents/professionals

Wallops Island Space Community (professionals)

VIRGINIA COMMONWEALTH UNIVERSITY

Administration/faculty/staff

Please refer your colleagues, friends, and families to complete the surveys for which they are appropriate respondents.

ORIGINS

Four Doctoral students in the School of Education* at Virginia Commonwealth University are collecting information for the University of the Eastern Shore of Virginia Foundation. This work is being done for academic credit and for the Foundation's benefit. The <u>Executive Summary</u> of the study is available.

* You may have previously completed a survey for students from the Executive MBA program, also at VCU. Those students assisted in developing a business plan for the Foundation, and this work will support developing a five-year plan for the foundation.



Note. Survey selection based on participant role website page. Source: (ShoreU.org/survey, N.D.)

We received 15 completed surveys with responses from ESCC administration, faculty, and staff. We also received 14 completed surveys with responses from ESCC students.

There are five public high schools on the Eastern Shore, Arcadia High School, Chincoteague High School, Nandua High School, Tangier Combined, and Northampton High School. The capstone team attempted to contact the principal, assistant principal, or guidance/school counselor at each, with no response. The capstone team also attempted to secure approval and administrative support in distributing the surveys via the superintendent's offices, also to no avail. One Eastern Shore high school administrator survey was submitted; they likely came upon the survey when they were solicited to complete the Eastern Shore community member survey. One Eastern Shore high school student survey was returned via the online survey tool, however, it was blank.

The Wallops Island Space Community survey was developed to collect data from individuals working at NASA, Rocket Lab, and Virginia Space/MARS (Mid-Atlantic Regional Spaceport). The Foundation has targeted this community as a desired partner in expanding opportunities for postsecondary education on the Eastern Shore. The capstone team sought to examine if the Foundation's perceived needs and opportunities meet the reality for these agencies. Five surveys, with responses, were submitted.

Originally, the capstone team did not plan to survey VCU students. During our data collection, we learned that 21 College of Engineering students had visited Virginia Space and toured the Mid-Atlantic Regional Spaceport facilities. The Director of the VCU Engineering Career Center, who hosted the trip, was willing to assist in outreach to these students sharing the opportunity to complete a survey and participate in a meeting via Zoom video conference to discuss their experience, their interest in the Eastern Shore, and their future plans. This prompted

the development of an additional survey for VCU students. We received only one response. The student completed the survey.

Finally, though the capstone team created a survey for VCU administration, faculty, and staff, it was not distributed to the VCU community. The capstone team felt that the groundwork or foundation in establishing a relationship between the Foundation and the university was not self-evident, and absent a leader sharing the survey and providing context, such as Dr. Shaeffer did with the ESCC community, the survey could foment confusion and generate more questions than data among university leadership. Efforts were made to identify someone well-situated to support the work of the capstone group and promote our efforts to collect data, again without success. The capstone group did, however, receive six surveys with responses to the VCU administration, faculty, and staff survey, apparently from Eastern Shore community members who have an affiliation with the university.

The capstone team used Survey Monkey, an online, cloud-based survey tool, to collect our survey responses. Survey Monkey has free and paid features. The capstone team purchased an upgraded plan to expand our capabilities in terms of teamwork, survey design, and data analysis. Our surveys were linked to Google Forms or Documents for Participant Consent. All surveys asked participants to self-identify and provide their contact information if they were willing to participate in follow-up qualitative interviews. Surveys directed toward students included incentives; as such, students had the option to provide their contact information if they wanted to be eligible for the incentive prizes.

Results

There were blank surveys returned for each version of the instrument. Presumably, people were scrolling through to see what was being asked. Response rates for each survey are low,

therefore drawing firm conclusions from the responses would be improper, but there are insights to be considered, combined with the secondary data, and factored into the Foundation's future work, as well as the five-year plan that the capstone team is developing. The survey questions are provided separately for review and use by future researchers (see Appendix D).

Eastern Shore Community Members

Of the 57 responses returned for this survey instrument, 50 had registered responses. According to Survey Monkey's metrics, it was expected that the survey would take respondents less than ten minutes to complete; there was an 88% completion rate for this survey. Forty-eight percent of respondents indicated that they have lived on the Eastern Shore for 20 years or more; 78% moved to the Eastern Shore as an adult, while 16% indicated that they were born on the Eastern Shore.

Asked to share their level of concern about several U.S. Census Bureau data points related to the Eastern Shore, the respondents in this group are concerned about the 2020 Census data, as reflected in the figure below.

Figure 8 details the side-by-side comparison of levels of concern about the 2020 Census data from the perspective of Eastern Shore community members.

Figure 8

Community Members Level of Concern

Issue	Concerned (Somewhat concerned, concerned, very concerned)	Unconcerned (Very unconcerned, unconcerned, somewhat unconcerned)	Not sure/have no opinion
Low population growth on the Eastern Shore	66%	28%	6%

Higher median age of residents of the Eastern Shore versus for Virginia	84%	14%	2%
Lower employment rate on the Eastern Shore versus for Virginia	92%	8%	N/A
Higher poverty rate on the Eastern Shore versus for Virginia	94%	6%	N/A
Higher percentage of people without healthcare coverage on the Eastern Shore versus for Virginia	92%	8%	N/A
Lower percentage of residents with a bachelor's degree or higher on the Eastern Shore versus for Virginia	92%	4%	4%

Note. Figure shows Eastern Shore of Virginia Community Members' concern level regarding the current or future population.

Seventy-two percent of respondents to this survey were aware of the Foundation, and 92% indicated that they could see the benefit of the establishing a four-year degree-granting institution on the Eastern Shore and would be supportive of or in agreement with the Foundation's goal to do so. Respondents were asked to indicate the challenges to attracting and retaining a talented workforce to their industry or business, they could select three choices from a list of potential challenges. The top two challenges selected were available housing (57%) and the educational readiness of residents of the Eastern Shore (55%). There was a tie for the third challenge between available employment opportunities for spouses/partners and educational resources for children (both 49%).

Participants were asked to select from a list of academic programs that they believe would be a good fit for an academic partnership on the Eastern Shore. Participants could select all that they felt would apply – the 50 respondents made 350 responses/selections. The top three academic programs selected were health professions (84%), education (82%), and technology (78%). Respondents were asked to indicate which industries offer the greatest potential for educational partnerships on the Eastern Shore, they could select two. The top two selections were the commercial space industry (80%) and rural health care (70%). One-third of respondents indicated that their business or industry may offer internships to students.

Finally, 46% of respondents to this instrument indicated that they are somewhat familiar with VCU, but 81% agree that a partnership between the Foundation and VCU would serve the educational needs of their industry.

ESCC Administration, Faculty, Staff

Of the 19 responses returned for this survey instrument, 15 had registered responses. According to Survey Monkey's metrics, it was expected that the survey would take respondents 10 to 15 minutes to complete; there was a 63% completion rate for this survey. Fifty-three percent of respondents indicated that they have lived on the Eastern Shore for 20 years or more; one-third have lived on the Eastern Shore for zero to five years. Fifty-three percent moved to the Eastern Shore as an adult, while 27% indicated that they were born on the Eastern Shore.

One-third of the respondents to this survey identified as staff at ESCC, 26% identified as faculty, and 7% identified as administration. There were five respondents that selected "other;" their responses as to their role varied from being unclear to volunteering on campus to a retired educator. The majority of the respondents from the ESCC have worked at the community college for 10 years or less (40% zero to five years, 40% six to 10 years).

Members of the ESCC administration, faculty, and staff were asked to respond to questions about their dual enrollment programs with local high schools. The goal of these questions was to inform the understanding of high school students' access to and interest in postsecondary education programs.

Figure 9 details the side-by-side comparison of reactions to questions about the ESCC dual enrollment program.

Figure 9

Eastern Shore Community College Dual-Enrollment

Question	Positive Reaction	Negative Reaction	No basis/Neutral/No opinion
Quality of the dual enrollment program.	86% (Very good, good, acceptable)	7% (poor)	7 %
Dual enrollment program is meeting current needs.	53% (Strongly agree, agree, somewhat agree)	14% (Somewhat disagree, disagree)	33%
Dual enrollment has the capacity to serve more students.	66% (Strongly agree, agree, somewhat agree)	7% (somewhat disagree)	27%

Note. Figure shows current Eastern Shore Community College Employees who completed the survey thoughts on dual-enrollment of high school students.

According to the ESCC administration, faculty, and staff respondents, the top two enrollment challenges that the community college is facing are (1) economic conditions/family financial support (73%), and (2) negative attitudes toward higher education (40%). Respondents were asked to select their top three challenges. There were six challenges tied for third: declining revenue/state financial support, concerns about student debt/tuition, housing insecurity, competition from online programs, decreasing numbers of high school graduates, and location. Regarding their level of concern about several U.S. Census Bureau data points related to

the Eastern Shore, the respondents in this group are also concerned about the 2020 Census data,

as reflected in the table below.

Figure 10 details the side-by-side comparison of levels of concern about the 2020 Census data from the perspective of members of ESCC's administration, faculty, and staff.

Figure 10

Eastern Shore	Community	College	Survey	Results by Concern	
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Issue	Concerned (Somewhat concerned, concerned, very concerned)	Unconcerned (Very unconcerned, unconcerned, somewhat unconcerned)	Not sure/have no opinion
Low population growth on the Eastern Shore	66%	34%	N/A
Higher median age of residents of the Eastern Shore versus for Virginia	66%	27%	7%
Lower employment rate on the Eastern Shore versus for Virginia	80%	13%	7%
Higher poverty rate on the Eastern Shore versus for Virginia	86%	14%	N/A
Higher percentage of people without healthcare coverage on the Eastern Shore versus for Virginia	86%	14%	N/A

Lower percentage of residents with a bachelor's degree or higher on the Eastern Shore versus for Virginia	73%	20%	7%
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Note. Figure shows Eastern Shore Community College Administration, Faculty, and Staff concern level regarding the current or future population.

Of the respondents, 60% indicated they were aware of the Foundation, and 60% indicated that they could see the benefit of the establishing a four-year degree-granting institution on the Eastern Shore and would be supportive of or in agreement with the Foundation's goal to do so. The ESCC administration, faculty, and staff indicated that in their experience, the majority of ESCC students have the following plan - complete some courses, then enter the workforce, 29%, complete their Associate's Degree, then enter the workforce, 7%, complete their Associate's Degree, then transfer to a four-year university, 7%, or complete a trade or certificate program, then enter the workforce, 43%. Fourteen percent of the responses fell in the 'other' category and were (1) Don't really know, I work mostly with adults, and (2) I believe students are represented relatively equally between those wishing to complete workforce courses, those interested in earning an industrial credential or associate degree and entering the workforce and those interested in 4-year transfer.

Regarding their students' decision to transfer, respondents to this survey instrument indicated that cost (73%), financial assistance package (73%), location (53%), and desired majors offered (53%) were the top factors influencing which college they would select. In their experience, the top three majors that ESCC students will study at their transfer institution are education (47%), health professions (40%), and liberal arts (33%).

Participants were asked to select from a list of academic programs that they believe would be a good fit for an academic partnership on the Eastern Shore. Participants could select all that they felt would apply – the 15 respondents made 88 responses/selections. The top three academic programs selected were education (80%), health professions (73%), and sciences (66%) – interestingly, these do not quite match the programs they believe their students are studying at their transfer institutions. Respondents were asked to indicate which industries offer the greatest potential for educational partnerships on the Eastern Shore, they could select two. The top two selections were the commercial space industry (80%) and rural health care (73%).

It is noteworthy that ESCC administration, faculty, and staff had varied responses to the question "if there was a University of the Eastern Shore of Virginia, I would encourage my students to seek their four-year degree there" - 47% somewhat agree, agree, or strongly agree. Approximately one-third neither agreed nor disagreed and 20% somewhat disagree, disagree, or strongly disagree. But, regarding encouraging students to consider completing an internship on the Eastern Shore, two-thirds agreed they would do so, one-third neither agreed nor disagreed, and no respondents disagreed with the statement. Asked if they would encourage their students to remain on the Eastern Shore after they completed their education, no one strongly agreed, but 43% agreed they would. Forty-three percent neither agreed nor disagreed that they would encourage their students to remain, 14% disagreed, but again none strongly disagreed.

Finally, when asked to reflect upon their own families and children, the majority of respondents indicated that their own children wanted to pursue admission to a 4-year college after high school and would be able to come home as needed (requiring less than half-a-days drive, typically not more than a full morning or afternoon of travel).

ESCC Students

Of the 19 responses returned for this survey instrument, 14 had registered responses. According to Survey Monkey's metrics, it was expected that the survey would take respondents less than 10 minutes to complete; there was a 74% completion rate for this survey. Interestingly, 46% of the respondents indicated that they did not attend high school on the Eastern Shore. Those that did were relatively evenly spread among the four listed public high schools on the Eastern Shore. The majority, 79%, did not participate in a dual enrollment program between their high school and ESCC. The one student who did, indicated that they took four courses via dual enrollment.

Thirty-six percent of the respondents were in their first semester at ESCC, 50% in their second semester, and 14% in their fourth semester. The top three factors influencing their decision to enroll at ESCC were cost (71%), proximity to home (64%), and feeling undecided about future goals/plans (43%). The majority reported that they were doing well academically at ESCC; 64% reported their GPA to be 3.00 - 3.99, and 15% reported a GPA of 4.0+.

ESCC students were asked to reflect on living on the Eastern Shore. The goal of these questions was to inform the understanding of their willingness to remain on the Eastern Shore.

Figure 11 details the side-by-side comparison of ESCC students' responses to questions about living on the Eastern Shore.

Figure 11

Question	Positive Reaction	Negative Reaction	No basis/Neutral/No opinion
I am happy living on the Eastern Shore.	78% (Strongly agree, agree, somewhat agree)	15% (Somewhat disagree, disagree)	7 %

Eastern Shore Community College Students Perceptions of the Eastern Shore

I see myself living/working/completing my education on/from the Eastern Shore after ESCC.	71% (Strongly agree, agree, somewhat agree)	15% (Somewhat disagree, disagree)	14%
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Note. Figure shows the responses from current Eastern Shore Community College students and their feelings about the Eastern Shore of Virginia.

For those not happy living on the Eastern Shore, 29% indicated that employment opportunities would need to change to attract them to live/work on the Eastern Shore. Earning potential and more development in the region ranked second on this list, both at 21%.

There are six professions that we consistently referenced in the survey instruments; the commercial space industry, rural healthcare, education, industries associated with the Chesapeake Bay, climate change, and life sciences. Of these, ESCC students responding to this instrument were most interested in rural healthcare (58%), education (50%), and the commercial space industry (25%). Respondents could make more than one selection.

Thirty-six percent of the respondents to this survey instrument indicated a plan to transfer to a 4-year college. Of these students, 71% strongly agree, agree, or somewhat agree that if there was a University of the Eastern Shore of Virginia (4-year) that they would transfer to it.

The majority of the students planning to transfer to a 4-year college had no preference for the size/enrollment at the institution. Of those who did, the preferences were for a medium to a large number of students. The majority (57%) indicated a preference to attend a school in the south region, which included Virginia, or to live at home and commute to school (43%). With regard to campus setting, the majority (57%) indicated no preference, but of those who did have a preference for metropolitan or suburban and co-ed were selected. No one indicated a preference for a rural campus setting. None of the respondents indicated a preference for a single-sex institution or an institution with a religious affiliation.

The top factors influencing their decision as to which college(s) they will apply to transfer to are financial assistance, desired major(s) offered, location, intellectually challenging/intense, and peer group/friends. The majority of respondents are currently undecided about what they would study at their transfer institution. For those who are not undecided, the top three areas of study are (1) government affairs, public relations, and international relations; (2) health professions; and (3) education. Regardless of where they are attending a 4-year college, 71% strongly agree, agree, or somewhat agree that they would consider participating in an internship on the Eastern Shore.

The top three public colleges/universities in Virginia that the respondents view positively and would consider attending are the College of William and Mary, Old Dominion University, and Virginia Tech.

Finally, when asked to reflect upon their own families, the majority of respondents indicated that their parents/guardians' highest level of educational attainment was high school graduate/GED. Their siblings' educational attainment reflected the full-range of responses available, but most top out at either high school graduate/GED or some college.

Eastern Shore High School Administration

There was one response to this survey instrument, it was 100% completed. According to Survey Monkey's metrics, it was expected that the survey would take respondents 10 minutes to complete.

The respondent identified their role as administrator, working for the Accomack County high schools – not a principal, assistant/associate principal, or guidance counselor. They have lived on the Eastern Shore for more than 20 years after moving to the Eastern Shore as an adult. Regarding their level of concern about several U.S. Census Bureau data points related to

the Eastern Shore, the respondent in this group is also concerned about the 2020 Census data, as

reflected in the table below.

Figure 12 details the side-by-side comparison of levels of concern about the 2020 Census data from the perspective of the Eastern Shore high school administrator.

Figure 12

High School Administrators	Concerns	about the	Eastern Sh	iore
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Issue	Concerned (Somewhat concerned, concerned, very concerned)	Unconcerned (Very unconcerned, unconcerned, somewhat unconcerned)	Not sure/have no opinion
Low population growth on the Eastern Shore	Concerned	N/A	N/A
Higher median age of residents of the Eastern Shore versus for Virginia	Somewhat concerned	N/A	N/A
Lower employment rate on the Eastern Shore versus for Virginia	Somewhat concerned	N/A	N/A
Higher poverty rate on the Eastern Shore versus for Virginia	Concerned	N/A	N/A
Higher percentage of people without healthcare coverage on the Eastern Shore versus for Virginia	N/A	N/A	Х
Lower percentage of residents with a bachelor's degree or higher on the	Very concerned	N/A	N/A

Note. Figure shows Eastern Shore High School Administrators concern level regarding the current or future population on the Eastern Shore of Virginia.

In this respondent's experience, most of their students will plan to pursue a trade or certificate program, while their parents want them to enter the workforce. For those planning to attend college, the two factors that the respondent indicated influence their students' decision about which colleges to apply to are location and cost. In college, in their experience, their former students will study business, education, or health professions.

This respondent indicated that they have three children, all of whom have or plan to attend a 4-year college. The children can come home as needed (requiring less than half-a-days drive, typically not more than a full morning or afternoon of travel).

Prior to completing this survey, the respondent was aware of the Foundation and indicated that they could see the benefit of establishing a four-year, degree-granting institution on the Eastern Shore and would be supportive of or in agreement with the Foundation's goal to do so.

Participants were asked to select from a list of academic programs that they believe would be a good fit for an academic partnership on the Eastern Shore. Participants could select all that they felt would apply. The top academic programs selected were education, engineering, health professions, and technology. Respondents were asked to indicate which industries offer the greatest potential for educational partnerships on the Eastern Shore, they were to select two. The top selections were the commercial space industry, education, and industries associated with Chesapeake Bay. This respondent would encourage their students to remain on the Eastern Shore after their high school graduation and would encourage their students to attend the University of the Eastern Shore of Virginia if it existed. In fact, they would encourage their students to remain on the Eastern Shore after their college graduation.

Eastern Shore High School Students

There was one response returned for this survey. It was blank. Therefore, the survey instrument did not generate any data. As previously indicated, the capstone team was unsuccessful in making connections with high school administrators who were willing to promulgate the survey instrument. Later in this chapter, the positionality of Eastern Shore high school students for postsecondary education is examined via secondary data sources.

Wallops Island Space Community

This survey instrument was intended for those associated with the NASA Flight Facility at Wallops Island, Rocket Lab, and Virginia Space/Mid-Atlantic Regional Spaceport (MARS). Five responses were returned, three with responses registered. There was one respondent from each agency. According to Survey Monkey's metrics, the survey respondents were expected to take 10 minutes to complete the survey. The completion rate was 60%.

The respondents identified their roles as administrative, business/management, and public relations. Two have worked on Wallops Island for zero to five years, and one has worked on Wallops Island for six to 10 years. One commutes to the Eastern Shore, one has lived there for six to 10 years (moved to the Eastern Shore as an adult), and one has lived on the Eastern Shore for more than 20 years (born on the Eastern Shore).

Regarding their level of concern about several U.S. Census Bureau data points related to

the Eastern Shore, the respondent in this group is also concerned about the 2020 Census data, as reflected in the table below.

Figure 13 details the side-by-side comparison of levels of concern about the 2020 Census data from the perspective of members of the Wallops Island space community.

Figure 13

Issue	Concerned (Somewhat concerned, concerned, very concerned)	Unconcerned (Very unconcerned, unconcerned, somewhat unconcerned)	Not sure/have no opinion
Low population growth on the Eastern Shore	100%	N/A	N/A
Higher median age of residents of the Eastern Shore versus for Virginia	67%	N/A	33%
Lower employment rate on the Eastern Shore versus for Virginia	100%	N/A	N/A
Higher poverty rate on the Eastern Shore versus for Virginia	100%	N/A	N/A
Higher percentage of people without healthcare coverage on the Eastern Shore versus for Virginia	100%	N/A	N/A
Lower percentage of residents with a bachelor's degree or higher on the Eastern Shore versus for Virginia	100%	N/A	N/A

NASA/Wallops Island Concerns about the Eastern Shore of Virginia

Note. Figure shows NASA Wallops Island employees' concern level regarding the current or future population.

Prior to completing this survey, only one of the three respondents was aware of the Foundation. All indicated that they could see the benefit of establishing a four-year degree-granting institution on the Eastern Shore and would be supportive of or in agreement with the Foundation's goal to do so.

Participants were asked about academic programs that they believe would be a good fit for an academic partnership on the Eastern Shore. Participants could select all from the list that they felt would apply. The top academic programs selected were (not surprisingly) engineering, math, and the sciences. Respondents were asked to indicate which industries offer the greatest potential for educational partnerships on the Eastern Shore - they were to select two. The top selections were the commercial space industry and education. All the respondents indicated that their agency offers internships on the Eastern Shore.

Respondents were asked to indicate the challenges to attracting and retaining a talented workforce to their industry or business, they could select three choices from a list of potential challenges. The top challenges selected were available housing, available employment opportunities for spouses/partners, and broadband/high-speed internet and WIFI access. The issue of educational resources for children was also indicated in multiple responses.

Finally, two of the three respondents to this instrument indicated that they are familiar with VCU, and all agree that a partnership between the Foundation and VCU would serve the educational needs of their industry.

VCU Students

Again, this survey instrument was developed specifically for the 21 VCU College of Engineering students that had a site visit at Virginia Space/MARS in the fall of 2022. There was one response from a graduate student who made the trip. They noted in their response that the instrument seemed to be geared toward undergraduate students, and it was, as undergraduates are the demographic being considered the focus for the proposed University of the Eastern Shore of Virginia for now. It should be noted though, that this respondent is interested in the commercial space industry and education/teaching and can see themselves living/working on/from the Eastern Shore.

VCU Administration, Faculty, Staff

Please recall the capstone team did not distribute this survey instrument within the VCU community. It is likely that the respondents are residents of the Eastern Shore or among the contacts made by the members of the Foundation, since they promoted the presence of the various survey links on their website. All the respondents indicated that they have visited or are familiar with the Eastern Shore.

Of the seven responses returned for this survey, all had registered responses. According to Survey Monkey's metrics, it was expected that the survey would take respondents nine minutes to complete; there was an 86% completion rate for this survey.

Fifty-three percent of respondents indicated that they have lived on the Eastern Shore for 20 years or more; one-third have lived on the Eastern Shore for zero to five years. Fifty-three percent moved to the Eastern Shore as an adult, while 27% indicated that they were born on the Eastern Shore.

One-third of the respondents to this survey identified as administrators at VCU, and two-thirds identified as faculty. Two-thirds of the respondents have worked at the university for

six to 15 years, and one-third of the respondents have worked at the university for 16 to 20 years plus.

Regarding their level of concern about several U.S. Census Bureau data points related to the Eastern Shore, the respondents in this group are also concerned about the 2020 Census data, as reflected in the table below. Figure 14 details the side-by-side comparison of levels of concern about the 2020 Census data from the perspective of VCU administration, faculty, and staff.

Figure 14

Issue	Concerned (Somewhat concerned, concerned, very concerned)	Unconcerned (Very unconcerned, unconcerned, somewhat unconcerned)	Not sure/have no opinion
Low population growth on the Eastern Shore	66%	34%	N/A
Higher median age of residents of the Eastern Shore versus for Virginia	66%	17%	17%
Lower employment rate on the Eastern Shore versus for Virginia	83%	N/A	17%
Higher poverty rate on the Eastern Shore versus for Virginia	100%	N/A	N/A
Higher percentage of people without healthcare coverage on the Eastern Shore versus for Virginia	100%	N/A	N/A

VCU Administration, Faculty and Staff Concerns about the Eastern Shore

Lower percentage of residents with a bachelor's degree or higher on the			
Eastern Shore versus for Virginia	83%	N/A	17%

Note. Figure shows Virginia Commonwealth University Administrators, Faculty, and Staff concern level regarding the current or future population.

Eighty-three percent of respondents to this survey were aware of the Foundation, and 100% indicated that they could see the benefit of the establishing a four-year degree-granting institution on the Eastern Shore and would be supportive of or in agreement with the Foundation's goal to do so. Respondents were asked, given the current trends in higher education, and based on their professional role, what form they would recommend a partnership between VCU and the Foundation take (they could select multiple responses). Sixty-seven percent selected a Center of Excellence (e.g. The VCU Rice Rivers Center), 17% a destination college or university, 50% a higher education center (e.g. The New College Institute), and 34% an upper-division college or university (one that requires applicants to have already completed their first two years. One hundred percent also selected satellite campuses.

Participants were asked to select from a list of academic programs those that they believe would be a good fit for an academic partnership on the Eastern Shore. Participants could select all that they felt would apply. The top three academic programs selected were engineering (100%), sciences (100%), and health professions (83%). Respondents were asked to indicate which industries offer the greatest potential for educational partnerships on the Eastern Shore, they could select two. The top selections (with tied rankings) were the commercial space industry, climate change, and the life sciences.

Regarding internships, the respondents indicated that VCU could encourage students to participate in internships on the Eastern Shore in all of the professions listed: the commercial

space industry, 50%; rural healthcare, 83%; education, 33%; industries associated with the Chesapeake Bay, 83%; climate change, 100%, and life sciences, 83%.

The respondents uniformly see a partnership between VCU and the Foundation as a reflection of VCU's values and in alignment with the university's strategic plan (Quest 2028). They are unanimous in their view that a partnership will benefit both VCU and the Foundation, as well as the Eastern Shore.

Positionality of Eastern Shore High School Students for Postsecondary Education

The Eastern Shore of Virginia consists of Accomack County Public Schools (ACPS) and Northampton County Public Schools (NCPS). As a part of our quantitative data collection, we attempted to assess the postsecondary interests of 11th and 12th-grade students within the ACPS and NCPS school districts via a web-based survey (see Appendix D). In an effort to collect the data, we first began by contacting the guidance counselors and administrative personnel within ACPS and NCPS high schools. Via email, we described the purpose of our study and requested permission to administer our survey to their 11th and 12th-grade students. We centered our focus on 11th and 12th-grade Eastern Shore students, due to their proximity to high school graduation and postsecondary decision-making. Our outreach efforts to the high schools generated one response which came from a guidance counselor within ACPS and directed us to contact the district's central office with our request. Based on that response, we contacted central office personnel at Accomack and Northampton County Public Schools. After several weeks of follow-up emails and calls, our attempts to survey 11th and 12th-grade students within ACPS and NCPS high schools were unsuccessful.

Due to our inability to primarily collect data from 11th and 12th-grade Eastern Shore students, we sought secondary data to inform our understanding of their positionality for

postsecondary education. Secondary data refers to data collected by someone other than the user for some other purpose (Sindin, 2017). Our team was able to successfully secure secondary data from the Virginia Department of Education (VDOE). The VDOE regularly collects a wide variety of data "on public education in the commonwealth, including information on enrollment, demographics, student achievement, postsecondary trends, finances and safety" (VDOE, Data Collections, n.d.). We also collected secondary data from the National Center for Education Statistics (NCES) to inform our understanding of the ACPS and NCPS districts.

Eastern Shore Public Schools

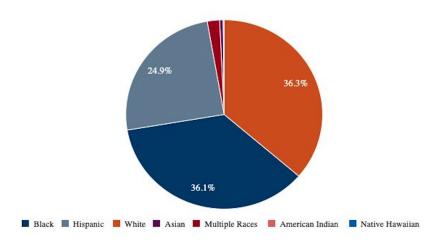
Located between the waters of the Chesapeake Bay and the Atlantic Ocean, the Accomack County and Northampton County school districts are defined by the National Center for Education Statistics (NCES) as *rural remote*. A *rural remote* locale is a census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster (NCES, Locale Classifications, n.d.). As discussed in Chapter Two, the literature tells us that the rural nature of Eastern Shore public schools means its students face unique challenges when it comes to accessing postsecondary education. These include but are not limited to: a lack of public transportation, long distances between campuses, and the lack of an adequate internet infrastructure (Ratledge et al., 2020). Our review of the literature also revealed that when rural youth in remote areas want to pursue postsecondary education, they often need to move because of fewer local educational opportunities and strong preferences to stay near family (Johnson, 2019). Subsequently, rural students tend to lower their educational aspirations and pursue more limited postsecondary opportunities nearby in order to maintain familial connections and support (Johnson, 2019).

Accomack County Public Schools (ACPS). Within the ACPS district, there are 13 schools spanning Pre-Kindergarten through 12th grades. Chincoteague, Nandua, Arcadia, and

Tangier Combined are the four high schools within the district. The VDOE's *Fall Membership* report reflects its annual collection of statistics on the number of students enrolled in public school on September 30. *Fall Membership* data is submitted by each school in Virginia that officially enrolls students and is collected at the student level (VDOE, Fall Membership Build-A-Table, n.d.). As reflected in Figures 15 and 16 below, ACPS is a racially diverse district that has served an average of 4,790 students over the past three academic years.

Figure 15

Virginia Department of Education Membership by Race and Ethnicity for Accomack County Fall Membership by Subgroups



2022 Fall Membership By Subgroup: Racial and Ethnic Groups

Note. Source: VDOE, School Quality Profiles - Enrollment - Fall Membership by Subgroups - Accomack County Public Schools, n.d.

Figure 16

Virginia Department of Education Membership by Grade for Accomack County

Grade	2020-2021	2021-2022	2022-2023
Pre-kindergarten	123	135	144
Kindergarten	311	314	311
Grade 1	340	333	330
Grade 2	319	320	345
Grade 3	348	314	318
Grade 4	379	329	322
Grade 5	344	374	335
Grade 6	378	360	378
Grade 7	408	363	361
Grade 8	372	409	363
Grade 9	430	491	468
Grade 10	423	359	398
Grade 11	345	333	326
Grade 12	344	318	328
Post Graduate	9	6	12
Total Students	4,873	4,758	4,739

Fall Membership by Grade

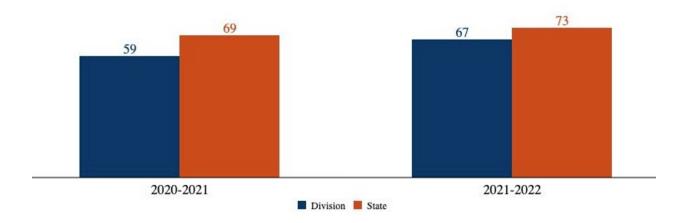
Note. Source: VDOE, School Quality Profiles - Enrollment - Fall Membership by Grade - Accomack County Public Schools, n.d.

Based on math and reading proficiency scores (see Figures 17 & 18), ACPS ranked within the bottom 50% of all 133 school districts in Virginia for the most recently concluded academic year, 2021-22 (VDOE, n.d.). The average reading proficiency score for ACPS students was 67% (versus the 73% statewide average), and the average math proficiency score was 63% (versus the Virginia public high school average of 66%).

Figure 17

PUTTING THE "U" IN SHORE U

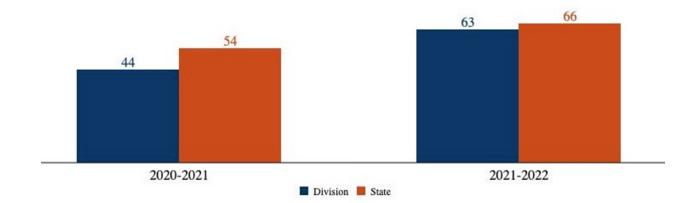
Accomack County Public Schools Reading Performance



Note. Source: VDOE, School Quality Profiles - Assessments - Reading Performance - Accomack County Public Schools, n.d.

Figure 18

Accomack County Public Schools: Math Performance

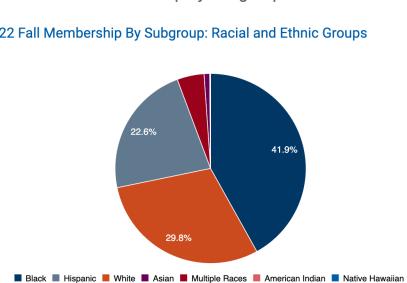


Note. 2020-2021 reading and math results reflect reduced student participation in state reading assessments due to Covid-19. The wide variations in participation rates and learning conditions should be taken into consideration when reviewing 2020-2021 data. Source: VDOE, School Quality Profiles - Assessments - Math Performance - Accomack County Public Schools, n.d.

Northampton County Public Schools (NCPS). Within the NCPS district, there are five public schools spanning Pre-Kindergarten through 12th grades. The district comprises two elementary schools, one middle school, a tech center, and one high school (Northampton). As reflected in Figures 19 and 20, data from the VDOE's Fall Membership by Subgroups (n.d.) report shows that the NCPS district is also racially diverse. Additionally, NCPS is noticeably smaller than ACPS, having served an average of 1,373 students over the past three academic years.

Figure 19

Virginia Department of Education Membership by Race and Ethnicity for Northampton County



Fall Membership by Subgroups

2022 Fall Membership By Subgroup: Racial and Ethnic Groups

Note. Source: VDOE, School Quality Profiles - Enrollment - Fall Membership by Subgroups -Northampton County Public Schools, n.d.

Figure 20

Virginia Department of Education Membership by Grade for Northampton County

Grade	2020-2021	2021-2022	2022-2023
Pre-kindergarten	48	63	65
Kindergarten	89	83	90
Grade 1	101	89	89
Grade 2	100	90	85
Grade 3	86	99	94
Grade 4	125	83	93
Grade 5	110	122	86
Grade 6	84	101	118
Grade 7	112	86	111
Grade 8	102	108	95
Grade 9	123	102	112
Grade 10	107	114	104
Grade 11	118	100	114
Grade 12	105	110	103
Total Students	1,410	1,350	1,359

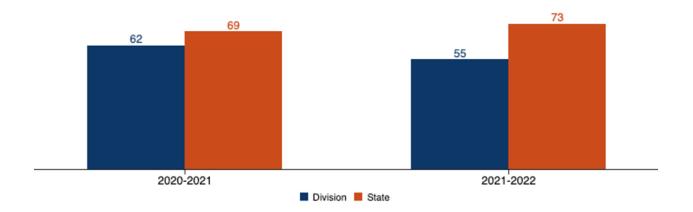
Fall Membership by Grade

Note. Source: VDOE, School Quality Profiles - Enrollment - Fall Membership by Subgroups - Northampton County Public Schools, n.d.

Based on reading and math proficiency scores (Figures 21 and 22), the NCPS district ranked within the bottom 50% of all 133 school districts in Virginia for the 2021-22 academic year (VDOE, n.d.). The average reading proficiency score was 55% (versus the 73% statewide average), and the average math proficiency score was 44% (versus the Virginia public high school average of 66%).

Figure 21

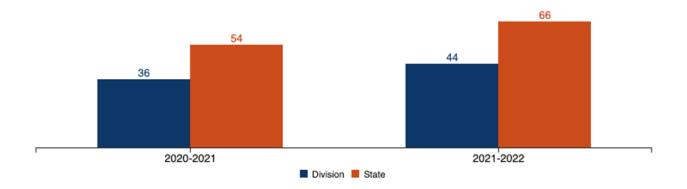
Northampton County Public Schools: Reading Performance



Note. VDOE, School Quality Profiles - Assessments - Reading Performance - Northampton County Public Schools, n.d.

Figure 22

Northampton County Public Schools: Math Performance



Note. 2020-2021 reading and math results reflect reduced student participation in state reading assessments due to Covid-19. The wide variations in participation rates and learning conditions should be taken into consideration when reviewing 20-21 data. Source: VDOE, School Quality Profiles - Assessments - Reading Performance - Northampton County Public Schools, n.d. *VDOE Assessment of College and Career Readiness*

The Virginia Department of Education annually collects data to assess the college and career readiness of Virginia students. As we assess how the Shore U Foundation can most effectively expand postsecondary education on Virginia's Eastern Shore, college and career readiness data on ACPS and NCPS students is vital to our understanding. The VDOE uses the following metrics as a part of its college and career readiness assessment:

- **Graduates** Graduates are defined as students who earn either an Advanced Studies or Standard Diploma.
 - Advanced Studies: To graduate with an Advanced Studies Diploma, a student must earn at least 26 standard units of credit by passing required courses and electives and at least nine verified units of credit by passing Standards of Learning end-of-course assessments in English, mathematics, science, and history. Students who entered the ninth grade in 2013-2014 and afterward must also successfully complete one virtual course (VDOE, Advanced Studies Diploma: Graduation Requirements, n.d.). The International Baccalaureate (IB) Diploma and Modified Standard Diploma are available for students who have successfully completed the IB curriculum within their high school and are considered a part of the Advanced Diploma count for VDOE purposes.
 - Standard: To graduate with a Standard Diploma, a student must earn at least 22 standard units of credit by passing required courses and electives and earn at least six verified credits by passing end-of-course SOL tests or other assessments approved by the Board of Education. Students who entered the ninth grade in 2013-2014 and afterward must earn a board-approved career and technical education credential to graduate and successfully complete one virtual course

(VDOE, Standard Diploma: Graduation Requirements, n.d.). The Applied Studies Diploma and Modified Standard Diploma are available for certain students with disabilities and are considered a part of the Standard Diploma count for VDOE purposes.

- **On-time Graduate** On-time graduates are students who earn an Advanced or Standard diploma within four years of entering the ninth grade.
- **On-Time Graduation Rate** The On-Time Graduation Rate is based on four years of longitudinal student-level data and accounts for student mobility, changes in student enrollment, and local decisions on the promotion and retention of students.

Figure 23 provides a snapshot of the *Diplomas and Completion* data collected by the VDOE for the Class of 2022 for both Accomack and Northampton County Public Schools, as well as at the state level.

Figure 23

Accomack and Northampton County versus All Public Schools in Virginia Diploma and

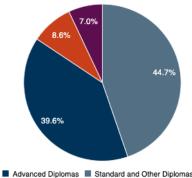
Completion Data

Accomack County Public Schools

Diplomas and Completion

Class of 2022: All Students

Division

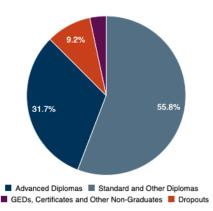


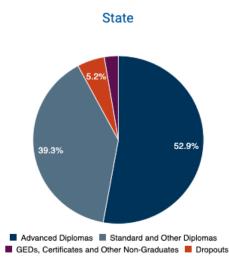
GEDs, Certificates and Other Non-Graduates Dropouts

Northampton County Public Schools Diplomas and Completion

Class of 2022: All Students

Division





Note. Source: VDOE, School Quality Profiles - Diplomas and Completion - Accomack County Public Schools, n.d. and VDOE, School Quality Profiles - Diplomas and Completion -Northampton County Public Schools, n.d.

Figures 24 and 25 provide a snapshot of the *Four-Year On-Time Graduation Rate* over time for Accomack County Public Schools and Northampton County Public Schools in comparison to students from all Virginia school districts.

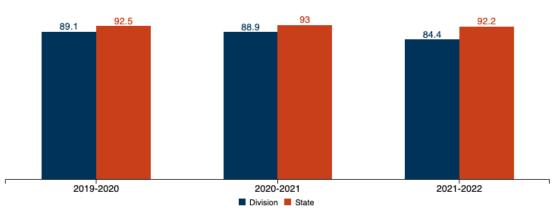
Figure 24

Four-Year On-Time Graduation Rate for Accomack County in comparison to all Virginia School districts.

Accomack County Public Schools

Four-Year Virginia On-Time Graduation Rate

On-Time Graduation Rate Over Time: All Students

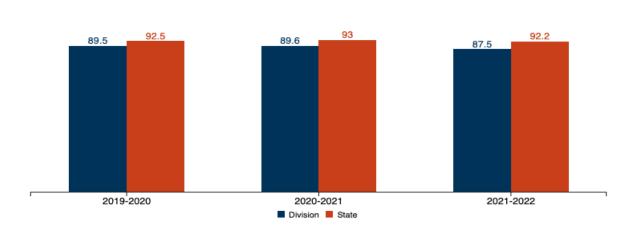


Note. Source: VDOE, School Quality Profiles - Four-Year Virginia On-Time Graduation Rate - Accomack County Public Schools, n.d.

Figure 25

Four-Year On-Time Graduation Rate for Northampton County in comparison to all Virginia School districts.

Northampton County Public Schools



On-Time Graduation Rate Over Time: All Students

Four-Year Virginia On-Time Graduation Rate

Note. Source: VDOE, School Quality Profiles - Four-Year Virginia On-Time Graduation Rate -Northampton County Public Schools, n.d.

Postsecondary Enrollment of ACPS and NCPS Students. The VDOE also collects postsecondary enrollment data as part of its college and career readiness assessment of Virginia students. The VDOE's *Graduates and Completers* report provides a breakdown of Virginia high school graduates and completers by school division. Graduates in the context of this report are defined as students who have earned an Advanced Studies or Standard diploma and Completers are defined as students who have earned a Certificate of Program Completion by completing a prescribed course of study, defined by a local school board, but that do not qualify them for a

diploma (VDOE, High School Graduates & Completers, n.d.). In reporting data for this report, graduates and completers may provide one of six areas of intended plans upon graduation (VDOE, High School Graduates & Completers, n.d.):

- Four-year college plans student plans to attend a four-year accredited college or university
- Two-year college plans student plans to attend a two-year or community college
- Other plans student plans to attend a business school, trade/technical school or participate in an apprenticeship program
- No continuing education plans student provides no further education plans upon graduation
- Military student plans to serve in the military
- Employment student plans to go into the workforce

Appendix K provides a breakdown of the VDOE's *Graduates and Completers* report for the ACPS and NCPS school districts for the past three academic years. We see that within ACPS, an average of 77% of graduates and completers enrolled in either a 2-year or 4-year Institution of Higher Education (IHE) post-graduation. Within NCPS, this average drops to roughly 55%. The data provided in Appendix K also reveals that over the past three academic years, within ACPS, an average of 9% of graduates and completers sought employment post-graduation, an average of 6% joined the military, an average of 2.8% reported Other Plans, and roughly 4.97% of ACPS's graduates and completers reported having No Continuing Education Plans post-graduation. Within NCPS, an average of 26.31% of graduates and completers sought employment post-graduation, an average of 8% joined the military, an average of 7% reported Other Plans, and roughly 3% of NCPS's graduates and completers reported having No Continuing Education Plans post-graduation.

Implications of the Positionality of Eastern Shore High School Students on the Study

The implications of the data collected from the Virginia Department of Education are multi-faceted. We see from the graduation data (Figures 23, 24, and 25 & Appendix K) that ACPS and NCPS serve a relatively low number of students. These students are racially diverse (see Figures 15 and 19), and a majority graduate with a Standard Diploma. There is a positive on-time graduation rate within both school divisions, and these rates are only marginally lower than state-wide figures. This finding is consistent with the literature, which indicates that smaller learning environments encourage student engagement and allow for positive interaction and relationship building among teachers and students which aids student retention and completion (Rao & Ye, 2016). We have also learned from the data that ACPS and NCPS students have lower math and reading scores as compared to students from districts across the state. As we design a path forward for Shore U, this data suggests that academic support structures may be critical to the postsecondary success of Eastern Shore students.

While we don't have data relevant to their postsecondary completion, the VDOE's postsecondary enrollment data (see Appendix K) confirms that for the past three academic years, the majority of ACPS graduates and completers enrolled in a 2 or 4-year institution of higher education post-graduation. This data is promising for Shore U as it suggests that an attractive postsecondary option on the Eastern Shore of Virginia has the potential to enroll a large portion of ACPS graduates and completers. Postsecondary enrollment numbers are lower for NCPS, with 50%, 53.13%, and 62.22% of its graduates and completers enrolling in a 2 or 4-year institution of higher education post-graduation (at the end of the 2021-22, 2020-21, and 2019-20 academic

127

years, respectively). The data still implies, however, that NCPS students are likely to have an interest in additional postsecondary options on the Shore. It is also important to note that a significant portion of NCPS' graduates and completers have increasingly sought employment post-graduation (38.68%, 28.13%, and 12.12% at the end of the 2021-22, 2020-21, and 2019-20 academic years, respectively). As we outline a path forward for Shore U, this data speaks to opportunities to support Eastern Shore students and residents, especially those of Northampton County, through internships and career and technical education offerings.

Qualitative Phase

Upon the completion of phase one of the research project, including the collection and analysis of quantitative data and secondary research, the capstone team initiated phase two of the project focused on qualitative research. For the purpose of the qualitative data collection and analysis, the terms "Eastern Shore," "the Shore," or "ESVA" are all referencing the Eastern Shore of Virginia, as they were used interchangeably by our respondents.

Data Collection

From the findings of the phase one survey responses and secondary data sources, qualitative interview questions were developed to further explore the research questions. While certain questions were asked of all participants, additional questions were developed based on the participant's role in the study. Participants for phase two were identified by their survey responses as indicating that they would be interested in participating in an additional focus group or interview. Additional participants were sought based on recommendations from the Foundation. Participants were recruited via email and scheduled utilizing the Zoom software. As noted below in Figure 26, participants were categorized as a general community member of the Eastern Shore, an Eastern Shore Community College staff, faculty, or administrator, an employee of a business currently located on the Eastern Shore, or a Virginia Commonwealth University staff or faculty member. More specific information on each participant is not provided to promote the anonymity of interview participants. Additionally, the type of interview is noted depending on whether the interview was conducted with a single individual or as part of a group.

Figure 26 provides de-identified information about qualitative interview participants.

Figure 26

Participant #	Role	Interview Type
1	ESCC Faculty, Staff, or Administrator	Individual
2	ESCC Faculty, Staff, or Administrator	Individual
3	ESCC Faculty, Staff, or Administrator	Individual
4	ESCC Faculty, Staff, or Administrator	Individual
5	Employee of an Eastern Shore Business	Individual
6	Employee of an Eastern Shore Business	Individual
7	Employee of an Eastern Shore Business	Group
8	Employee of an Eastern Shore Business	Group
9	Eastern Shore Community Member	Individual
10	Eastern Shore Community Member	Individual
11	Eastern Shore Community Member	Group
12	Eastern Shore Community Member	Group
13	Eastern Shore Community Member	Group
14	Eastern Shore Community Member	Group
15	Virginia Commonwealth Faculty	Individual

Qualitative Interview Participants

Note. This figure contains the participant numbers, role, and type of interview for the qualitative data phase of the capstone project.

Qualitative Themes, Subthemes, and Codes

While analyzing the qualitative data, inductive and deductive coding techniques were used to gain a better understanding of the depth and nuances of the interviews and focus groups. Overall, people spoke very highly of the Foundation's desire to positively impact the Eastern Shore of Virginia. One participant said, "It will just benefit [the Shore] for many years to come. So beyond just that few years of, you know, the actual education piece. Just that impact! There would be a long term impact which would be just awesome for the Shore!" Conversely, others felt very strongly that the Foundation should be clear about its mission, vision, and values moving forward to promote authenticity and transparency. The participant shared, "You don't start an institution of higher education because you want to do economic development. You start it because you want to educate people." Keeping the passion for the Shore central to our work as a capstone team, the following outlines the four main themes that the capstone team found in the qualitative data as well as sub-themes to provide more detailed and nuanced information.

Theme 1: Positives of Living and Working on the Eastern Shore

Throughout the quantitative phase, the capstone team wanted to focus on the positives of living and working on the Eastern Shore so that the Foundation could capitalize on what people felt were the unique strengths of the Eastern Shore of Virginia. Most interview participants spoke very passionately about the Eastern Shore and what they loved about working and living there. Within this theme, two sub-themes emerged regarding the natural environment and the people of the Eastern Shore.

Environment. The vast majority of participants noted that one of their favorite things about the Eastern Shore was the natural beauty of the landscape. Three participants specifically spoke about their love of the outdoors and outdoor activities such as camping and hiking.

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Beyond the aesthetics of living in such a beautiful place, many participants also noted the maritime education and career opportunities offered by the Eastern Shore because of its natural access to the ocean, bay, and marsh ecological environments. One community member remarked, "One of the one [*sic*] of the statistics that I ran into some time ago is that the Shore is the least inhabited place on the entire Atlantic coast." Many participants remarked that the scenery and landscape goes unrivaled when compared to beaches elsewhere, and the Eastern Shore even served as an inspiration for architecture and design students at VCU in the fall of 2021.

Community. In addition to the natural beauty of the Eastern Shore, another common sub-theme that emerged as part of the reason they loved living on the Eastern Shore was the "people." Participants talked about how the Shore, although made up of multiple counties and cities, felt like one small town. The "people" of the Shore were noted as being "friendly," "caring," "kind," and "helpful." More than one respondent offered the observation that in their experience on the Eastern Shore when some asks, "how are you?," they actually want to know. One Eastern Shore community member said, "There's good people that are here. They're hardworking, determined folks, and they know how to roll up their sleeves and work and do good work and very kind, generous." Another participant stated, "I think there's a lot of people who really care a great deal about the community and about the people who live here and the environment here," when asked about what she loved most about living and working on the Eastern Shore. However, the same participant shared her difficulties with initially connecting with people after moving, describing her experience as "...it's very hard to meet people. And to make connections, especially if you're young, and if you don't have built-in networks. So our first couple of years, I basically knew and talked to no one. That was really hard."

Furthermore, many participants talked about the large number of community members who emigrated from Haiti or were first-generation Americans born of Haitian immigrants. The agriculture and chicken processing industry on the Eastern Shore were noted as the major draw to the region for this population. Speaking of the benefits of having different cultures present on the Eastern Shore, one community member remarked:

There is an increasing Haitian population here on the Eastern shore. And, of course, they speak Creole variation of French. And the local hospitals, I think they do a good job to make sure that that healthcare is there for the Haitians and that the language barrier doesn't become an issue. I have noticed that. And that's a good thing!

Theme 2: Challenges of Living and Working on the Eastern Shore

Living and/or working on the Eastern Shore of Virginia does not come without challenges, according to all interview and focus group participants. All participants mentioned the concept of needing to leave the Eastern Shore to access a resource or service not currently available to them. The theme of "leaving the Shore" is consistent throughout discussions of the challenges of living on the Eastern Shore and is also central to the overall study's purpose of exploring postsecondary education options to not only attract new students to the Eastern Shore but also in the Foundation's efforts to keep current community members from leaving the Eastern Shore.

Population Decline and Aging Population. The original concern of the Foundation members regarding the overall population decline and the fewer number of people from younger generations coming to the Eastern Shore was confirmed in the qualitative interview data. Not only were participants concerned about the higher median age of the population, but one, in particular, noted that the part of the population in "[the] interim years between growing up and

retiring is challenging." Another participant spoke openly about how not having in-person education options beyond the associate's degree level may have led to a decrease in the younger population. She specified, "We lose the best of our young people." Additionally, another participant stated:

The idea that it is a common complaint among parents here that when their kids go away for an education off the Shore, they never come back, and I think that, but having more educational opportunities locally, particularly, perhaps, to go from a year or two at the Community College, and then into a university would be the sort of thing that would help to make more people stay here longer.

Lack of Resources/Opportunities. The lack of available resources and opportunities on the Eastern Shore was a central concern throughout all interviews. Quality healthcare, including physical and mental health services, were mentioned by participants as being a challenge of living on the Eastern Shore. Even finding care for pets was noted as a challenge by those living on the Eastern Shore, especially in regard to emergency vet services or specialized care. Healthcare, and in particular rural health, emerged as sub-themes in many interviews. Participants were quick to note the lack of these resources, as well as other related challenges, such as poor Internet for telehealth opportunities, but they also spoke openly about potential partnerships and pathways for Shore U in these areas.

Commerce and other consumer-based industry was frequently noted by participants as a reason for needing to leave the Eastern Shore. The lack of shopping and other services plays a role in a variety of other challenges as well, like access to quality food for specialized diets. For example, two participants talked specifically about the availability of more specialized grocery stores such as Whole Foods or Wegmans and needing to leave the Eastern Shore to find such

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stores. Additionally, many participants shared their desire for new restaurants and food venues on the Eastern Shore. While further economic development of the Eastern Shore was talked about positively by all participants, some indicated that too much growth and development would cause the Shore to lose its charm. One participant, whose husband was born and raised on the Eastern Shore, stated simply, "He wants the Shore to stay the Shore."

The lack of affordable housing was also a concern for many of the interview participants. Beach homes, retirement homes, and second homes were all mentioned as being plentiful in the area, but finding apartments, condominiums, and affordable single-family homes was singled out as being a very significant problem for young people and those of pre-retirement age. In response to a question about commuting to work on the Eastern Shore, one participant noted, "...there's probably more [coworkers] living up North than there are living down South in the local area. And a lot of that is due to housing. There is just not the opportunities here." Another community member of the Eastern Shore put it this way, "We do have a housing shortage here, primarily workforce housing shortage. That's a huge barrier right now is the housing, not just the cost, but the inventory, the amount of housing. We don't have enough of it either."

Additionally, services such as fast and reliable internet, good electricity, clean water, effective sewage disposal, and access to propane and natural gas were mentioned by participants as being difficult to come by on the Eastern Shore. More participants elaborated on how the lack of reliable, widespread broadband internet was a direct challenge to adjusting to virtual work in the post-Covid-19 pandemic world. One participant said frankly, "If I didn't have a hot spot that NASA provides me, I wouldn't have access to the Internet." Furthermore, trade service providers like plumbing, HVAC, and electrical services were mentioned not only as being in high demand and in short supply but also those who do currently provide those services were noted as being

closer to retirement age and being of an older generation. This inherently would create a shortage issue if there are not enough qualified and trained professionals to replace those who might be retiring in the very near future.

Childcare for children who are too young to attend school, and quality afterschool care were mentioned as barriers by several participants, especially those who came to the Eastern Shore without any family or prior friendships. While some community members could rely on family members or friends to watch their children, those without these resources felt it necessary to either stay home with their children for a certain period of time or seek childcare further up the peninsula or on the Virginia mainland. The Eastern Shore Community College does provide child care assistance in the form of financial support, but it does not currently offer on-site daycare to students. Access to childcare may be another barrier preventing students from achieving higher education.

Many participants also noted a quality, public K-12 education as being a scarce resource on the Eastern Shore. A few participants talked about the lack of funding for schools in both Accomack County and Northampton County. This lack of funding affected the physical buildings where learning is supposed to happen and was talked about with less-than-desirable adjectives. When talking about the public schools currently on the Eastern Shore, participants noted that not only was attracting new teachers to the Eastern Shore a challenge, but retaining the good teachers they currently have was a challenge as well. One participant said, "We're doing [teaching program] because we need teachers. We're like everybody else. We're operating without all the teachers that we need."

Barriers to Education. While discussing the lack of available resources and services, participants also spoke to specific barriers to pursuing further educational opportunities at the

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community college and pursuing further education beyond those offered at ESCC. The overall theme of lack of financial resources and financial hardships was prevalent in almost every interview regarding the challenges of living on the Eastern Shore and also present in conversations about barriers students face at the community college. Lack of financial resources plays a part in the challenges mentioned previously, such as affordable housing and access to quality food, but it also is a major factor in the subthemes described further below.

Transportation was a major concern noted by many participants as a significant barrier to education and work. Students without their own vehicle or resources to operate a vehicle typically relied on the public transportation available on the Eastern Shore. Because public transportation is limited, students who live farther away from the community college or other resources may spend the majority of their day working around the public transportation schedule. For example, a student may spend a total of eight hours getting to and from the community college campus for a single two-hour class. Beyond the difficulties of securing reliable transportation lies the issue of traffic congestion and high commute times which were noted as challenges by several participants.

One additional barrier to education noted by the faculty, staff, or administrators at ESCC was the large portion of the population who spoke English as a second language (ESL) and the majority of students who identified as first-generation college students. All participants spoke of the positives of the diversity and multiculturalism present on the Eastern Shore; however, educators are aware of the significant challenges faced by first-generation college students compared to their non-first-generation classmates. Additionally, speaking another language adds to the cultural diversity of the area, but many students must first take English courses to become proficient enough to excel in classes that require written and verbal communication assignments.

Thus, these students are having to complete a set of requirements prior to enrolling in any degree, certification, or credentialing programs to progress in their careers.

Theme 3, Current and Future Partnerships

Regardless of the participant's role, the capstone team wanted to explore partnerships with local, state, and national organizations that might benefit the Foundation and its goals now and into the future. As a team, we recognize that mentioning these businesses, organizations, and institutions does not imply any current or future promise of a relationship with the Foundation. Many of the participants mentioned VIMS, the Virginia Institute of Marine Science, which has a located on the Eastern Shore as a likely partner of the Foundation (note, VIMS is a marine research and education center associated with William & Mary's School of Marine Science, but also serves as an advisory agency to the Commonwealth). As mentioned previously, the ecological availability of the Eastern Shore provides an ideal opportunity for marine science and environmental science programs. Additionally, careers in aquaculture, marine science and biology, and also the Navy were all mentioned as possible avenues of exploration for Shore U.

Additionally, partnering with the local K-12 school systems currently on the Shore would allow the Foundation to provide support for already established programs focused on engaging students in STEM studies. Many of the participants shared that partnering with the programs that already exist and funding/supporting new programs of this kind would be mutually beneficial as students in middle school and high school begin to think about what classes they need to take in order to take the next step in the college or career journey. For example, one participant spoke about programs like the Virginia Space Coast Scholars, where spots might be held for local students, but the challenge is finding students who will apply and participate. Similarly, Rocket

Lab does work with school-aged children to get them excited and involved in STEM careers. During their interview, one employee said:

We do a lot of tours with young kids. So we're excited to share that and open what we do to the local community. So [that] people better understand and know that there's a future if they stay here, and, you know, get an education, and they can come back and work here [at Rocket Lab].

Another sub-theme that emerged from the qualitative data was Shore U's potential partnership with other colleges and universities in Virginia. From the interviews, VCU, UVA, Virginia Tech, and ODU were all mentioned as possible partners. Serving as a site for academic projects and "domestic-abroad" experiences was also mentioned by participants as a way to partner with colleges and universities and show off what the Eastern Shore has to offer. One former VCU faculty member spoke about his experience taking students to the Eastern Shore and his hopes for the future as:

I think what we hope to do is develop this domestic study abroad program so that it becomes part of our curriculum. So that just like going to Florida in the summer, you can go to the Eastern Shore in the summer and it wouldn't cost you as much and you're closer to home.

Internships and Clinicals. One emerging theme from the qualitative data was the opportunities for internships at current Eastern Shore businesses and corporations. NASA at Wallops Island, Virginia Space Authority and the Mid-Atlantic Regional Spaceport (MARS), and Rocket Lab provide internship opportunities for students from all over the globe, but local businesses and industries, such as the city planning department, offer internships as well. It seems that NASA is well aware of the workforce challenges at present. In their interview, one

employee of NASA stated, "Our bottom line is, we need to recruit and educate the next generation of our workforce." Furthermore, in regards to the benefits of hiring people from the Shore, they stated:

There is a trend that if you're from this Shore you already know the benefits, the lifestyle, the recreation. You have family here. You're more likely to stay long term, and some of our top managers in all of our offices were from the shore, and that's their story.

An additional challenge noted by many participants regarding internships was disseminating information about the internships and having current students follow through with the application process. Shore U Foundation might explore ways to support internships already planned for the Eastern Shore while developing relationships with local entities.

Rural health was also mentioned by many participants, both in the lack of available healthcare options, but also in the potential for clinical programs and partnerships. For example, students studying dentistry, mental health therapy and counseling, family medicine, and nursing were all mentioned as potential partners needing clinical experience to complete this degree. To the study participants, this kind of partnership would be a mutually beneficial one, in that students needing clinical hours would be able to complete them while providing health services that are needed on the Eastern Shore.

Similar to internships, one participant expounded upon the benefits of a co-op program with universities and colleges across the nation. He shared an experience of his partner, including his thoughts:

A co-op program and I could see that as a as a real asset here that that people could work as students in in actual work, and that would be a good way for them to test out how well they really like those careers, and it also gives employers a chance to see the people in action, and maybe find people that they want to hire going forward.

Eastern Shore Community College. In our interviews with ESCC administration, faculty, and staff the role of the community college it was clear that whatever postsecondary education option the Foundation chooses to pursue, ESCC will be vital to the venture's success. The community college is already an integral part of the Eastern Shore community, with one participant noting, "We fill a lot of community needs that otherwise would go unserved. There's no one else to do a lot of what we do." One Eastern Shore Community College interviewee said:

Half of our population is either in poverty or working poor. And so, I wake up every day, come to work every day, concerned about how is it that we help people make a living wage? And not just a living wage, but I'm talking about a great career. And I think that that's one of the things that we need to be able to do if the Eastern Shore is going to flourish.

Furthermore, Shore U's collaboration with ESCC is in line with the vision of its administration, faculty, and staff. As one interviewee said when asked what they would like to see happen in the future, they said:

I would like to see within five years that we have created relationships with a limited number of four-year institutions so that those students who want to complete a four-year degree can do so without leaving the shore. And that your Eastern Shore community college would be the hub for being able to do that.

Theme 4, Academic Considerations and Options for Shore U

Regardless of the participant's role, all qualitative interviewees were asked to think about potential academic pathways, partnerships, and future goals for Shore U. Many themes emerged

that were in line with the analysis of the quantitative data, the literature review, and with the prior work of the Foundation. However, novel sub-themes emerged as well, especially in the topics of bachelor's degree or four-year degree completion, educational institution options, and academic and degree considerations.

Bachelor's Degree Completion. Many participants expressed concern about the lack of opportunity to complete a bachelor's degree in person while remaining on the Eastern Shore of Virginia. While the Covid-19 pandemic has led to an increase in online classes and online degree programs, these options can ostensibly be completed from anywhere and do not require a student to remain on the Eastern Shore. However, one participant from the ESCC noted that "the only option is remote and requires [a] maturity that not everyone has," in response to a question about completing a four-year degree. For in-person degree or class options, participants identified the need to travel to the Virginia mainland or seek an out-of-state option in Delaware or Maryland to complete their degree.

While the completion of a four-year degree was mentioned as essential to a variety of career fields, some participants were quick to point out that not all services, careers, and industries on the Eastern Shore require a four-year degree. Unsurprisingly, the four interviews conducted with ESCC administration, faculty, and staff all mentioned the importance of trade and skilled job training and workforce development provided by the community college. Another emerging theme focused on the current need for plumbers, electricians, and other trades workers on the Eastern Shore and the need for additional training beyond what the community college currently offers.

Educational Institution Options. While one option for Shore U is a completely new institution of higher education, there was only marginal support for an upper-division school or

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four-year degree completion option. In contrast, there was outright opposition to the possibility of a four-year institution on the Eastern Shore of Virginia, especially in relation to competition with ESCC. Additionally, some participants were more concerned about strengthening what is currently available on the Eastern Shore before introducing something new or novel. For example, one participant responded to an interview question regarding postsecondary education options for the Foundation with:

If the energy that was put into trying to create something new was instead put into supporting our existing organizations like our community college and like our public school systems, I think we would get a lot more bang for our buck.

Noting the challenges of reliable high-speed internet access and the evolution of digital learning, many participants talked about a physical building or campus where students could complete certifications, credentials, or four-year degrees similar to a center for higher education. Furthermore, one participant shared that an upper-division school with a "seamless plan of transferability" from the local community college would be ideal to finish out their four-year degree goals. Similarly, an intercollegiate degree option was suggested by one participant who shared her own journey of attending classes at multiple colleges and universities to complete her degree in Ecology.

Academic Programs, Certifications, and Degrees. Interview and focus group participants were asked to expound upon academic majors, programs, certifications, or credentials that would be helpful to current and future industries on the Eastern Shore. The majority of participants identified aerospace engineering and other associated degrees due to the space industry already present on Wallops Island (NASA, Virginia Space Authority/MARS, and Rocket Lab). General engineering degrees, as well as more specialized majors, were also

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mentioned by participants at ESCC, especially in relation to their new engineering degree program.

Participants also noted the importance of degree programs, certifications, and credentials that support the current and future businesses of the Eastern Shore. Human Resources and Business degrees were noted by some participants, while others mentioned law and legal services, community health care, farming and agriculture, and aquaculture. There was a sub-theme that emerged from the data of the importance of not focusing on just engineering fields or even just STEM fields. One employee at Virginia Space Authority said:

We also want to drive home for them [students] the fact that you do not have to be an engineer. I'm not an engineer. Our pad facilities manager is not an engineer. There's a lot of people that work here [Virginia Space Authority] that are integral to what we do, but they're not math and engineering people. So we want to drive that point home to students as well.

Furthermore, a former VCU faculty member said of his project-based program experience, "I think we can teach scientists or other disciplines, as well as just the connection between the quantifiable information and qualitative information. I think that's a real place in any curriculum."

Lastly, in alignment with the other themes regarding the lack of quality K-12 education and childcare, a few participants noted the importance of quality teacher education programs. These programs were offered as a means to not only provide more qualified educators to the Eastern Shore but also may benefit via a partnership with the current public schools through student teaching and paraprofessional training. However, one ESCC interviewee did mention the

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college's already established partnership with ODU where students can complete their associate's degree at the local community college and then finish their four-year degree online.

Summary of Research Findings

This chapter presents the results from the collected quantitative and qualitative seminal research from the data collection phases of this study. The quantitative data suggest that across all participant groups, most survey respondents (69%, n = 75) were familiar with the Foundation and the Shore U project. Additionally, the vast majority of respondents (96%, n = 83) lived and/or worked on the Eastern Shore of Virginia and were at least somewhat concerned with matters of low population growth, a lower employment rate than that of Virginia overall, and a higher poverty rate than Virginia as a whole. Additionally, encouraging economic growth within the region by way of postsecondary education was denoted as a favorable idea. A majority of respondents also saw benefits in strengthening the partnership between the Foundation, ESCC, and VCU.

The qualitative data also helped identify several themes across the stakeholders' interests. The unique natural beauty of the Eastern Shore of Virginia and its abundance of natural resources were commonly discussed in the qualitative interviews. Additionally, the kindness of the people who live and work on the Eastern Shore could be considered another positive theme that was often mentioned. On the other hand, the lack of resources in the region became an evident theme as well. Leaving Virginia's Eastern Shore for more career and educational opportunities, as well as for upgraded utilities (such as better water, sewer systems, internet, and electricity infrastructure), were common themes in the conversation. Respondents also considered a need for better healthcare, childcare, affordable housing, and mental health services in the region. Both the qualitative and quantitative data informed the responses to this study's central

research questions regarding postsecondary education on the Eastern Shore of Virginia.

Figure 27

Theme and Research Question Alignment

Theme(s), Subthemes, and Codes

1. A. Challenges to Living on the Eastern Shore Lack of Resources/ Opportunities: leaving the Shore, lack of housing, childcare, skilled workers, utility systems Barriers to Education: lack of 4-year degree options

B. Positives of Living and Working on the Eastern Shore

Community: the "people" Challenges to Living on the Eastern Shore Lack of Resources/ Opportunities: leaving the Shore, economic development, job opportunities **Current and Future Partnerships** Eastern Shore Community College: partnership

- 2. Positives of Living and Working on the Eastern Shore *Environment*: natural beauty Challenges to Living on the Eastern Shore-Lack of Resources/
- 2. How can a proposed partnership with the local community college and a four-year institution keep Eastern Shore residents from leaving the area for higher education?

B. What potential economic impact could Shore U have on the Eastern Shore of Virginia?

1. A. How can expanded postsecondary education offerings stimulate economic

development on the Eastern Shore?

Research Question

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Opportunities: leaving the Shore, economic development Barriers to Education: lack of 4-year degree options **Current and Future Partnerships-**Eastern Shore Community College: partnership **Academic Considerations** and Options for Shore U-Bachelor's Degree Completion: Covid-19, travel to VA mainland, trades, workforce development Educational Institution **Options:** cannibalizing existing institutions, upper-division, four-year degree completion. four-year institution, physical location, intercollegiate degree

- 3. Academic Considerations and Options for Shore U-Academic Programs, Certifications, Degrees: engineering, space industry, business, STEM, education, healthcare
- **3.** What academic programs would be a good fit for an academic partnership on the Eastern Shore?

Note. This figure represents the overall themes from our findings and how they align with our

research questions.

RQ 1. A. How can expanded postsecondary education offerings stimulate economic

development on the Eastern Shore?

According to the collected data, more postsecondary education options on the Eastern

Shore were overall seen as a need, especially for respondents who work and/or live on the

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Eastern Shore. As aforementioned, research participants demonstrated concern (either verbally or in writing) about the current status of several economic matters in the region, such as the need for better housing and childcare options, more skilled workers, and upgraded utility service systems. Creating more educational opportunities and career training on the Eastern Shore can build up the workforce of the region through both specialized and transferable skills.

Additionally, respondents noted a present lack of the ability to complete a four-year degree and the limited number of trade programs offered on the Eastern Shore, namely in-person. This causes many college-aged and college-bound students to leave the region, especially if the ESCC does not offer a program or concentration that a student is interested in. Bringing more educational programs and internships to the region could keep students interested in pursuing postsecondary education on the Eastern Shore and promote the idea of using their education and specialized skills in careers within the region.

A more skilled and educated workforce could attract new employers to the area, thus increasing the amount of [higher-paying] jobs due to the ability to implement minimum education requirements. Additionally, employers presently operating on the Eastern Shore could divert more efforts to recruiting local talent rather than seeking candidates from outside of the region.

RQ 1. B. What potential economic impact could Shore U have on the Eastern Shore of Virginia?

Most respondents were familiar with the Foundation and the Shore U project. The mission to bring a new postsecondary degree-granting institution to the Eastern Shore has been viewed favorably, according to the data. This demonstrates that there is a need for what the Foundation is seeking to create. Additionally, this dissertation is an expansion of research and

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other work that has already been conducted in support of the Foundation's mission. This quest demonstrates the Foundation's commitment to its mission and the concentrated efforts of establishing meaningful connections and answering the pertinent, though preliminary, research questions that can bring them closer to offering more education on Virginia's Eastern Shore.

The goal of the Shore U endeavor is to not only open a higher education institution but also to determine the best way for this school to promote economic development in the region. According to the data, there are underrepresented industries in the region that respondents felt could not only stimulate the growth within the Eastern Shore of Virginia but also keep families and college-aged/college-bound students from leaving. Such industries include skilled laborers, childcare and K-12 educators, business, and health professionals. The original research suggests that the Foundation can meet the existing, diverse needs by deepening the understanding of these needs and by customizing an institution to address the unique challenges on the Eastern Shore, whilst offering educational opportunities that promote the major industries that have been essential economic stimulants in the region.

Additionally, the respondents spoke highly of the "people" of the Eastern Shore of Virginia and the natural beauty of the area. Shore U seeks to maintain that profile. The Foundation continues to use the knowledge they ascertain through partnerships and its highly skilled and multi-talented Board of Directors to understand the needs and interests of the Eastern Shore community. The Foundation and its Board of Directors are all individuals who live and/or work on the Eastern Shore of Virginia or have been dedicated to creating more education and economic growth to the Eastern Shore of Virginia, aligning with the mission of Shore U. As such, the individuals working relentlessly to bring this project to fruition are the "people" of the Eastern Shore of Virginia who work, live, interact, and transact within the region. Thus, the Foundation has a vested interest in bringing more postsecondary education and economic growth to the Eastern Shore of Virginia.

Finally, respondents believe that Shore U will bring employment opportunities to the area. The institution will need administrators, faculty, and support staff, but also, there should be opportunities for students to work through the school, the local community, and internships. The larger number of job opportunities and available career fields will help contribute to the workforce development and economic growth of the Eastern Shore of Virginia.

RQ 2. How can a proposed partnership with the local community college and a four-year institution keep Eastern Shore residents from leaving the area for higher education?

Although participants agreed that expanded postsecondary education options are necessary on the Eastern Shore of Virginia, there were various opinions about the type of institution that would fit best in the region. To address this research question, it is important to note that several participants expressed their concern that a new higher education institution would cannibalize the population of college-aged and college-bound students and the resources going to already-established institutions. However, creating partnerships with existing schools was viewed favorably overall.

The majority of respondents explicitly mentioned the importance of this effort being a collaboration with ESCC, especially so as not to be seen as a direct competitor to the region's esteemed and established postsecondary institution. There was some support for Shore U to consider becoming an upper-division institution, which would allow students from ESCC and other two-year degree-granting institutions to complete a four-year degree. However, other options, such as a higher education center, garnered interest and support from research participants as well. With a higher education center, this project would be an opportunity for the

Foundation to create partnerships with ESCC and multiple four-year institutions to offer a diverse spectrum of academic programs that respondents felt would fit well with the needs and interests of the Eastern Shore community.

The Covid-19 pandemic opened the widespread accessibility of postsecondary education as many institutions began offering more virtual classes and degree programs. However, since online education can be completed from anywhere with reliable connectivity, respondents often travel off of the Eastern Shore of Virginia while pursuing their college degree, likely due to the previously detailed challenges of living in the region. Any new institution on the Eastern Shore will need in-person class options to keep students in the region. Additionally, partnering with ESCC and a (or multiple) four-year institution(s) to expand the educational offerings of the area's established and developing industries can build up the resources and services that many respondents felt are currently unavailable or scarce.

Finally, it was noted by several participants that the region would not necessarily offer a "typical" college experience, as it is a rural area and does not presently offer the entertainment options that other institutions, especially in more urban settings, may offer. Concurrently, respondents stated that this lack of stimuli (such as nightclubs, megastores, and chain restaurants) is what keeps the Eastern Shore of Virginia unique from other areas. It was recommended that the region maintains this characteristic about it, even when establishing a new institution. Whomever the Foundation partners with should want to enhance the experiences of life on the Eastern Shore and promote, preserve, and appreciate the natural beauty of the region that the residents and workers so highly regard.

RQ 3. What academic programs would be a good fit for an academic partnership on the Eastern Shore?

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The data shows that many participants believe that an institution that offered the ability to gain specialized credentials, such as in trades beneficial to developing the region (e.g., plumbing, construction, welding, carpentry), would fit well on Virginia's Eastern Shore. Another option for the institution that echoed across several participant responses considered the current and emerging industries of the region, such as engineering- especially for the opportunities relating to Wallops Island, farming and agriculture, business and workforce development, rural health, and teacher education and training programs. The ability to study fine arts was also suggested in the data, especially as a cooperative education effort between an arts program and a STEM concentration. This option would provide the opportunity for students to experience, study, and appreciate the natural beauty of Virginia's Eastern Shore, which was noted often in the collected data on both a creative and technical level.

This chapter reported the findings from both the quantitative and the qualitative phases of our two-phase explanatory mixed methods research plan. In chapter five these results will support the recommendations to the Foundation and serve as the underpinning for the five-year plan for expanding postsecondary education on the Eastern Shore.

Chapter 5: Discussion and Recommendations

The University of the Eastern Shore of Virginia Foundation submitted a Request for Assistance asking that a capstone team create "a 5-year Plan for Curricula (including Learning Outcomes and Assessment Strategies), Staffing, and Funding for a Center of Excellence between the VCU College of Engineering, School of Business, and the Eastern Shore Community College (ESCC) in order to establish collaborative linkages amongst VCU, ESCC, and the Wallops Space Community" (Request for Assistance, n.d.). Upon receipt of the Request for Assistance, our capstone team engaged the Foundation in weekly meetings in an effort to better understand their request and how we could most effectively provide assistance. These meetings began in the summer of 2022, and by early fall, it was determined that the purpose of the study would be to outline a comprehensive five-year plan detailing the steps necessary to create a new, attractive postsecondary education option on the Eastern Shore of Virginia. This refined purpose emerged from the weekly discussions between our team and the Foundation and was finalized with the full support of the Foundation.

We began our study by conducting a comprehensive literature review that addressed how establishing a four-year degree-granting institution on the Eastern Shore of Virginia would benefit the region, specifically regarding the potential socioeconomic impact. The literature review also investigated types of potential partner institutions of higher education for Shore U, examining the pros and cons of satellite campuses, centers of excellence, destination institutions, and transfer programs. Informed by the research from the literature review, the following research questions guided our study: A. How can expanded postsecondary education offerings stimulate economic development on the Eastern Shore?

B. What potential economic impact could Shore U have on the Eastern Shore of Virginia?

- 2. How can a proposed partnership with the local community college and a four-year institution keep Eastern Shore residents from leaving the area for higher education?
- 3. What academic programs would be a good fit for an academic partnership on the Eastern Shore?

To gather the data needed to answer these research questions and to inform our recommendations, we employed a mixed-methods research design using quantitative and qualitative data collection methods. The following themes emerged from the analysis of our findings:

- Theme 1: Positives of Living and Working on the Eastern Shore
 - Environment: Natural beauty of the Eastern Shore; and
 - **Community:** The people are good and hardworking; although the Eastern Shore is made up of several counties and cities, it feels like one small town.
- Theme 2: Challenges of Living and Working on the Eastern Shore
 - Population Decline and Aging Population: The overall population decline and the fewer number of people from younger demographics coming to the Shore presents a challenge;
 - Lack of Resources/Opportunities: Quality healthcare including physical and mental health services, poor internet for telehealth opportunities, lack of affordable housing and services such as fast and reliable internet, good electricity,

clean water, effective sewage disposal, and access to propane and natural gas are difficult to come by on the Eastern Shore; and

 Barriers to Education: Lack of financial resources, affordable housing, and access to quality food. Transportation and a growing population whereby English is the second language (ESL).

• Theme 3: Current and Future Partnerships

- VIMS and the Navy for careers in aquaculture, marine science and biology;
- Other Virginia colleges and universities;
- Local K-12 school systems;
- ESCC: The role of the community college will be vital to Shore U's success; and
- Internships and Clinicals: NASA at Wallops Island, Virginia Space Authority and the Mid-Atlantic Regional Spaceport, and Rocket Lab. Rural Health: Clinical internships for students studying dentistry, mental health therapy and counseling, family medicine, and nursing.

• Theme 4: Academic Considerations and Options for Shore U

- Bachelor's Degree Completion: Lack of opportunities to complete a bachelor's degree in-person while remaining on the Eastern Shore of Virginia and the importance of trade/skills job training and workforce development;
- Educational Institution Options: Marginal support for an upper-division school or four-year degree option. Opposition to any postsecondary expansion that competes with ESCC; and
- Academic Programs, Certifications, and Degrees: Interest in aerospace engineering and other associated degrees due to the space industry already present

through NASA and Rocket Lab. General and specialized engineering degrees, Human Resources, Business, Social Work, and Teacher Education programs.

Shore U: Five-Year Strategic Plan

Rooted in our research findings and its emergent themes, the recommended steps for the Foundation over the next five years support the expansion of postsecondary education on Virginia's Eastern Shore through increased community involvement, political engagement, fundraising, scholarships, and the establishment of an internship hub during the first three years of the plan. Years four and five focus on academic partnerships that will culminate in the provision of upper-division courses offered at the Eastern Shore Community College property in collaboration with a public, four-year institution of higher education in Virginia as well as the development of a new strategic plan focused on the steps needed to establish an education center on Virginia's Eastern Shore.

Figure 28 provides the areas of focus for each year of the five-year plan.

Figure 28

Shore U Foundation Five-Year Plan July 1, 2023 - June 30, 2028	
Plan Year	Focus Areas
Year One: July 1, 2023 - June 30, 2024	Lay the groundwork for the five-year plan, establish a physical presence on the Shore, expand and leverage Board expertise, seek greater community and political engagement, initiate fundraising.
Year Two: July 1, 2024 - June 30, 2025	Publish and promulgate an annual report updating the plan's progress, establish and strengthen partnerships, establish an

Shore U Foundation Five-Year Plan

	internship hub, establish & fundraise for scholarships. Continue political engagement.
Year Three: July 1, 2025 - June 30, 2026	Start the implementation phase from the groundwork that has been laid in years one and two. Continue to publish and promulgate an annual report updating the plan's progress, continue fundraising efforts and begin to award academic scholarships, facilitate internship placements, and identify and foster academic partnerships. Continue political engagement.
Year Four: July 1, 2026 - June 30, 2027	Utilize the higher education experts on the Foundation's Board of Directors to begin making the connections between ESCC and Virginia colleges and universities to develop or identify classes that can be held in person or via hybrid instruction on the Eastern Shore. Continue to publish and promulgate an annual report updating the plan's progress, fundraising, awarding scholarships, and facilitating internship placements. Continue political engagement.
Year Five: July 1, 2027 - June 30, 2028	Begin strategic planning process focused on the steps needed to establish an Education Center on Virginia's Eastern Shore. Continue to publish and promulgate an annual report (making sure it includes a business update, a progress report on the Foundation's long-term goals, as well as poignant stories about some of the students receiving scholarships, completing internships on the Eastern Shore, and taking courses at the developing education center), continue fundraising efforts, awarding scholarships, facilitating internship placements. Continue political engagement.

Note. This figure contains the five-year plan for the Foundation as proposed by the capstone

team and informed by the quantitative and qualitative findings of the project.

Year One: July 1, 2023 - June 30, 2024

Our data analysis revealed that across all participant groups, the majority of respondents feel that encouraging economic growth within the region by way of postsecondary education is a favorable idea. While most respondents are familiar with the Foundation and the Shore U project, opportunities exist to further engage the Eastern Shore community in Shore U's efforts. Year one of our five-year plan focuses on greater community involvement and engagement through the establishment of a physical presence on the Eastern Shore. A physical location on the Shore will allow the Foundation to hold regular community meetings where residents, secondary students and staff, ESCC students and staff, businesses, media, and local officials can learn more about the five-year plan, progress towards its completion, ways they can get involved, and the potential impact successful implementation will have on the community.

We also recommend expanding the Foundation's current Board of Directors (see Appendix J for a full listing of the Foundation's current members) to include someone with expertise in marketing and communications as well as someone with experience in higher education administration in Virginia. During year one, the Marketing and Communications Director should focus their efforts on getting messages out to the community about the five-year plan as well as opportunities to engage with the Foundation and its work. They should also ensure regular updates to the Shore U website that reflect progress towards completion of the five-year plan and current and upcoming engagement activities. Adding a Director to the Board with administrative experience within a Virginia college or university provides the Foundation with someone positioned to make the connections necessary for potential academic partnerships with Virginia schools. In addition to increased community engagement, year one of our five-year plan also focuses on increased political engagement. We recommend the Foundation solicit the

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help of a political strategist or consultant to engage in political action/lobbying on behalf of Shore U. This political consultant should regularly update and solicit support from local, state, and federal government representatives. They should also represent the Foundation's interests at events such as the annual Virginia General Assembly Lobbying Day.

The current Board of Directors should be actively involved in all of the above-noted activities, and in the five-year plan as it progresses. This may take the form of forming committees that focus on marketing and communications, building relationships with Virginia colleges and universities, and political engagement and activism. With regard to political engagement and activism, the shortage of available housing is an issue that the Foundation, and its Board of Directors can partner with the ESVA Chamber of Commerce, community leaders, and others to raise awareness of the impact on the Eastern Shore, as well as to work toward short and long term solutions to this critical issue stymying population growth and retention.

Finally, the results of our data collection revealed that a potential barrier for Shore U is the negative financial state of most four-year institutions as a residual of the Covid-19 pandemic. Our data analysis also confirmed concerns by Eastern Shore community members that resources might be pulled from ESCC as a result of Shore U's efforts. Additionally, the data revealed a lack of financial resources as a barrier for Eastern Shore students looking to obtain a postsecondary degree. Accordingly, year one of our five-year plan focuses the Foundation's efforts on the establishment of a fundraising plan. The Foundation should set a fundraising goal to be published on its website. Monies raised would serve two purposes: (1) to support the Foundation's overall effort to expand postsecondary education on Virginia's Eastern Shore and (2) to provide academic scholarships specifically for students on the Eastern Shore who plan to enroll at ESCC. As the Foundation moves toward the end of this five-year plan and looks to

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establish an education center on the Shore, having already raised capital in support of the center's operation will better position the Foundation for state approval. Establishing a scholarship fund for students on the Shore who plan to enroll at ESCC alleviates worry by the community relating to Shore U's intentions and affirms the Foundation's commitment to Eastern Shore students and ESCC. Providing financial assistance to Eastern Shore students who plan to enroll at ESCC also works to increase the number of students enrolled at the college and, eventually, the pool of students poised to matriculate to the Eastern Shore education center. This presents another opportunity to leverage the experience of the Board of Directors, as all members of the Board have a role to play in growing the reputational and financial capital and resources of the Foundation, as well as in infusing both back into the communities on the Eastern Shore.

Year Two: July 1, 2024 - June 30, 2025

Year one focuses on community engagement, spreading the word about the five-year plan, and working to secure the necessary funding to move the project forward. Year two will not only be a continuation of these efforts but also a year dedicated to establishing and strengthening partnerships. One step that is essential to creating these meaningful relationships is to provide thorough updates about the progress of the project so that potential partners understand the Foundation's commitment to the mission and want to buy in. The Foundation and its Board of Directors should publish and promulgate an annual report detailing the efforts taken in year one and the vision for the project for the remainder of the five-year plan. The annual report needs to be publicly available but also viewable and easily accessible on their website. In addition to the annual report, periodic, perhaps quarterly updates should be prepared and published, as well as shared with key stakeholders to keep the Foundation, its goals, and progress top-of-mind for political and community leaders, as well as for community members. This is an opportunity to the Board of Directors who are focused on marketing and communication, and community engagement and political action to keep ther Foundation and its goals front of mind across the many audiences.

Additionally, in year two, perhaps as an extension of the physical location opened in year one, the Foundation should establish an internship hub. This can operate in the same space as the central operations and board meetings, but the purpose of the internship hub will be to create partnerships that will lead to internships, practicums, and clinical opportunities for ESCC and prospective Shore U students. The data showed that education, business, engineering, social work, and the health professions (such as nursing, pharmacy, and medicine) would be well suited to support internships and ultimately become majors for Shore U to offer. Established institutions such as ESCC, VCU, local businesses, and other institutions that presently offer programs and opportunities for students to engage in cooperative education should be targeted for partnerships.

A final recommendation for year two is to continue the focus on fundraising. In year one, fundraising efforts were focused on operational resources. In year two, fundraising should expand to include establishing scholarship funds. ESCC students and college-aged and college-bound students from the Eastern Shore would be the intended recipients. Depending on the success of these fundraising efforts, financial assistance may be offered specifically for students who intend to pursue majors that will require internships, practicums, or clinical placements on the Eastern Shore. These scholarships should serve students from underrepresented populations to demonstrate Shore U's commitment to diversity, equity, inclusion, and access to higher education. Additional financial support should be created for students based on financial need in addition to secondary and postsecondary academic

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achievement. Employers such as Tyson, Purdue, and Rocket Lab should be considered for sponsoring scholarships.

Year Three: July 1, 2025 - June 30, 2026

In year three, the recommendation is for the Foundation to start the implementation phase from the groundwork that was laid in years one and two. That means that in year three, the internship hub should be prepared to facilitate placements for the internships, clinical placements, and practicums partnerships that were established in the years prior. The Foundation should also determine avenues for providing housing assistance for admitted students who may need that option. Scarce and lack of affordable housing options were mentioned in the data multiple times, so year three should prioritize creating partnerships to alleviate these concerns for students who travel to study on the Eastern Shore of Virginia. The Wallops Island Space community provides housing assistance to its interns. Their processes offer a partnership or serve as a model to the Foundation in supporting students it attracts to the area for internships.

Additionally, monies from fundraising in year two should be written into scholarships and start to be awarded to deserving Eastern Shore high school students. This effort will require a team led by the Director of Marketing and Communications, and their committee, to establish a presence in the local middle and high schools to ensure increased visibility to students within the region so that the students know that Shore U is a viable option as they prepare to make plans for what is next for them after leaving high school. The communications team will establish rapport with the administrators of the local high schools and provide informational seminars and seasonal networking events for eighth through 12th graders. In the spring of year three, scholarships should begin being awarded to selected 11th and 12th graders from the Eastern Shore of Virginia high schools. The number of scholarships being awarded and the amount of the award will be based on fundraising efforts.

As the Foundation continues to work toward establishing a higher education institution. an initiative starting in year three should be for the Foundation to identify and foster new academic partnerships with VCU and other existing institutions of higher education. A proposed partnership is for Shore U to institute a program that works with VCU's aquatic campus - the Rice Rivers Center and the Eastern Shore's VIMS. This collaboration could help bring VCU students to the Eastern Shore of Virginia to conduct studies on freshwater versus saltwater ecosystems. Another idea is to deepen the engagement with VCU's School of Arts and local arts organizations, such as the Lemon Tree Gallery and Studio. The beauty and landscape of the Eastern Shore of Virginia was often echoed in the research. According to the collected data, there is interest for fine arts to have a larger presence in the region, especially to capture the natural glory of the Shore, and establishing more art partnerships would be a channel to bring art students to the Shore and engage local creatives. A final proposed partnership to be established in year three is with the Remote Area Medical Volunteer Corps to initiate a Rural Health Day on the Eastern Shore of Virginia. In 2022, the Remote Area Medical Volunteer Corps held a pop-up clinic in the rural Southwest county of Emory, Virginia, to offer free medical, dental, and vision services on a first-come, first-served basis for one full day (Guerry, 2022). This would be an exciting opportunity for the Foundation and its Board of Directors, as the research showed that better and more affordable healthcare services are needed on the Eastern Shore of Virginia. This would also be a chance for students who are interested in pursuing a medical field through Shore U to network with experienced health professionals.

Finally, throughout the first and second quarters of year three, the Foundation should prepare to host an alternative spring break for college students from the Eastern Shore of Virginia or external students who are interested in completing service projects during their institution's spring break. For instance, Shore U's Alternative Spring Break could work with the Eastern Shore of Virginia's chapter of Habitat for Humanity to have students contribute sweat equity into housing projects across the Eastern Shore. Another option would be to welcome students from VCU's Rice Rivers Center to work on collecting and recycling oyster shells from restaurants and retailers across the Eastern Shore of Virginia to exhibit an interest in and commitment to their oyster reef restoration project. This could, in turn, strengthen the partnership between VCU and Shore U.

All of the activities targeted for years two and three, internships, academic partnerships, the Rural Health Day, and alternative spring breaks, could also support students in fulfilling their requirements for experiential learning.

Year Four: July 1, 2026 - June 30, 2027

The work of the first three years will, of course, continue, and grow as the plan progresses. By July 2026, the Foundation's mission, vision, and activities will be well-known across the Eastern Shore and the Commonwealth of Virginia. As an established partner to institutions of higher education through its internship hub and its facilitation of academic partnerships and events, it will be time to utilize the higher education experts on the Foundation's Board of Directors to begin making the connections between ESCC and Virginia colleges and universities to develop or identify classes that can be held in person or via hybrid instruction on the Eastern Shore. These proposals should consider the full range of course offerings, not only including traditional fall and spring semester courses, which are typically 14-16 weeks long, but also miniterms, the winter session, and summer studies. For example, at VCU, there are three miniterms. There are two five-week mini-terms and one eight-week mini-term. The winter session is the period of time between the fall and spring semesters, where select courses meet six days per week for two weeks or five days per week for three weeks. Summer courses at VCU have varying starting dates and lengths; there are three, four and a half, five, six, and eight week summer sessions.

If the Foundation's physical location established in year one is not suitable for holding classes, the Board's Executive Director or appropriate representatives will want to have a memorandum of understanding (MOU) with the ESCC and/or other entities willing to provide physical locations where classes may be held. Anticipate the needs for a particular course, and address these needs in the MOU. For example, how many students can the space accommodate, available technology in the space, daytime or evening access to the space, parking for faculty and students, and other resources available to the instructor and students? Allow for flexibility to revisit and address specific course needs as necessary.

Unique, existing resources of the Eastern Shore

During the qualitative data collection phase of the research, multiple interviewees stressed that the Foundation should capitalize on what the Eastern Shore has to offer that other regions of the Commonwealth may not. Proposing classes that connect to the natural environment of the region - for example, the Chesapeake Bay, the marshes, and salt-water ecosystems could be marketed as a unique opportunity for experiential learning for students of the Life Sciences. Note - if VCU is the partner university, these classes may be connected to the REAL Initiative (https://provost.vcu.edu/initiatives/real/). REAL stands for relevant experiential and applied learning initiative. The university's REAL Initiative connects to the Student Opportunity Center, a national database of experiential learning opportunities and other resources for students. This may attract students from outside of the Commonwealth to the Eastern Shore for these unique academic opportunities as well. Again, the Higher Education experts on the Board of Directors should explore and become conversant in these opportunities and be able to draw these connections when making their proposals to host classes on the Eastern Shore.

Academic courses directed toward students participating in internships on the Eastern Shore

In addition to striving to identify and host classes on the Eastern Shore that capitalize on the unique, existing resources of the region, the Foundation should also, initially, focus on class offerings that would benefit students on the Eastern Shore. The intent would not be to detract from the ESCC or its dual enrollment program with the local high schools but rather to offer classes students could take for credit, in person or via a hybrid option, while they are there completing an internship, practicum hours, or other academic endeavors on the Eastern Shore. The Board of Directors will want to use data from the internship hub to inform their plan for soliciting faculty to teach courses targeting these students. Simultaneously, these courses may be the foundation for the curriculum ultimately available at the education center.

This is not to say that Dual Enrollment should be dismissed out of hand. But the goal would be to supplement the ESCC offerings, not compete with their offerings. Of course, the Board will need the appropriate approvals and authorizations to offer a Dual Enrollment Program.

In our qualitative data collection, we asked respondents which academic programs they felt would best meet the needs of the Eastern Shore. The following areas of studies or academic majors were the top rated; health professions, education, STEM (science, technology, engineering, math), and government and political science. These programs, in addition to those sponsoring internships or other learning opportunities on the Eastern Shore, such as art, business, and social work, plus independent studies, would be recommended as academic majors available at the education center. Hospitality may be another natural fit. We neglected to include this in our survey instruments, but it may be a useful addition for future consideration.

Year Five: July 1, 2027 - June 30, 2028

The Foundation's annual report will now reflect a business update (fundraising, expenditures), a progress report on its long-term goals, as well as poignant stories about some of the students receiving scholarships, completing internships on the Eastern Shore, and taking courses at the developing education center.

During year five, the Foundation and its Board of Directors will assess the work that has been accomplished, growth that has been achieved, and new interest and support that developed between 2023 and 2027. Armed with these reflections and data from the past four years, the Foundation will develop its strategic plan for the next five to ten years.

This strategic planning process will include reassessing the state of higher education in Virginia and the trends regarding state funding. The Foundation will also want to understand as best it can the enrollment trends and financial standing of any four-year institution it hopes to partner with in establishing an education center on the Eastern Shore.

The strategic planning process will also include reviewing and assessing the academic partnerships the Foundation has established as well as the academic majors that it will propose

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based on the courses of study that are or are not garnering interest. Articulating short-term and long-term goals in terms of academic majors to be offered at the education center will focus the Foundation, partner programs, and the community on filling these particular programs.

The short-term goal for the strategic plan will be finalizing the establishment of the education center. A longer-term goal for the plan will be functionally also becoming an upper-division school for the completion of undergraduate education, a two-plus-two program in partnership with the ESCC.

By now, the Foundation, Board of Directors and subcommittees should have, through political outreach and lobbying, understand what SCHEV and the Commonwealth of Virginia will require to establish the education center, to secure funding for the building(s), if needed, and to secure the appropriation of state funds moving forward.

An intermediate goal that the Foundation is encouraged to consider is expanding its efforts beyond traditional higher education to also consider the needs for and of skilled trades on the Eastern Shore. Throughout our data collection phase, participants shared that there is a crucial need for skilled tradespeople on the peninsula. The ESCC offers professional and technical courses and licensing renewal support. The Foundation could support individuals who want to become master craftsmen. To become a master carpenter, electrician, pipefitter, or plumber typically requires a bachelor's or a master's degree, plus an apprenticeship or achieving journeyman status. The Foundation will already be partnering with ESCC, and have established an internship hub; adding this dimension should be relatively easy, and may offer great dividends in terms of meeting an existing need on the Eastern Shore and retaining these talented professionals on the peninsula as well, as they do not need to relocate to fill these requirements. Throughout this five-year plan, the Foundation has been encouraged to reconsider the Shore U moniker and the desire to have a University of the Eastern Shore of Virginia in favor of establishing an education center that will ultimately also function as an upper-division school. We have proposed majors that capitalize upon the existing resources and needs of the Eastern Shore and as such, may also allow the education center to become a destination school of sorts for the particular, unique opportunities available in the regions.

Finally, in the fifth year of this plan, we encourage the Foundation and the Board of Directors to consider engaging former Governor Dr. Ralph Northam with the proposal that the Commonwealth officially establish the education center as the Dr. Ralph Northam Education Center of the Eastern Shore of Virginia. Toward this end, we would encourage your Board and political strategist to begin soliciting his input and financial support as soon as possible. Members of the former Governor's family may be solicited to join the Board or serve as consultants to the Foundation. Thomas Northam is the former Governor's brother and practices law in the Richmond, Virginia, area. The former Governor's wife, Pam, or their adult children, Aubrey and Wes, may be solicited to participate on the Board of Directors or to support this effort in other ways.

From the beginning, the University of the Eastern Shore of Virginia Foundation has held as its primary goal to establish a four-year institution on the Eastern Shore of Virginia, with a particular focus on the positive economic impact students, their families, and others associated with the institution could have on the region. Though limited, our research results demonstrate support for the Foundation and its goals, but with a focus on education as the path to economic opportunity for individuals and, thus, the region. Rather than focus on the economic impact that college faculty, staff, and students, as well as their families, may have on the region. The research suggests that the Foundation should focus on expanding postsecondary education, which will, in turn, foster a more informed and engaged citizenry, support the workforce needs of the area, attract and maintain business and industry in the area, fill existing service gaps, and ultimately support economic growth on the Eastern Shore.

Study Limitations and Biases

Several limitations arose throughout this study that should be considered with regard to the outcomes of this project and for future related research. Virginia Commonwealth University's Capstone and Dissertation project spans one academic year, starting with a summer semester and concluding the following spring semester. This timeframe encompasses multiple phases, including data collection, which limits the scope of and the available time to distribute surveys and conduct qualitative interviews.

Additionally, the data collection phase coincided with secondary and postsecondary semester breaks and mandatory testing and thus restricted communication with and accessibility to potential research participants. There were multiple attempts to include high schools students within Accommack and Northampton Public Schools in the original research (including numerous emails and phone calls spanning the course of several weeks to administrators within both school divisions); however, there was very low participation due to student age constraints and limited access to direct communications with this participant group. Subsequently, this study relied heavily on secondary data collected from the Virginia Department of Education to understand the postsecondary interests of high school students on Virginia's Eastern Shore. As it relates to the VDOE's postsecondary enrollment reports, a noteworthy limitation is that the data collected reflects "the best available estimates of postsecondary enrollment as there is currently no definitive source of all postsecondary enrollment records by state, division or school" (VDOE, College & Career Readiness, n.d.). Engaging high school students in related research, coupled with secondary data collection, would be impactful for understanding the interests of college-bound and college-aged students.

In addition, the geographical location of the researchers posed a challenge throughout the project. With three researchers located in the Richmond City area of Virginia and one located in Raleigh, North Carolina, the Eastern Shore of Virginia is not easily accessible. All but one of the qualitative interviews were conducted virtually, and only two researchers had the ability to visit the Eastern Shore of Virginia during the project. With more time, all researchers may have been able to coordinate time to travel to the Eastern Shore of Virginia and conduct research in person.

This study also had relatively low participation across all participant groups during the qualitative phase despite multiple attempts to schedule structured interviews and offering incentives for participation. Many of those who did participate were solicited by the Foundation, and likely skew to the favoring their idea to expand educational opportunities on the Eastern Shore. A larger number of completed qualitative interviews could provide a more robust perspective on the economic and educational needs of Virginia's Eastern Shore and the potential of Shore U from the various stakeholder groups.

A final limitation of this study is that the professions of the researchers presented the potential for bias in the research and outcomes. Two of the researchers both attended and worked for VCU at the time that this dissertation was written, and one researcher formerly worked for the university. Although none of the researchers work directly for or with any participants in the research, the affiliation and proximity to VCU may skew the data analysis.

Considerations for Future Research

The scope of our study focused specifically on the steps the University of the Eastern Shore of Virginia Foundation might take to expand postsecondary education on Virginia's Eastern Shore. The steps recommended were informed by quantitative and qualitative data collected from stakeholders about their experiences on the Eastern Shore of Virginia and their perceptions as to what might be an attractive postsecondary option for the Eastern Shore. These stakeholders included Eastern Shore community members, Eastern Shore Community College students and staff, and some Virginia Commonwealth University administrators. In fact, given the Foundation's particular interest in working with Virginia Commonwealth University, the survey prepared for VCU administration, faculty, and staff may be used partially or in toto in future research to explore this partnership. As mentioned previously, finding an ally on the President's Cabinet or in another Executive Leadership role may be benefit the data collection process.

Future research might also focus on other stakeholders, such as the Virginia Department of Education, the State Council of Higher Education for Virginia, secondary educators, counselors, and administrators from other regions, students and administrators within four-year degree-granting institutions in Virginia (other than Virginia Commonwealth University), college-bound and college-aged students, students currently obtaining a postsecondary education through a higher education center, faculty currently teaching within a higher education center, and political leaders on the Eastern Shore. Eastern Shore Community College students indicated that the top three public colleges/universities in Virginia that they view positively and would consider attending are the College of William and Mary, Old Dominion University, and Virginia. Exploring why these institutions are their top three and then taking that information into account when focusing future research on other four-year degree granting institutions. Furthermore, while this study primarily focuses on the expansion of postsecondary education on Virginia's Eastern Shore through pathways that lead to the attainment of a four-year degree, future research might focus on pathways for expanding career and technical education options at the postsecondary level, particularly within institutions of higher education located within close proximity to rural regions. Because of the link between upward social mobility and educational attainment, future research might also explore the impact on the social mobility of people from rural regions who obtained a career and technical education post-graduation as opposed to a four-year baccalaureate degree. Finally, due to the high population of racially diverse secondary students on Virginia's Eastern Shore, a final recommendation for future research might be to explore the varying degrees to which the combined impact of race and poverty affects college access for rural populations.

Conclusion

The mission of the University of the Eastern Shore of Virginia Foundation to expand postsecondary education on the Eastern Shore of Virginia is rooted in the notion that if students from small towns and rural areas are able to obtain a postsecondary education without leaving their community, their chances of not only enrolling in college but staying enrolled through completion, increases. Increasing access to postsecondary education within rural communities also positions a local institution of higher education to serve as an engine of economic development for its community by turning out the skilled talent local industries need for research and other support. To this end, this study adds to the literature in that it further demonstrates that social and economic mobility in the United States is connected to the proximity by which people complete their education and subsequently transition to work. This study also provides implications for future practice in that it offers a blueprint for expanding postsecondary

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education in rural areas. While the initial goal of this study was to outline a pathway for the Foundation to establish a four-year degree-granting institution on Virginia's Eastern Shore, the study's emergent themes indicate that the Shore is not quite ready for that. For the immediate future, establishing an education center is a viable option with proven success in the state of Virginia. It has the potential to make a positive, meaningful, and lasting impact on Virginia's Eastern Shore. No matter the region, establishing a university is no easy feat, particularly in the post-Covid-19 world. It takes time. Given the drive, passion, and commitment of the Foundation, however, there is no doubt that expansion of postsecondary education on the Eastern Shore of Virginia, as Shore U or in another form, is an inevitable reality.

References

ACPS. (n.d.). VDOE, School Quality Profiles.

http://schoolquality.virginia.gov/divisions/accomack-county-public-schools#desktopTabs-2

Albudaiwi, D. (Ed.) (2017). Open-ended questions. *The SAGE Encyclopedia of Communication Research Methods*. Volumes 1-4. Sage Publications, Inc.

https://doi.org/10.4135/9781483381411

Altma, R. (1969). *A study of the establishment of upper division colleges in the united states.* Department of Health, Education, and Welfare.

https://files.eric.ed.gov/fulltext/ED042434.pdf

Association of Public & Land Grant Universities. (n.d.). Land-grant university faq.

https://www.aplu.org/about-us/history-of-aplu/what-is-a-land-grant-university/

Athens State University. (n.d.). *Programs - Athens State University*. Athens State University -It's How You Finish. Retrieved September 30, 2022, from

https://www.athens.edu/programs/

- Athens State University. (2022a, April 2). *Our history*. Athens State University It's How You Finish. Retrieved September 30, 2022, from https://www.athens.edu/about/our-history/
- Athens State University. (2022b, July 8). *About us*. Athens State University It's How You Finish. Retrieved September 30, 2022, from https://www.athens.edu/about/
- Athens State University. (2022c, July 8). *Vision & mission*. Athens State University It's How You Finish. Retrieved September 30, 2022, from

https://www.athens.edu/about/vision-mission/

Athens State University. (2022d, July 22). *Admissions*. Athens State University - It's How You Finish. Retrieved September 30, 2022, from <u>https://www.athens.edu/admissions/</u>

Bahr, P. R., Gross, J., Jackson, G., McNaughtan, J., & Oster, M. (2016, December 20).
Unrealized potential: Community college pathways to STEM baccalaureate degrees. *The Journal of Higher Education*, 88(3), 430–478.

https://doi.org/10.1080/00221546.2016.1257313

- Borrego, M., Choe, N. H., Foster, M., Froyd, J., Halter, J., Martin, J. P., & Winterer, E. R. (2018, October 2). Interventions supporting baccalaureate achievement of Latinx STEM students matriculating at 2-year institutions: A systematic review. *Journal of Research in Science Teaching*, *56*(4), 440–464. <u>https://doi.org/10.1002/tea.21485</u>
- Bowman, E. (2009). The new college institute: An institutional analysis of the creation of an organization of higher education in the Commonwealth of Virginia. [Master's thesis, Virginia Commonwealth University].

https://scholarscompass.vcu.edu/cgi/viewcontent.cgi?article=2745&context=etd

- Brawner, C. E., & Mobley, C. (2018, June 20). "Life prepared me well for succeeding": The enactment of community cultural wealth, experiential capital, and transfer student capital by first-generation engineering transfer students. *Community College Journal of Research and Practice*, 43(5), 353–369. https://doi.org/10.1080/10668926.2018.1484823
- Buelow, M. T., Cepeda, R., Jaggars, S. S., & Rivera, M. D. (2021, November 1). "Like a freshman who didn't get a freshman orientation": How transfer student capital, social support, and Self-Efficacy intertwine in the transfer student experience. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.767395
- Buenaflor, S. H. (2021, August 19). Transfer student Self-Efficacy: A Success-Oriented narrative of the transfer student experience. *Community College Journal of Research and Practice*, 1–16. <u>https://doi.org/10.1080/10668926.2021.1967226</u>

- Burke, A. (2017). Why are satellite campus students highly satisfied: an interpretative phenomenological analysis. (16) [Doctoral Thesis. Northeastern University]. https://repository.library.northeastern.edu/files/neu:cj82q172n/fulltext.pdf
- Burkholder, G. J., Cox, K. A., Crawford, L. M., & Hitchcock, J. (2019, September 3). *Research design and methods: An applied guide for the scholar-practitioner* (1st ed.). SAGE
 Publications, Inc.
- Byun S.Y., Meece J.L., Irvin, M.J. (2012). Rural-Nonrural Disparities in postsecondary educational attainment revisited. *National Institute of Health Public Manuscript.* 49(3). doi:10.3102/0002831211416344.
- Chatham-Carpenter, A. (Ed.) (2017). Multiple choice questions. *The SAGE Encyclopedia of Communication Research Methods*. Volumes 1-4. Sage Publications, Inc. https://doi.org/10.4135/9781483381411
- ChildFund. (n.d.). *The Effects of Poverty on Education in the United States*. <u>https://www.childfund.org/Poverty-and-Education-in-the-US/?no_redirect=true</u>
- Christopher Newport University. (n.d.) Who we are. https://cnu.edu/whoweare/history/
- Chuang, Y., Mccready, B., & Wang, X. (2017, February). The effect of earning an associate degree on community college transfer students' performance and success at Four-Year institutions. *Teachers College Record: The Voice of Scholarship in Education*, 119(2),
 - 1-30. <u>https://doi.org/10.1177/016146811711900206</u>
- Community College Baccalaureate Association. (n.d.). *State inventory: Baccalaureate degrees* by state. <u>https://www.accbd.org/state-inventory/</u>
- Community College Review. (2023, March 29). *Eastern shore community college melfa, VA*. Retrieved April 4, 2023, from

https://www.communitycollegereview.com/eastern-shore-community-college-profile#:~:t ext=School%20Highlights,students%20are%20full%2Dtime).

- Connerly, T.R., Holmes, K., Tamang, A.L. (2021). *Introduction to sociology 3e*. OpenStax. <u>https://assets.openstax.org/oscms-prodcms/media/documents/IntroductiontoSociology3e-WEB_9QTqRGQ.pdf</u>
- County of Northampton. (n.d.). Economic Development.

https://www.co.northampton.va.us/government/departments_elected_offices/economic_d evelopment

- Covington, O. (2021, September 13). Elon named #1 national university for teaching excellence in new U.S. News & World Report rankings. Today at Elon. <u>https://www.elon.edu/u/news/2021/09/13/elon-named-1-national-university-for-teachingexcellence-in-new-u-s-news-world-report-rankings/</u>
- Creswell, J. W. (2022, September 27). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). SAGE Publications, Inc.
- DeSantis, A. L., Jaeger, A. J., Johnson, K. R., Whatley, M., & Worsham, R. (2021, March 3).
 Early effects of North Carolina's comprehensive articulation agreement on credit accumulation among community college transfer students. *Research in Higher Education*, 62(7), 942–975. <u>https://doi.org/10.1007/s11162-021-09626-y</u>
- Dobosh, M. (Ed.) (2017). Demographic questions. *The SAGE Encyclopedia of Communication Research Methods*. Volumes 1-4. Sage Publications, Inc.

https://doi.org/10.4135/9781483381411

- Drescher, J., Podolsky, A., Reardon, S.F., Torrance, G. (2022). The geography of rural educational opportunity. *The Russell Sage Foundation Journal of the Social Sciences*, *8(3)*, 123-149. DOI: 10.7758/RSF.2022.8.3.05
- Dundar, A., Fink, J., Jenkins, D., Ran, F. X., & Xu, D. (2018, June 20). Collaboratively clearing the path to a baccalaureate degree: Identifying effective 2- to 4-Year college transfer partnerships. *Community College Review*, 46(3), 231–256.

https://doi.org/10.1177/0091552118772649

Eastern Shore Community College. (n.d.). *Degrees, certificates, and credentials*. Retrieved September 25, 2022, from

http://catalog.es.vccs.edu/content.php?catoid=1&navoid=13#transfer

- Eastern Shore Community College. (2022, March 16). *About*. Retrieved September 25, 2022, from <u>https://es.vccs.edu/about/</u>
- Eastern Shore Visitor. (n.d.). *Welcome to the eastern shore of maryland and virginia*. http://www.easternshorevisitor.com/
- Economic Innovation Group. (2018). Escape velocity: How elite communities are pulling away in the 21st century race for jobs, businesses, and human capital. https://eig.org/wp-content/uploads/2018/05/Escape-Velocity-Report.pdf
- Elon University News Bureau. (2022, September 12). U.S. news & world report names Elon #1 national university for undergraduate teaching for a second straight year. Today at Elon.
 Retrieved September 25, 2022, from

https://www.elon.edu/u/news/2022/09/12/u-s-news-world-report-names-elon-1-national-u niversity-for-undergraduate-teaching-for-a-second-straight-year/ EMSI. (n.d.). How your school affects where you live.

https://www.economicmodeling.com/how-your-school-affects-where-you-live/

 Epps, K. K., Epps, A. L., & Campbell, J. E. (2015). A Framework for Identifying Factors to Consider When Implementing an Academic Program at a Satellite Campus.
 DigitalCommons@Kennesaw State University. Retrieved from https://digitalcommons.kennesaw.edu/cgi/viewcontent.cgi?article=4569&context=facpub
 <u>S</u>

Florida Tech. (n.d.) Quick facts. https://www.fit.edu/admissions/why-florida-tech/quick-facts/

- Flynn, D. (2013, November 29). Baccalaureate attainment of college students at 4-Year institutions as a function of student engagement behaviors: Social and academic student engagement behaviors matter. *Research in Higher Education*, 55(5), 467–493. https://doi.org/10.1007/s11162-013-9321-8
- Fraser, D., & Stott, K. (2015). University Satellite Campus Management Models. Australian Universities' Review, 57(2), 79–83.
- George Mason University. (n.d.). Mason milestones.

https://www.gmu.edu/about-mason/mason-milestones

 Glenn, R. (2019, February 1). Creating destination campus requires destination community.
 Victoria Advocate. Retrieved September 18, 2022, from https://www.victoriaadvocate.com/blogs/reader/a_jaguar_journey_my_freshman_year/cre ating-destination-campus-requires-destination-community/article_f58bba4e-2673-11e9-8 8da-5cb9017b9fe4.html Gracyalny, M. (Ed.) (2017). Likert-type scale questions. *The SAGE Encyclopedia of Communication Research Methods*. Volumes 1-4. Sage Publications, Inc. https://doi.org/10.4135/9781483381411

Guerry, C. (2022, May 19). Remote Area Medical Holding Free Weekend Clinic in Swva.
WFXRtv. Retrieved April 4, 2023, from
<u>https://www.wfxrtv.com/news/health/remote-area-medical-holding-free-weekend-clinic-i</u>
<u>n-swva/</u>

- Hayes, S., & Maliszewski Lukszo, C. (2019, September 16). Facilitating transfer student success:
 Exploring sources of transfer student capital. *Community College Review*, 48(1), 31–54.
 https://doi.org/10.1177/0091552119876017
- High Point University. (2019, April 2). *History of the University*. High Point University Visitor Information. Retrieved September 18, 2022, from

https://www.highpoint.edu/visitorinformation/history-of-the-university/

- Huffman, M. C. (2012). An analysis of virginia transfer policy and articulation agreement: A comparative study of community college transfer and native students- enrollments and outcomes in a teacher preparation program [PhD Dissertation]. Virginia Commonwealth University.
- Huh, Y., & Kang, S. P. (2016, November). University of west florida program profile introduction for november/december 2016 issue of *PI. Performance Improvement*, 55(10), 32–32. <u>https://doi.org/10.1002/pfi.21621</u>
- Holtz-Eakin, D. & Lee, T. (2019, June 4). The economic benefits of educational attainment. <u>https://www.americanactionforum.org/project/economic-benefits-educational-attainment</u>

- Ilie, S., Rose, P., Vignoles, A. (2021). Understanding higher education access: Inequalities and early learning in low and lower-middle-income countries. *British Educational Research Journal*, 47(5), 1237–1258. DOI: 10.1002/berj.3723
- Ippolito, M. (2021, February). "Stone steppers" and "Place makers": Community college students' transfer aspirations and perceptions of time. *Teachers College Record: The Voice of Scholarship in Education*, *123*(2), 1–30.

https://doi.org/10.1177/016146812112300208

Johnson, E. (2019, December 20). Education Deserts.

https://www.insidehighered.com/news/2019/12/20/access-higher-education-tilts-heavily-t oward-urban-areas

Johnston, K. (2022). How poverty and education are related: Here's a look at how poverty impacts education. *MoneyWise*.

https://moneywise.com/loans/student-loans/ways-poverty-affects-education

- Kawulich, B. B. (2005). View of participant observation as a data collection method: Forum qualitative sozialforschung / forum: Qualitative social research. View of Participant
 Observation as a Data Collection Method | Forum Qualitative Sozialforschung / Forum: Qualitative Social Research. Retrieved October 2, 2022, from https://www.qualitative-research.net/index.php/fgs/article/view/466/996
- Keller, G., & Lambert, L. M. (2014, March 11). Transforming a college: The story of a Little-Known college's strategic climb to national distinction (updated edition). Johns Hopkins University Press.
- Kim, A. (2019, February). Make rural America's "higher education deserts" bloom. PPI New Ideas for a Do-Something Congress, (5). <u>https://files.eric.ed.gov/fulltext/ED600500.pdf</u>

Longwood University. (n.d.). Welcome to Longwood. http://www.longwood.edu/about/

- Marré, A. (2017). *Rural education at a glance*. Washington, DC: United States Department of Agriculture. <u>https://www.ers.usda.gov/webdocs/publications/83078/eib-171.pdf</u>
- Keller, G., & Lambert, L. M. (2014, March 11). Transforming a College: The Story of a Little-Known College's Strategic Climb to National Distinction (updated edition). Johns Hopkins University Press.
- Marré, A. (2017). Rural Education at a Glance. *Economic Education Bulletin*, (EIB-171). <u>https://www.ers.usda.gov/webdocs/publications/83078/eib-171.pdf?v=422</u>
- Mcadory, M. (2020, July 16). A fresh perspective on revitalizing Maryland's Eastern Shore.
 Chesapeake Bay Program.
 <u>https://www.chesapeakebay.net/news/blog/fresh-perspective-on-revitalizing-marylands-e</u>astern-shore
- McBride, K. R., Gregor, M. N., & McCallister, K. C. (2017, August 14). Bridging the gap. *Reference Services Review*, 45(3), 498–510. <u>https://doi.org/10.1108/rsr-10-2016-0067</u>
- McKinney, L., Scicchitano, M., & Johns, T. (2012, November 8). A national survey of community college baccalaureate institutions. *Community College Journal of Research* and Practice, 37(1), 54–63. <u>https://doi.org/10.1080/10668926.2012.711140</u>
- Misachi, J. (2020, January 23). What are the biggest industries in Delaware? *WorldAtlas*. https://www.worldatlas.com/articles/what-are-the-biggest-industries-in-delaware.html
- National Center for Education Statistics. (2022). *Report on the condition of education 2022*. https://nces.ed.gov/pubs2022/2022144.pdf

New College Institute. (n.d.). History. https://newcollegeinstitute.org/about-us/history/

NCES. (n.d.) Local Classifications.

https://nces.ed.gov/programs/edge/Geographic/LocaleBoundaries

Norfolk State University. (n.d.). History & mission: About.

https://www.nsu.edu/About/History-and-Mission

- Oak Point University. (2020, May 4). *Our history & tradition*. Retrieved September 30, 2022, from https://oakpoint.edu/about-oakpoint/our-history-tradition/
- Oak Point University. (2022a, July 14). *Undergraduate programs*. Retrieved September 30, 2022, from <u>https://oakpoint.edu/academics/undergraduate-programs/</u>
- Oak Point University. (2022b, August 16). *IPE interprofessional education*. Retrieved September 30, 2022, from https://oakpoint.edu/academics/undergraduate-programs/ipe/

Old Dominion University. (n.d.) About ODU: History & archives.

https://www.odu.edu/about/historyandarchives

- Patterson, G. (1988). Countdown to college: Launching Florida Institute of Technology. *The Florida Historical Quarterly*. 77(2), 163-180. <u>https://www.jstor.org/stable/30152246</u>
- Quirk, K. (2022, September 16). New effort aims to make UWM a premier destination for experiential learning. UWM REPORT. Retrieved September 18, 2022, from <u>https://uwm.edu/news/new-effort-aims-to-make-uwm-a-premier-destination-for-experient</u> ial-learning/
- Radford University. (n.d.). Our history.

https://www.radford.edu/content/radfordcore/home/about/history.html

Rao, J., & Ye, J. (2016). From a virtuous cycle of rural-urban education to urban oriented rural basic education in China: An explanation of the failure of China's Rural School Mapping Adjustment policy. *Journal of Rural Studies*, 47, 601-611.

- Ratledge, A., Dalporto, H., Lewy, E. (2020). *Rural higher education: Realities & opportunities*. https://www.mdrc.org/publication/rural-higher-education-realities-opportunities
- Rehfuss, M. C., Kirk-Jenkins, A., & Dice, T. F. (2015). Students' Experiences with Different Course Delivery Modalities: On Campus, Online, and Satellite. ODU Digital Commons.
 Retrieved from

https://digitalcommons.odu.edu/cgi/viewcontent.cgi?article=1068&context=chs_pubs

- Rose, M. (2018, January 30). *Building a destination campus*. https://blogs.missouristate.edu/bearbulletin/2018/01/30/building-destination-campus/
- Rossi, F., & Goglio, V. (2018). Satellite University Campuses and Economic Development in peripheral regions. *Studies in Higher Education*, 45(1), 34–54.
 https://doi.org/10.1080/03075079.2018.1506917
- Rothwell, J. (2015). What colleges do for local economies: A direct measure based on consumption.

https://www.brookings.edu/research/what-colleges-do-for-local-economies-a-direct-meas ure-based-on-consumption/

- Rush, D. (2016). *Salisbury University: \$480 million economic impact*. Delmarva Public Media. <u>https://web.archive.org/web/20220307225357/https://www.delmarvapublicmedia.org/loca</u> <u>l-news/2016-02-22/salisbury-university-480-million-economic-impact</u>
- Scholarship America. (2022, September). *The Far-Reaching Impact of the Student Debt Crisis*. https://scholarshipamerica.org/blog/the-far-reaching-impact-of-the-student-debt-crisis/
- Sindin, X. (Ed.) (2017). *Secondary Data*. (Vols. 1-4). SAGE Publications, Inc, https://doi.org/10.4135/9781483381411

State Council for Higher Education for Virginia. (n.d.-a). Colleges & universities.

https://www.schev.edu/students/applying-for-college/colleges-universities

State Council for Higher Education for Virginia (n.d.-b). SCHEV responsibilities.

https://www.schev.edu/about/overview/schev-responsibilities

 State Council of Higher Education for Virginia. (2021, August 8). Virginia public higher education policy on passport and uniform certificate of general studies programs.
 Retrieved September 25, 2022, from

https://surveys.schev.edu/docs/default-source/students-section/transfer/passport-ucgs-poli cyupdatedsept821.pdf

- The Huffington Post. (2014, January 24). *The college of our wildest dreams actually exists, but you've probably never heard of it*. HuffPost. Retrieved September 18, 2022, from https://www.huffpost.com/entry/college-of-your-wildest-dreams_n_4508077
- Texas A&M University at Central Texas. (2019, October 3). *Texas a&m university central texas transfer guides*. Retrieved September 30, 2022, from

https://www.tamuct.edu/degrees/undergraduate/transfer-guides.html

- Texas A&M University at Central Texas. (2020). *Mission, vision & values*. Texas a&M University at Central Texas. Retrieved September 30, 2022, from <u>https://www.tamuct.edu/about/mission.html</u>
- Texas A&M University at Central Texas. (2022, August 12). EWCHEC: East Williamson county higher education center. Texas a&M University at Central Texas. Retrieved September 30, 2022, from <u>https://www.tamuct.edu/about/ewchec.html</u>
- Texas A&M University Central Texas. (2022, August 15). *About Texas a&m university-central texas*. Retrieved September 30, 2022, from https://www.tamuct.edu/about/index.html

Travel + Leisure. (2021, June 24). America's most beautiful college campuses.

https://www.travelandleisure.com/attractions/colleges-universities/americas-most-beautif ul-college-campuses

U.S. Food and Drug Administration. (1998, January). IRB-FAQs. FDA.

https://www.fda.gov/regulatory-information/search-fda-guidance-documents/institutional -review-boards-frequently-asked-questions#:~:text=The%

United States Census Bureau. (n.d.-a). Accomack County, Virginia.

https://data.census.gov/cedsci/profile/Accomack_County,_Virginia?g=0500000US51001

United States Census Bureau. (n.d.-b) 2020 Decennial Census.

https://data.census.gov/cedsci/all?q=decennial%20census%202020

United States Census Bureau. (n.d.-c). Northampton County, Virginia.

https://data.census.gov/cedsci/profile/Northampton County, Virginia?g=0500000US511

<u>31</u>

United States Census Bureau. (n.d.-d). Population Estimates: Accomack County, Virginia.

https://data.census.gov/cedsci/table?q=accomack%20county%20virginia&tid=PEPPOP2 019.PEPANNRES

United States Census Bureau. (n.d.-e). *Population Estimates: Northampton County, Virginia*. <u>https://data.census.gov/cedsci/table?q=Northampton%20county%20va&tid=PEPPOP201</u> <u>9.PEPANNRES</u>

United States Census Bureau. (n.d.-f). Virginia. https://data.census.gov/cedsci/all?q=virginia

United States Census Bureau. (n.d.-g). Maryland.

https://data.census.gov/profile/Maryland?g=0400000US24

United States Census Bureau. (n.d.-h). Caroline County, Maryland.

https://data.census.gov/profile/Caroline County, Maryland?g=0500000US24011

United States Census Bureau. (n.d.-i). Cecil County, Maryland.

https://data.census.gov/profile/Cecil County, Maryland?g=0500000US24015

United States Census Bureau. (n.d.-j). Dorchester County, Maryland.

https://data.census.gov/profile/Dorchester_County_Maryland?g=0500000US24019

United States Census Bureau, (n.d.-k). Kent County, Maryland.

https://data.census.gov/profile/Kent_County_Maryland?g=0500000US24029

United States Census Bureau, (n.d.-l). Queen Anne's County, Maryland.

https://data.census.gov/profile/Queen_Anne's_County,_Maryland?g=0500000US24035

United States Census Bureau, (n.d.-m). Somerset County, Maryland.

https://data.census.gov/profile/Somerset_County, Maryland?g=0500000US24039

United States Census Bureau, (n.d.-n). Talbot County, Maryland.

https://data.census.gov/profile/Talbot County, Maryland?g=0500000US24041

United States Census Bureau. (n.d.-o). Wicomico County, Maryland.

https://data.census.gov/profile/Wicomico County, Maryland?g=0500000US24045

United States Census Bureau. (n.d.-p). Worcester County, Maryland.

https://data.census.gov/profile/Worcester County, Maryland?g=0500000US24047

United States Census Bureau. (n.d.-q). Delaware.

https://data.census.gov/profile/Delaware?g=0400000US10

United States Census Bureau. (n.d.-r). Kent County, Delaware.

https://data.census.gov/profile/Kent_County, Delaware?g=0500000US10001

United States Census Bureau. (n.d.-s). New Castle County, Delaware.

https://data.census.gov/profile/New Castle County, Delaware?g=0500000US10003

United States Census Bureau (n.d.-t). Sussex County, Delaware.

https://data.census.gov/profile/Sussex_County_Delaware?g=0500000US10005

University of the Eastern Shore of Virginia Foundation. (n.d.). Survey. ShoreU.org.

https://shoreu.org/survey

University of New Mexico. (n.d.). UNM strategic planning. Retrieved September 18, 2022, from http://strategy.unm.edu/become-a-destination-university/index.html

University of Virginia. (n.d.). About the university. https://www.virginia.edu/aboutuva

- University of West Florida. (n.d.-a). *About UWF*. Retrieved September 25, 2022, from https://uwf.edu/about/
- University of West Florida. (n.d.-b). *Economic impact*. Retrieved September 25, 2022, from https://uwf.edu/about/economic-impact/

University of West Florida. (n.d.-c). History. Retrieved September 25, 2022, from

https://uwf.edu/about/history/

University of West Florida. (n.d.-d). *Programs*. Retrieved September 25, 2022, from https://uwf.edu/programs/?search=&type=

University of West Florida. (n.d.-d). *Programs*. Retrieved September 25, 2022, from <u>https://uwf.edu/programs/?search=&type=</u>

University of Wisconsin Milwaukee. (n.d.). *Making UWM a destination campus throughout the midwest for experiential learning*. University of Wisconsin- Milwaukee. Retrieved September 18, 2022, from

https://cpb-us-w2.wpmucdn.com/sites.uwm.edu/dist/3/559/files/2020/03/EL-Rationale-fo r-Distribution.pdf

- UVAWise. (n.d.). Our mission & history. https://www.uvawise.edu/about/our-mission-history
- VCCS. (2022a, July 14). *Transfer* | *Virginia's Community Colleges*. Retrieved September 18, 2022, from_https://www.vccs.edu/transfer-programs/
- VCCS. (2022b, August 18). About Virginia's Community Colleges. Retrieved September 18, 2022, from <u>https://www.vccs.edu/about/#statistics</u>
- VDOE. (n.d.) Data Collections.

https://www.doe.virginia.gov/data-policy-funding/data-reports/data-collection

VDOE. (n.d.). Fall Membership - Build-A-Table.

https://p1pe.doe.virginia.gov/apex/f?p=248:1:::::p_session_id,p_application_name:-7578 050508588704398,credentials

VDOE. (n.d.). School Quality Profiles - Assessments - Math Performance - Accomack County Public Schools.

http://schoolquality.virginia.gov/divisions/accomack-county-public-schools#desktopTabs

- <u>-3</u>
- VDOE. (n.d.). School Quality Profiles Assessments Math Performance Northampton County Public Schools.

https://schoolquality.virginia.gov/divisions/northampton-county-public-schools#desktopT abs-3

VDOE. (n.d.). School Quality Profiles - Assessments - Reading Performance - Accomack County Public Schools. http://schoolquality.virginia.gov/divisions/accomack-county-public-schools#desktopTabs

VDOE. (n.d.). School Quality Profiles - Assessments - Reading Performance - Northampton County Public Schools.

https://schoolquality.virginia.gov/divisions/northampton-county-public-schools#desktopT abs-3

VDOE. (n.d.). School Quality Profiles - Diplomas and Completion - Accomack County Public Schools.

http://schoolquality.virginia.gov/divisions/accomack-county-public-schools#desktopTabs

VDOE. (n.d.). School Quality Profiles - Diplomas and Completion - Northampton County Public Schools.

https://schoolquality.virginia.gov/divisions/northampton-county-public-schools#desktopT abs-3

VDOE. (n.d.). School Quality Profiles - Enrollment -Fall Membership by Grade - Accomack County Public Schools.

http://schoolquality.virginia.gov/divisions/accomack-county-public-schools#desktopTabs

<u>-3</u>

VDOE. (n.d.). School Quality Profiles - Enrollment - Fall Membership by Grade - Northampton County Public Schools.

https://schoolquality.virginia.gov/divisions/northampton-county-public-schools#desktopT abs-3 VDOE. (n.d.). School Quality Profiles - Enrollment -Fall Membership by Subgroups - Accomack County Public Schools.

http://schoolquality.virginia.gov/divisions/accomack-county-public-schools#desktopTabs
-3

- VDOE. (n.d.). School Quality Profiles Enrollment Fall Membership by Subgroups -Northampton County Public Schools.
 <u>https://schoolquality.virginia.gov/divisions/northampton-county-public-schools#desktopT</u> <u>abs-3</u>
- VDOE. (n.d.). School Quality Profiles Four-Year Virginia On-Time Graduation Rate -Accomack County Public Schools.

http://schoolquality.virginia.gov/divisions/accomack-county-public-schools#desktopTabs
-3

VDOE. (n.d.). School Quality Profiles - Four-Year Virginia On-Time Graduation Rate -Northampton County Public Schools.

https://schoolquality.virginia.gov/divisions/northampton-county-public-schools#desktopT abs-3

Virginia Commonwealth University. (n.d.-a). *Biology, bachelor of science (and accelerated masters) - transfer map — Major maps — Student success*. Retrieved September 18, 2022, from

https://majormaps.vcu.edu/transfer/biology-bachelor-of-science-and-accelerated-masters/ virginia-community-college-system

Virginia Commonwealth University. (n.d.-b). *Electrical engineering, bachelor of science (and accelerated masters) - transfer map — Major maps — Student success*. Retrieved

September 18, 2022, from

https://majormaps.vcu.edu/transfer/electrical-engineering-bachelor-of-science-and-accele rated-masters/virginia-community-college-system

Virginia Commonwealth University. (n.d.-c). Official VCU mission: Why we're here.

https://www.vcu.edu/about-vcu/mission-and-history/

Virginia Commonwealth University. (n.d.-d). *Quest 2028: One VCU: Together We Transform*. <u>https://uploads.provost.vcu.edu/quest2028/bovdocument.pdf</u>

Virginia Economic Development. (n.d.). Regional profile: Eastern Shore.

https://www.vedp.org/region/eastern-shore#:~:text=The%20Eastern%20Shore%2C%20hi

storically%20known.of%20aerospace%20and%20small%20businesses.

- Virginia Military Institute. (n.d.-a). History. https://www.vmi.edu/about/history/
- Virginia Military Institute. (n.d.-b). Quick facts. https://www.vmi.edu/about/quick-facts/

Virginia Places. (n.d.). Eastern Shore. http://www.virginiaplaces.org/regions/eshore.html

Virginia State University. (n.d.). Our history. https://www.vsu.edu/about/history/index.php

Virginia Tech. (n.d.). Radford University - Virginia tech collaborative partnership.

https://www.vt.edu/innovationcampus/masters-degrees/fasttrack/ru_csa.html

Wake Forest University. (2023, February 3). *How do I analyze my survey results?* Office of Institutional Research. Retrieved April 4, 2023, from

https://ir.wfu.edu/large-survey/how-do-i-analyze-my-survey-results/

Walsh College. (n.d.). Graduate & undergraduate business degrees: Transfer course equivalents. Retrieved October 1, 2022, from

https://wwws.walshcollege.edu/TransferCourseEquivalents/?utm_source=web&utm_med

ium=transfer&utm_campaign=equivalency-database&_ga=2.11037236.1629706599.166 4628486-953476351.1664628486

- Walsh College. (2022a, June 6). *Admissions*. Walsh Graduate & Undergraduate Business Degrees. Retrieved October 1, 2022, from https://walshcollege.edu/future-students/
- Walsh College. (2022b, June 6). *History of Walsh College*. Walsh Graduate & Undergraduate
 Business Degrees. Retrieved October 1, 2022, from
 https://walshcollege.edu/about-us/history-of-walsh-college/?_ga=2.225184410.16297065
 https://walshcollege.edu/about-us/history-of-walsh-college/?_ga=2.225184410.16297065
 https://walshcollege.edu/about-us/history-of-walsh-college/?_ga=2.225184410.16297065
- Walsh College. (2022c, June 6). Transfer | Walsh College. Walsh Graduate & Undergraduate Business Degrees. Retrieved October 1, 2022, from <u>https://walshcollege.edu/transfer/</u>
- Walsh College. (2022d, June 6). Walsh undergraduate degree programs. Graduate & Undergraduate Business Degrees. Retrieved October 1, 2022, from https://walshcollege.edu/walsh-undergraduate-degree-programs/
- Wang, X. (2009, March 31). Baccalaureate attainment and college persistence of community college transfer students at Four-Year institutions. *Research in Higher Education*, 50(6), 570–588. https://doi.org/10.1007/s11162-009-9133-z
- Wang, X. (2015, September). Pathway to a baccalaureate in STEM fields. *Educational Evaluation and Policy Analysis*, 37(3), 376–393.

https://doi.org/10.3102/0162373714552561

Wang, X. (2016, December). A multilevel analysis of community college students' transfer to Four-Year institutions of varying selectivity. *Teachers College Record: The Voice of Scholarship in Education*, 118(12), 1–44. <u>https://doi.org/10.1177/016146811611801202</u>

- Weemaes, K. (2021). The effects of higher education on socioeconomic mobility: A comparative analysis of outcomes at Bucknell University. (578) [Honors Theses. Bucknell University]. <u>https://digitalcommons.bucknell.edu/honors_theses/578</u>
- Wells, R. S., Manly, C. A., Kommers, S., & Kimball, E. (2019). Narrowed gaps and persistent challenges: Examining rural-nonrural disparities in postsecondary outcomes over time. *American Journal of Education*, 126(1), 1-31. doi:<u>https://doi.org/10.1086/705498</u>
- Wexler, E. (2016, February 3). Geography Matters. <u>https://www.insidehighered.com/news/2016/02/03/when-students-enroll-college-geograp</u> <u>hy-matters-more-policy-makers-think</u>
- William & Mary. (n.d.). *History & traditions: Not many universities can say they've canceled classes because 'the british invaded'*. <u>https://www.wm.edu/about/history/index.php</u>
- Wills, B. S. (2004). No ordinary college: A history of the University of Virginia's college at Wise.University of Virginia Press.
- World Vision. (2022, May 18). *What is poverty? It's not as simple as you think.* <u>https://www.worldvision.ca/stories/child-sponsorship/what-is-poverty</u>
- Zhang, Y. L. (2019, October 10). Early academic momentum: Factors contributing to community college transfer students' STEM degree attainment. *Journal of College Student Retention: Research, Theory and Practice*, 23(4), 873–902. https://doi.org/10.1177/1521025119881130

Appendix A

Putting the "U" in Shore U

Codebook

Themes, Sub-themes, and Codes

Theme 1: Positives/Realities of the Eastern Shore

- People
 - Immigrant Population
 - Kind/Caring/Helpful
- Natural Beauty/Being Outdoors
 - Ecological Availability: Marsh, Bay, Ocean

Theme 2: Challenges/Under Resourced

- Leaving the Shore for Better Resources
- Transportation
- Careers/Professions Lacking on Shore or Need for Future
 - Fishing and Marine Science
 - Law Enforcement
 - Chicken/Purdue Farms/Sanderson Farms
 - Eco-Tourism
 - Hospitality
- Barriers to Education
 - Beyond the Two-year Degree
 - Money/Financial Resources
 - English as a second language
 - Enrollment- anticipated, trouble maintaining, additional, etc
 - First-Generation
- Lack of:
 - Medical and Mental Health Resources
 - Childcare
 - Sewer Systems
 - Clean Water
 - Good Internet
 - Good Electricity
 - Propane/Natural Gas
 - Available/Affordable Housing
 - Good public schools
 - Food Security
 - Access to Resources General
- Population Decline/Lack of Growth
- Age of Population

• Lack of Things to Do in the Community

Theme 3: Partnerships

- NASA/Wallops Island
- Virginia Space
- Rocket Lab
- VIMS
- Navy
- Internships
 - Poor Marketing
- Community College
 - Dual Enrollment Population

Theme 4: Options for ShoreU

- Bachelor's Degree Completion
- Academic Majors
 - STEM
 - Science Major
 - Aeronautical Engineering
 - Engineering- General
 - Farming and Agriculture
 - Workforce Development/Trades
 - Human Resources Management/Business
 - Law/Legal Services
 - Medical/Nursing/Healthcare
 - Teaching/Education
- Transfer Agreement
- Collaboration with Other Colleges and Universities
 - Old Dominion University
 - VA Tech
 - UVA
 - VCU
- Options for Shore U
 - Destination Institution
 - Higher Education Center
 - Satellite/Branch Campus
 - Upper-division School

Appendix B

Putting the "U" in Shore U Qualitative Interview Consent Form



Virginia Commonwealth University Department of Education Informed Consent to Participate in Information Collection

Study Title: Putting the "U in Shore U": Expanding Postsecondary Education on the Eastern Shore of Virginia

Researchers:

Karen Belanger, Doctoral Candidate, Educational Leadership Katy Jones, Doctoral Candidate, Educational Leadership Takeya McLaurin, Doctoral Candidate, Educational Leadership Katharine Wise, Doctoral Candidate, Educational Leadership:

We're inviting you to an interview and/or focus group for qualitative information gathering purposes for our dissertation and capstone project. This interview/focus group is completely voluntary. There is no penalty or other negative consequences if you don't wish to participate. If you begin the interview/focus group, you can always change your mind and stop at any time. Please let the interviewers know if you wish to withdraw at any point. You may also choose to skip any questions you do not wish to answer.

What is the purpose of this study?

The purpose of this study is to outline a comprehensive five-year plan that lays out the steps necessary to create a new, attractive postsecondary education option on the Eastern Shore of Virginia. Our client, the University of the Eastern Shore of Virginia Foundation, has developed the name The University of the Eastern Shore of Virginia, or "Shore U", for this proposed institution of higher education. This is a mixed-method study that will utilize both quantitative and qualitative data to address our central research question pertaining to establishing Shore U. The goal of this mixed-method research design is:

- to understand the demographic and economic profile of the Eastern Shore of Virginia and how it compares to other rural or economically-disadvantaged areas with a similar profile to the Eastern Shore,
- · to determine which academic programs and majors are most likely to succeed at Shore U,
- to understand the educational interests and motivations of high school and postsecondary students studying or working on the Eastern Shore,
- to unearth benefits for a host institution to take on the project of creating Shore U.

What will I do?

Interviews and focus groups are being administered to high school student participants at the participating Eastern Shore high schools, participating students at Eastern Shore Community College, and local business and industry professionals. This information will help us understand what factors make a four-year college an attractive option for postsecondary education as well as other attractive options for post-secondary education. Additionally, as a resident of the Eastern Shore, your perspective can help us assess why and how a student might choose to stay within or leave the region if a degree-granting postsecondary was available to them locally. We will collect demographic information (race, ethnicity, age, etc), personal background (number of years in Virginia, family information, etc), and other information such as GPA, course of study or intended major, collegiate aspirations, opinions of the Eastern Shore of Virginia, and more if applicable. The interviews will be conducted via Zoom between the participant and one or more of the Capstone Team. Interviews will be

recorded and transcribed, with all files being stored in Google Drive on the VCU secure service network. The interview will take no longer than one hour including time to review the consent statement with participants.

As our research involves interviews and focus groups with interested participants, at the end of the interview will be asked if you would recommend anyone else for us to reach out to for an interview or focus group. You do not have to provide contact information if you do not wish.

<u>Risks</u>

Personal or Probing Questions: Some questions ask for personal and potentially private information such as your GPA, your socioeconomic class, race and ethnicity, and your feelings on certain topics. If you feel uncomfortable answering a question at any time, you may skip them, choose to address only part of a question, or quit the interview at any time without any penalty.

Online data being hacked or intercepted: Anytime you share information online there are risks. We're using a secure system to collect this data, but we can't completely eliminate this risk. All interview and focus group data and analysis will be kept on Google Drive on secure Virginia Commonwealth University servers. The researchers will only utilize their VCU accounts when conducting and analyzing research to minimize the risk of data being shared outside of VCU.

Breach of confidentiality: There is a chance your data could be seen by someone who shouldn't have access to it. We're minimizing this risk by only utilizing our VCU school accounts to conduct any research and analysis of data and your data will be de-identified in the final project report.

Possible benefits:

Participants will benefit from providing critical information related to the potential of establishing a four-year degree-granting institution on the Eastern Shore of Virginia. This research is also a critical component of the four researchers' doctoral program and by participating in this research, participants are contributing to the educational achievement of four Virginia Commonwealth University Students.

Estimated number of participants:

While the results of this research project will not be generalizable outside the context of this project, our aim to gather information from 20 or more interviews.

How long will it take?

The interview will take no longer than one hour.

Costs: There is no cost to participate in the survey.

Compensation:

Participants from ESVA High Schools and from ESCC who successfully complete an interview or focus group will be able to be entered into a drawing for raffle prizes.

Future research:

Your data won't be used or shared for any future research studies.

Where will data be stored?

All data will be stored on VCU servers using Google Drive and on the video platform, Zoom. Data will be deidentified as much as possible and access to identifiable data will be extremely limited.

How long will it be kept?

Survey and interview data will be kept until the successful completion of the dissertation defense by July 1,2023.

Who can see my data?

We (the researchers) will have access to all data collected from the interview or focus group. This is so we can analyze the data and conduct the study.

We may share our findings in publications or presentations. If we do, the results will use de-identified (no names, birthdate, address, etc.).] If we quote you, we'll use pseudonyms (fake names).

Others who might have access to the survey data include the capstone committee members:

- · Dr. Jeffrey Wilson, Capstone Chair, Virginia Commonwealth University
- Dr. Brittany Gracik, Committee Member, Virginia Commonwealth University
- · Dr. Gypsy Denzine, Committee Member, Virginia Commonwealth University

Committee members may assist with data collection, analysis, and reporting to support the research team's progress. All committee members are extremely knowledgeable about maintaining privacy and confidentiality in research.

Agreement to Participate

Your participation is completely voluntary, and you can withdraw at any time.

Do you consent to being interviewed? Do you consent to having the interview recorded? Do you have any questions?

Participant Name

Participant Signature

Contact Information

Please feel free to call or text (804) 933-1581 or email <u>wiseks@vcu.edu</u> with any additional questions or concerns about your child participating in this information gathering survey.

For more information about the Foundation or its vision and mission, visit the University of the Eastern Shore of Virginia Foundation webpage (www.shoreu.org) or contact:

President/Founder: Terry Malarkey - londoner@ieee.org or (757)710-3001 Vice President/Treasurer: Kristine Marcy - kristinemarch@verizon.net or (202)368-0579 Secretary: Dr. Ed Murdy - eomurdy@yahoo.com or (301)641-7981

Questions about the research, complaints, or problems:

Dr. Jeffrey Wilson, Virginia Commonwealth University, jlwilson4@vcu.edu

We will send this information in follow-up email should you need it.

Appendix C

Putting the "U" in Shore U: Qualitative Interview Questions

Participant Name: Participant Company/Agency: Participant Role/Job Title: Years in the Role:

How long have you lived and/or worked on the Eastern Shore of Virginia?

How did you come to be on the Eastern Shore of VA? (Work, Native, Retirement, etc)

What are some of the things that make living and working on the Eastern Shore of VA great?

What challenges do you personally face living and/or working on the Eastern Shore?

In general, what are your concerns about the Eastern Shore of VA as it exists now? What about in the future?

What issues is your company/organization/community facing now or will be facing in the future as it relates to postsecondary education options on the Eastern Shore of VA?

What would you like to see happen on the Eastern Shore of VA in the next five years?

What do you believe are the biggest barriers and challenges for students currently on the Eastern Shore?

If you were/are a student, what would a school or center for higher education need to offer for you to consider pursuing education on the Eastern Shore?

What do you believe would attract students to pursue an internship on the Eastern Shore of VA?

What academic programs do you believe would be the most beneficial to students pursuing higher education on the Eastern Shore?

What industries do you believe would be most successful in partnering with any postsecondary education option on the Eastern Shore?

If the opportunity to complete a four-year degree were available on the Eastern Shore of VA, would you encourage students to remain on the Eastern Shore? Why or why not?

In your opinion, how does a postsecondary education option impact the economy of the Eastern Shore?

Is there anything more that you would like to share regarding the Foundation's desire to establish a four-year degree-granting institution or other postsecondary education option on the Eastern Shore?

Is there anyone else that you would recommend us contacting to gain more insight and information about the Eastern Shore of VA as it relates to our study?

For non- ESVA residents: Where do you work? For how long?

Are you familiar with/have you visited the ESVA?

ESVA facts: 1% population growth between 2010 and 2020, median age is 48 (vs. 39 for all of VA), the employment rate is 10 % lower than the rest of VA, and the poverty rate is 8% higher. Only 23% of residents have Bachelor's Degree or higher, as opposed to the 42% for in all of Virginia.

In your opinion, how can expanded postsecondary education opportunities stimulate economic development on the Eastern Shore?

In your opinion, what is the potential economic impact that Shore U could have on the Eastern Shore of Virginia?

How could your industry/business partner with Shore U to attract students?

Appendix D

Quantitative Data Survey Instrument Questions

Eastern Shore Community Members (A)

There were no questions unique to this survey instrument.

ESCC Administration, Faculty, Staff (B)

My role is:

Administration Faculty Staff Other Please specify:

I have worked at ESCC: 0-5 years 6-10 years 11-15 years 16-20 years More than 20 years

The quality of the ESCC/high school dual enrollment program is:

Very good Good Acceptable Poor Very poor No basis

The ESCC/high school dual enrollment program is meeting the current interest:

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree The ESCC/high school dual enrollment program has the capacity to serve more students than it currently is:

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree

In my experience, ESCC's top three enrollment challenges are (select three):

Economic conditions/family financial support Declining revenue/state financial support Concerns about student debt/Tuition Housing insecurity Food insecurity The strong labor market for unskilled workers Competition from online programs Decreasing numbers of high school graduates Negative attitudes toward higher education Competition from trade schools Competition from certificate programs Location Other Please specify:

In my experience, the majority of ESCC students have the following plan (select one): Complete some courses, then enter the workforce Complete their Associate's Degree, then enter the workforce Complete their Associate's degree, then transfer to a four-year university Complete a trade or certificate program, then enter the workforce Complete a trade or certificate program for their current job Other Please specify:

In my experience, the factors that influence my students' decision as to which college(s) to transfer to are (Check all that apply):

Location Cost Financial assistance package Desired major(s) offered Intellectually challenging/intense Athletics/school spirit Artsy atmosphere Conservative atmosphere Liberal atmosphere Politically active **Religious affiliation** Diversity Peer group/friends Greek Life (e.g., fraternities and sororities) HBCU (historically Black college/university) Internships Single Sex Study abroad Interaction with town Online In-person

In my experience, most ESCC transfer students will study ______ at their four-year college (select the top three):

Arts Business Communication, Media Education Engineering Government, Public Affairs, International Relations Health Professions Liberal Arts & Humanities (e.g., English, History, Psychology, Sociology) Math Sciences Social Work Technology Undecided

Topics I would be willing to discuss further (in an interview):

ESCC's relationships with colleges/colleagues in the Delaware and/or Maryland regions of the DelMarVa peninsula.

Data that you have/can share regarding your students.

Data that you have/can share regarding your alumni.

Data that you have/can share regarding alumni's post-ESCC educational pursuits. Data that you have/can share regarding your alumni's post-ESCC life experiences. Opportunities for collaboration with the Foundation. Roadblocks for the Foundation. Other. Please specify:

ESCC Students (C)

I am in my _____ semester at Eastern Shore Community College (ESCC):

First Second Third Fourth Fifth Sixth Seventh or more

My GPA is:

0.00 - 0.99 1.00 - 1.99 2.00 - 2.99 3.00 - 3.99 4.00+

I attended High School on the Eastern Shore of Virginia (Eastern Shore).

True

False

If true, please provide the name of your high school:

While in High School, I had dual enrollment at ESCC? True False

If true, please indicate what courses you took:

What factors influenced your decision to enroll at ESCC (select all that apply):

Cost

Family responsibilities

Feeling undecided about future goals/plans

Friends/peer group

Specific trade or certificate program Parental/guardian support Proximity to home Other, please specify:

I do not live on the Eastern Shore; I commute from:

N/A

Please specify location or distance:

If you are not happy living on the Eastern Shore, what would need to happen/change to attract you to live/work on the Eastern Shore (select all that apply):

N/A

More peers/people in my age group Employment opportunities Earning potential More development of the region Less development of the region Other, Please specify:

After ESCC, I plan to:

Transfer to a 4-year college or university (Routed to next appropriate question) Attend another 2-year college or university Attend a trade or certificate program Enter military service Enter the workforce/get a job Undecided Other, please specify:

I plan to transfer to a four-year college; if there was a University of the Eastern Shore of Virginia, I would want to earn my four-year degree there:

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree Public colleges/universities in Virginia that I view positively and <u>would</u> consider attending (select your top 3):

Christopher Newport University College of William and Mary George Mason University James Madison University Longwood University Norfolk State University Old Dominion University Radford University University of Mary Washington University of Virginia UVA-Wise Virginia Commonwealth University Virginia Military Institute (VMI) Virginia State University Virginia Tech Other, please specify:

Public colleges/universities in Virginia that I view negatively and <u>would not</u> consider attending (select up to 3):

Christopher Newport University College of William and Mary George Mason University James Madison University Longwood University Norfolk State University Old Dominion University Radford University University of Mary Washington University of Virginia UVA-Wise Virginia Commonwealth University Virginia Military Institute (VMI) Virginia State University Virginia Tech Other, please specify:

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Eastern Shore High School Administration (D)

I am a:

High School Principal High School Assistant/Associate Principal High School Guidance Counselor Other Please specify:

Select the high school where you work:

Arcadia HS Chincoteague HS Nandua HS Northampton HS Broadwater Academy Other Please specify:

In my experience, the majority of graduates from the high school where I work have the following plan for themselves after their graduation (select one):

4-year college or university2-year college or universityTrade or certificate programMilitary serviceWorkforceGap yearNo plan/they are unsure what to do nextOther

In my experience, my student's parent(s)/guardian(s) want them to:

Attend a 4-year college or university Attend a 2-year college or university Attend a trade or certificate program Enter military service Enter the workforce Take a gap year Graduate from high school, anything beyond that is up to the student Other In my experience, the factors that influence my students' decision as to which college(s) to apply to are (Check all that apply):

Location Cost Financial assistance package Desired major(s) offered Intellectually challenging/intense Athletics/school spirit Artsy atmosphere Conservative atmosphere Liberal atmosphere Politically active **Religious affiliation** Diversity Greek Life (e.g., fraternities and sororities) HBCU (historically Black college/university Internships Single Sex Study abroad Online In-person Interaction with town

In my experience, I expect that graduates from the high school where I work will study in college (select the top three):

Arts Business Communication, Media Education Engineering Government, Public Affairs, International Relations Health Professions Liberal Arts & Humanities (e.g., English, History, Psychology, Sociology) Math Sciences Social Work Technology Undecided

Eastern Shore High School Students (E)

I am a:

Junior Senior Other Please specify

Select your high school: Arcadia HS Chincoteague HS Nandua HS Northampton HS

Broadwater Academy

Other Please specify:

1 5

Your high school GPA:

A+/97-100 A/90-96 B+/86-89 B/80-85 C+/76-79 C/70-75 D+/66-69 D/60-65 F/ below 60 Other Please specify:

Do you have dual enrollment with Eastern Shore Community College (ESCC)?

No

Yes If yes, please list the courses you have taken:

I have lived on the Eastern Shore of Virginia (Eastern Shore):

My entire life (age 0-1 year)

Since before I started school (age 1-5 years)

Since I was in elementary school (age 6-10 years)

Since I was in middle/junior high school (age 11-13 years)

Since I was in high school (age 14-18 years)

N/A I do not live in Accomack or Northampton Counties

Immediately after high school I plan to (select one):

Attend a 4-year college or university Attend a 2-year college or university/community college Attend a trade or certificate program Enter a military service Join the workforce/get a job Take a gap year before going to college/university Undecided Other Please specify:

I plan to attend ESCC, then IF there was a University of the Eastern Shore of Virginia (4-year), I would want to earn my four-year degree there:

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree

I plan to attend a four-year college, if there were a University of the Eastern Shore of Virginia, I would want to earn my four-year degree there:

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree

My parent(s)/guardian(s) want me to attend college: Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree

Disagree

Strongly disagree Not applicable

My parent(s)/guardian(s) do or would want me to attend college close to home:

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree Not applicable

My parent(s)/guardian(s) expect me to live on the Eastern Shore after college graduation:

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree Not applicable

(Open Ended Question) - Is there anything more that you would like to share about your plans for your future?

Wallops Island Space Community (F)

I work for:

NASA Rocket Lab VA Space/MARS Other Please specify:

My role would best be described as:

Aerospace Engineer/Technician Administrative Astronomer Avionics Engineer

Business/Management **Computer Engineer** Data Analyst **Electronics Engineer** Finance Human Resources Industrial Hygienist IT Legal Counsel Logistics Mathematician Mechanical Engineer Medical support Meteorologist Photographer/Producer/Technical Writer **Propulsion Engineer Public Relations** Scientist Technician Other: Please specify:

I have worked on Wallops Island: 0-5 years 6-10 years 11-15 years 16-20 years More than 20 years

VCU Students (G)

I am in my semester at VCU: Drop-down menu

My school/college is:

School of the Arts School of Business College of Engineering College of Humanities & Sciences Life Sciences Other, please indicate your school/college: Are you familiar with the Eastern Shore of Virginia?

Yes, I am from the Eastern Shore of Virginia.Yes, I have visited the Eastern Shore of Virginia.Yes. I have never been, but would be interested in learning more.Yes. I have never been, and would NOT be interested in learning more.No, but I would like to learn more.No. I would NOT like to learn more.

I visited the Eastern Shore of Virginia with my academic program.

True False If, true please indicate what program:

Do you have any interest in working in any of the following professions (select all that apply):

The commercial space industry (Wallops Island, NASA, VA Space/MARS, Rocket Lab, etc.) Rural healthcare (doctor, nurse, hospital administration, other medical fields) Education (teaching, school administration) Industries associated with the Chesapeake Bay (fishing, oysters, preservation) Climate change (water levels, changing ecosystems, wind energy)

Life Sciences (environmental studies, studies related to biological life)

Art (communication arts, graphic design, interior design, visual and performance art)

I would consider participating in an internship on the Eastern Shore (e.g., at Wallops Island). Strongly agree

Agree Somewhat agree Neither agree nor disagree Somewhat disagree Disagree Strongly disagree

I could see myself living/working/completing my VCU education on/from the Eastern Shore.

Strongly agree Agree Somewhat agree Neither agree nor disagree Somewhat disagree Disagree Strongly disagree

I could see myself living/working on/from the Eastern Shore of Virginia after I leave VCU.

Strongly agree Agree Somewhat agree Neither agree nor disagree Somewhat disagree Disagree Strongly disagree

(Open Ended Question) - Is there anything more you would like to say about educational opportunities on the Eastern Shore (e.g., about internships, co-ops, etc.)?

VCU Administration, Faculty, Staff (H)

My role is:

Administration Faculty Staff Other Please specify:

I have worked at Virginia Commonwealth University (VCU)::

0-5 years 6-10 years 11-15 years 16-20 years More than 20 years

I have visited/am familiar with the Eastern Shore of Virginia (Eastern Shore): True

False

Understanding that the mission of the Foundation is to partner with a Virginia institution, in my professional role, I am in agreement with this mission and would be supportive of a partnership between the Foundation and VCU:

True False Given the current trends in higher education, and based on my professional role, I would recommend that VCU consider partnering with the Foundation in their efforts to establish a (select all that apply):

Center of Excellence (e.g., The VCU Rice Rivers Center) Destination college or university Higher education center (e.g., The New College Institute) Satellite campus Upper-division college or university (one that requires applicants to have already completed their first two years) Other: Please Specify:

VCU could encourage students to participate in internships on the Eastern Shore in the following areas (select all that apply):

The commercial space industry Rural healthcare Education Industries associated with the Chesapeake Bay Climate change Life Sciences Other, please specify _____ No opinion/basis

I believe that a partnership between VCU and the Foundation reflects VCU's values and aligns with its Quest 2028 Goals:

True Please specify: False

I see benefits **for VCU** if it partners with the Foundation: True

Please specify: False

I see benefits **for the Foundation** if it partners with VCU: True Please specify: False I see benefits for the Eastern Shore if VCU partners with the Foundation

True Please specify: False

Questions Appearing on Multiple Survey Instruments

Survey Instruments A, B, D, F, H

As a resident of or professional on the Eastern Shore/of Virginia:

For each of the six (6) questions in this section, select the ONE option that best describes your level of concern.

I am ______ about low population growth on the Eastern Shore, only 1% between 2010 and 2020.

Very unconcerned Unconcerned Somewhat unconcerned Not sure/have no opinion Somewhat concerned Concerned Very concerned

I am ______ about the higher median age of residents of the Eastern Shore, approximately 48 years of age, versus 39 for all of Virginia.

Very unconcerned Unconcerned Somewhat unconcerned Not sure/have no opinion Somewhat concerned Concerned Very concerned

I am ______ about the lower employment rate on the Eastern Shore, 50% vs. 60% for all of Virginia.

Very unconcerned Unconcerned Somewhat unconcerned Not sure/have no opinion Somewhat concerned Concerned

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Very concerned

I am ______ about the higher poverty rate on the Eastern Shore, 18% vs. 10% for all of Virginia.

Very unconcerned Unconcerned Somewhat unconcerned Not sure/have no opinion Somewhat concerned Concerned Very concerned

I am ______ about the higher percentage of people without health care coverage on the Eastern Shore, 12% vs. 7% for all of Virginia.

Very unconcerned Unconcerned Somewhat unconcerned Not sure/have no opinion Somewhat concerned Concerned Very concerned

I am _____ by the fact that only 23% of residents on the Eastern Shore have a Bachelor's Degree or Higher, as opposed to the 42% in all of Virginia.

Very unconcerned Unconcerned Somewhat unconcerned Not sure/have no opinion Somewhat concerned Concerned Very concerned

Before today, I was aware of the University of the Eastern Shore of Virginia Foundation (the Foundation).

True False

I believe the following academic programs would be a good fit for an academic partnership on the Eastern Shore (select all that apply):

Arts Business Communication, Media Education Engineering Government, Public Affairs, International Relations Health Professions Liberal Arts & Humanities (e.g., English, History, Psychology, Sociology) Math Sciences Social Work Technology Unsure/no opinion

I believe the following industries offer the greatest potential for educational partnerships on the Eastern Shore (select your top two):

The commercial space industry (Wallops Island, NASA, VA Space/MARS, Rocket Lab, etc.) Rural healthcare (doctor, nurse, hospital administration, other medical fields) Education (teacher, school administration)

Industries associated with the Chesapeake Bay (fishing, oysters, preservation) Climate change (water levels, changing ecosystems, wind energy) Life Sciences (environmental studies, studies related to biological life) Other, please specify

(Open-Ended Question) How can expanded postsecondary education opportunities stimulate economic development on the Eastern Shore?

(Open-ended Question) What is the potential economic impact that Shore U could have on the Eastern Shore?

(Open Ended Question) - Is there anything more that you would like to share regarding the Foundation's desire to establish a four-year degree-granting institution on the Eastern Shore?

Survey Instruments A, B, D, F

I have lived on the Eastern Shore of Virginia (Eastern Shore):

0-5 years 6-10 years 11-15 years 16-20 years More than 20 years Not applicable

I was -

Was born on the Eastern Shore Moved to the Eastern Shore as a child, with my parent(s)/guardian(s) Moved to the Eastern Shore as an adult None of the above (Directed to question 6/others directed to next section)

I do not live on the Eastern Shore, I commute from (please specify location or distance):

In my experience as a resident of or a professional working on the Eastern Shore, the biggest challenges to attracting and retaining a talented workforce for my industry/business are (select up to three):

Educational readiness of the residents of the Eastern Shore Location - Rural Location - DelMarVa Peninsula Available housing Available health care Cost of living Available employment opportunities for spouses/partners Educational resources for children Broadband/high-speed and WIFI internet access Other Please specify:

Understanding that the mission of the Foundation is to establish a four-year, degree-granting institution (Shore U) on the Eastern Shore, I see the benefits of this mission and would be supportive of/in agreement with this goal:

True False

Survey Instruments A, F

How familiar are you with Virginia Commonwealth University (VCU)? Very familiar Familiar Somewhat familiar Not familiar A partnership between the Foundation and VCU could serve the educational needs of your industry/business:

Strongly agree Agree Somewhat agree Not sure/have no opinion Somewhat disagree Disagree Strongly disagree

To my knowledge, my industry/business offers internships to college students:

True False Unknown

In my opinion, my industry/business could offer internships to college students:

I answered True on Question 18/not applicable

True

False

(Open-ended Question) How could your industry/business partner with Shore U to attract students?

Survey Instruments B, D

If there was a University of the Eastern Shore of Virginia, I would encourage my students to seek their four-year degree there:

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree

I would encourage my students to consider completing an internship on the Eastern Shore: Strongly agree

Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree

I would encourage my students to remain on the Eastern Shore after they complete their education.

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree

Do you have/or have you had high-school or college-aged children?

Yes

No (redirect to next section)

What are/were their plans for after their high school graduation? (this is set up to ask about up to four children)

N/A 4-year college or university 2-year college or university Trade or certificate program Military service Workforce/Get a job Gap year No plans/unsure Other

After their high school graduation -

This child (up to four) is, will be, or was ...

N/A

Able to come home every weekend (short-commute).

Able to come home as needed (>/= half-a-days drive).

Able to come home only on vacations/school closures (< half-a-day drive/a

flight).

If there was a University of the Eastern Shore of Virginia, I would encourage my students to seek their four-year degree there:

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree

I would encourage my students to consider completing an internship on the Eastern Shore:

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree

I would encourage my students to remain on the Eastern Shore after they complete their education.

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree

Survey Instruments C, E

I am happy living on the Eastern Shore:

(for the purposes of this survey, happy is defined as content, pleased to continue)

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree I see myself living/working/continuing my education on the Eastern Shore after I graduate from high school:

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree Not applicable ex. Military service

Do you have any interest in working in any of the following professions (select all that apply):

The commercial space industry (Wallops Island, NASA, VA Space/MARS, Rocket Lab, etc.) Rural healthcare (doctor, nurse, hospital administration, other medical fields) Education (teacher, school administration) Industries associated with the Chesapeake Bay (fishing, oysters, preservation) Climate change (water levels, changing ecosystems, wind energy) Life Sciences (environmental studies, studies related to biological life)

What would <u>you</u> like to see in a four-year college/your transfer institution? Size/Number of students (Check all that apply):

Small (3,000 and under) Medium (3,000 -10,000) Large (10,000 -20,000) Largest (over 20,000) No preference

Location (Check all that apply):

Northeast (CT, MA, RI, VT, NH, ME) Mid-Atlantic (NY, NJ, MD, PA, DE) Midwest (IL, IN, MI, WI, OH, MN, MO, etc.) South (FL, GA, LA, NC, SC, TN, VA, etc.) West (AZ, CA, CO, OR, WA, etc.) Flight to school is okay Less than or equal to a half-a-day drive to school More than half-a-day drive to school Live at home and commute to school

Ideally, I want to be:

Able to commute from home Able to come home every weekend (short-commute). Able to come home as needed (less than or equal to a half-a-days drive). Able to come home only on vacations/school closures (more than half-a-day drive/a flight). Other Please specify:

Campus setting (Check all that apply):

Metropolitan(in a city) Suburban (near a city) Rural Co-ed Single Sex No preference

Religious affiliation (e.g., Liberty University, Catholic University) Yes No No preference

Which factors will influence <u>your decision</u> as to which college(s) you will transfer to (Check all that apply)?

Location Cost Financial assistance package Desired major(s) offered Intellectually challenging/intense Athletics/school spirit Artsy atmosphere Conservative atmosphere Liberal atmosphere Politically active **Religious affiliation** Diversity Greek Life (e.g., fraternities and sororities) HBCU (historically Black college/university) Internships Single Sex Study abroad

Online In-person Interaction with town Peer group/friends None of the above

I intend to study:

Arts Business Communication, Media Education Engineering Government, Public Affairs, International Relations Health Professions Liberal Arts & Humanities (e.g., English, History, Psychology, Sociology) Math Sciences Social Work Technology Undecided

Regardless of where I am attending college, I would consider participating in an internship on the Eastern Shore (e.g., at Wallop's Island):

Strongly agree Agree Somewhat agree Not sure/no opinion Somewhat disagree Disagree Strongly disagree

Education Attainment in your family. Select the level of education completed for each family member/guardian: (The question is presented with a matrix of drop-down menus)

Father/male guardian Mother/female guardian Siblings (up to four)

Responses: N/A or unknown Did not graduate from high school High school graduate/GED Some college Associate's Degree Bachelor's Degree Masters Degree Terminal Degree (Ph.D./Doctorate, Juris Doctorate/JD, MBA)

Survey Instruments C, E, G

(Open Ended Question) - Is there anything more that you would like to share about your plans for your future?

I would like to enter my name for the raffle.

Name Email address Phone number

All Survey Instruments

I have reviewed the participant consent form (linked). Continuing with the survey confirms my consent.

Yes No (sends to disqualification page)

OR (for ESCC and high school student surveys)

I am 18 years of age. I have reviewed the participant consent form (linked). Continuing with the survey confirms my consent.

*If you are not yet 18 years of age, parental consent is required. Your parent or guardian will need to review and sign this form (parental consent form linked).

Yes

No (to disqualification page)

I would be willing to participate in an interview related to these topics in the future:

Yes No If yes, please provide your contact information Name (Company) Email address Phone number

Appendix E

Quantitative Phase Consent Form

Virginia Commonwealth University

Department of Education

Informed Consent to Participate in Information Collection

Study Title: Putting the "U in Shore U": Expanding Postsecondary Education on the Eastern Shore of Virginia

Researchers:

Karen Belanger, Doctoral Candidate, Educational Leadership Katy Jones, Doctoral Candidate, Educational Leadership Takeya McLaurin, Doctoral Candidate, Educational Leadership Katharine Wise, Doctoral Candidate, Educational Leadership:

We're inviting you to take a survey for information gathering purposes for our dissertation and capstone project. This survey is completely voluntary. There is no penalty or other negative consequences if you don't want to take the survey. If you start the survey, you can always change your mind and stop at any time.

What is the purpose of this study?

The purpose of this study is to outline a comprehensive five-year plan that lays out the steps necessary to create a new, attractive postsecondary education option on the Eastern Shore of Virginia. Our client, the University of the Eastern Shore of Virginia Foundation, has developed the name The University of the Eastern Shore of Virginia, or "Shore U", for this proposed institution of higher education. This is a mixed-method study that will utilize both quantitative and qualitative data to address our central research question pertaining to establishing Shore U. The goal of this mixed-method research design is:

- to understand the demographic and economic profile of the Eastern Shore of Virginia and how it compares to other rural or economically-disadvantaged areas with a similar profile to the Eastern Shore,
- to determine which academic programs and majors are most likely to succeed at Shore U,
- to understand the educational interests and motivations of high school and postsecondary students studying or working on the Eastern Shore,
- to unearth benefits for a host institution to take on the project of creating Shore U.

What will I do?

This quantitative survey is being administered to junior and senior high school student participants at the participating Eastern Shore high schools as well as to all participating

students at Eastern Shore Community College. These survey results will help us understand what factors make a four year college an attractive option for postsecondary education. Additionally, as a resident of the Eastern Shore, your perspective can help us assess why and how a student would choose to stay within or leave the region if a degree-granting postsecondary was available to them locally. The survey will collect demographic information (race, ethnicity, age, etc), personal background (number of years in Virginia, family information, etc), GPA, course of study or intended major, collegiate aspirations, opinions of the Eastern Shore of Virginia, and more. The survey uses the survey tool *Survey Monkey* and will feature a variety of question types including Likert scales, check-all, multiple choice, and ranking-type questions. While we would prefer for survey respondents to answer every question for research completion, however, participants may choose to skip any questions they do not feel comfortable answering or do not wish to answer at this time. The survey will take no longer than 15-20 minutes to complete.

The second phase of our research involves interviews and focus groups with interested participants. At the end of the survey, you will be asked if you would be willing to do an interview for our research study. You do not have to participate in the second part of the research study to receive the gift card for completion of the survey.

<u>Risks</u>

Personal or Probing Questions: Some questions ask for personal and potentially private information such as your GPA, your family's socioeconomic class, and your aspirations after graduation. If you feel uncomfortable answering a questions at any time, you may skip them or quit the survey at any time without any penalty.

Online data being hacked or intercepted: Anytime you share information online there are risks. We're using a secure system to collect this data, but we can't completely eliminate this risk. All survey data and analysis will be kept on Google Drive on secure Virginia Commonwealth University servers. The researchers will only utilize their VCU accounts when conducting and analyzing research to minimize the risk of data being shared outside of VCU.

Breach of confidentiality: There is a chance your data could be seen by someone who shouldn't have access to it. We're minimizing this risk by only utilizing our VCU school accounts to conduct any research and analysis of data and your data will be de-identified in the final project report. The online survey is completely anonymous and will not collect information about your name, ID number, email address, or any other identifying information. Students wishing to enter the drawing for an Amazon gift card for completion of this survey will need to provide an email address at the end of the survey. All efforts will be made to ensure that email addresses are not shared outside of the research group and the email addresses will be deleted after the successful defense of the dissertation no later than July 1, 2023.

Possible benefits:

Participants will benefit from providing critical information related to the potential of establishing a four-year degree granting institution on the Eastern Shore of Virginia. This research is also a critical component of the four researchers' doctoral program and by participating in this research, participants are contributing to the educational achievement of four Virginia Commonwealth University Students.

Estimated number of participants:

While the results of this research project will not be generalizable outside the context of this project, our aim to gather survey results from 70% of participants.

How long will it take?

The survey should take no longer than 15-20.

Costs: There is no cost to participate in the survey.

Compensation:

Participants from ESVA High Schools and from ESCC who successfully complete the survey will be able to be entered into a drawing for raffle prizes.

Future research:

Your data won't be used or shared for any future research studies.

Where will data be stored?

All data will be stored on VCU servers using google Drive and on the survey platform, Survey Monkey. Data will be de-identified as much as possible and access to identifiable data will be extremely limited.

How long will it be kept?

Survey and interview data will be kept until the successful completion of the dissertation defense by July 1,2023.

Who can see my data?

We (the researchers) will have access to all data collected from the survey. This is so we can analyze the data and conduct the study.

We may share our findings in publications or presentations. If we do, the results will use de-identified (no names, birthdate, address, etc.).] If we quote you, we'll use pseudonyms (fake names).

Others who might have access to the survey data include the capstone committee members:

- Dr. Jeffery Wilson, Capstone Chair, Virginia Commonwealth University
- Dr. Brittany Gracik, Committee Member, Virginia Commonwealth University
- Dr. Gypsy Denzine, Committee Member, Virginia Commonwealth University

Committee members may assist with data collection, data analysis, and data reporting in an effort to support the research team's progress. All committee members are extremely knowledgeable about maintaining privacy and confidentiality in research.

Agreement to Participate

Your participation is completely voluntary, and you can withdraw at any time. To take this survey, you must be:

- At least 16 years old
- A current Eastern Shore Community College student or
- Current Eastern Shore High School Student

If you meet these criteria and would like to take the survey, click the button below to start.

Contact Information

Please feel free to call or text (804) 933-1581 or email <u>wiseks@vcu.edu</u> with any additional questions or concerns about your child participating in this information gathering survey.

For more information about the Foundation or its vision and mission, visit the University of the Eastern Shore of Virginia Foundation webpage (<u>www.shoreu.org</u>) or contact:

President/Founder: Terry Malarkey - <u>londoner@ieee.org</u> or (757)710-3001 Vice President/Treasurer: Kristine Marcy - <u>kristinemarch@verizon.net</u> or (202)368-0579

Secretary: Dr. Ed Murdy - eomurdy@yahoo.com or (301)641-7981

Questions about the research, complaints, or problems:

Dr. Jeffery Wilson, Virginia Commonwealth University, jlwilson4@vcu.edu

Please print or save this screen if you want to be able to access the information later.

Appendix F

Electrical Engineering, Bachelor of Science (and accelerated masters) Transfer Map



Electrical Engineering, Bachelor of Science (and accelerated masters)

VCU

2022-2023

Community college: A.A.&.S. or A.S. in engineering (Virginia Community College System)

Associate degree A.A.&.S. or A.S. in Engineering

Program description

The profession of electrical engineering touches all aspects of our lives in that electrical engineers design



and fabricate devices and systems critical in applications such as computing, communications, health care, manufacturing and automation, power generation and utilization, transportation, and entertainment. An element very important to these and many other applications is the microelectronic device or system.

Electrical engineers play an ever increasing role in the design and building of major facets of today's and tomorrow's health care systems and medical research through the application of microelectronic instrumentation and diagnostic tools such as MRI and CAT scan systems. The field of electrical engineering truly permeates every facet of our lives and thus provides excellent employment opportunities to the general practitioner or specialist in more than 35 different subspecialties.

Career opportunities

Electrical engineers design, develop, test, and supervise the manufacture of electrical equipment. Some of this equipment includes electric motors; machinery controls, lighting, and wiring in buildings; radar and navigation systems; communications systems; and power generation, control, and transmission devices used by electric utilities. Electrical engineers specialize in areas such as communications, signal processing, and control systems or have a speciality within one of these areas—control systems or aviation electronics, for example.

Bachelor-level job titles

Automation Engineer Control Systems Engineer Electrical Engineer Photonics Engineer Robotics Engineer Automotive Engineer Design Engineer Mechatronics Engineer Power Systems Engineer Solar Energy Systems Engineer

Graduate and professional level job titles

College Professor Research & Development Engineer Firmware Engineer Systems Engineer/Manager

Contact information

VCU Transfer Center Telephone: (804) 827-1349 Email: transferinfo@vcu.edu Transfer Advising Request

Office of Admissions

Telephone: (804) 828-1222 or (800) 841-3638 Email: ugrad@vcu.edu Apply Here.

Guaranteed transfer

admission

- Completion of associate degree (A.A.&.S.
 - or A.S. in Engineering)
 - Minimum GPA of 3.0
 - All courses must be completed with a grade of "C" or better
 - Earn a minimum grade of "B" in all your math, science and engineering classes

Degree requirements in Bulletin

Electrical Engineering, Bachelor of Science (B.S.)

Electrical Engineering, Bachelor of Science (B.S.), accelerated Bachelor's-to-Master's

Plan of study in Bulletin

Electrical Engineering, Bachelor of Science (B.S.) Electrical Engineering, Bachelor of Science (B.S.), accelerated Bachelor's-to-Master's

Requirements

Highest level of math required: MATH 201 or higher

Science required: 5+ additional science courses

Foreign language requirements: No

Additional tuition/fees: Yes

GPA requirements (to progress/graduate in the major): 2.0+ cumulative GPA, 2.0+ major GPA

VCU Major Maps View VCU Major Map for Electrical Engineering

Visit majormaps.vcu.edu for the online version with links. Sponsored by the Office of the Provost



Electrical Engineering, Bachelor of Science (and accelerated masters)

Virginia Community College System (A.A.&.S. or A.S. in engineering)

MAXIMIZE COURSE AND	DEVELOP CULTURAL AGILITY	EXPLORE CAREERS AND	PREPARING FOR LIFE AFTER
DEGREE PLANNING COMMUNITY DE		DEVELOP ESSENTIAL SKILLS	COLLEGE

PUTTING THE "U" IN SHORE U

_		MAXIMIZE COURSE AND DEGREE PLANNING	GET CONNECTED WITH YOUR COMMUNITY	DEVELOP CULTURAL AGILITY	EXPLORE CAREERS AND DEVELOP ESSENTIAL SKILLS	PREPARING FOR LIFE AFTER COLLEGE
EXPLORE	YEAR 1	 Schedule an appointment with your community college advisor to map out your associate degree course plan. Enroll in the SDV student success course. Complete your english and start your math requirements in your first year. Be prepared for academic challenges and utilize tutoring resources to get ahead. Explore GRASP financial aid resources and submit the FAFSA on time. 	Explore the VCU Electrical and Computer engineering department website. Learn about the transfer admission process for VCU. Review admission information for engineering transfer students. Get involved with student clubs and organizations at your community college. Volunteer for community service projects. Register to vote.	 Identify a mentor in a diversity organization. Attend diversity-focused events on your community college campus and in your community (e.g., international festival). Make friends with people with diverse perspectives and join a cultural or identity-related student organization. 	 Create LinkedIn profile. Complete career assessments through the Virginia Education Wizard. Browse information about occupations and job titles associated with electrical engineering. Assess your preparation for a career by completing a Gap Analysis. 	 Create a weekly and monthly budget. Prepare for a career after college by creating a brand for yourself. Develop personal and career goals and create SMART steps for 2-3 "dream jobs." Practice independent living skills such as money and time management, self- care, and personal responsibility.
EXPERIENCE	YEAR 2	 Be prepared for academic challenges. Use tutoring resources to get ahead. Meet with your community college advisor to finalize plans to complete your associate degree. Submit a transfer advising request to the VCU Transfer Center. Research scholarship opportunities and explore your eligibility for the Two-Year College Transfer Grant. Explore the accelerated BS to MS in Electrical Engineering program. 	 Apply to VCU. Visit the VCU campus and attend a transfer admission session. Research housing options for next year. Attend a talk or other event sponsored by the VCU Electrical and Computer Engineering department, or meeting with VCU students to make professional and personal connections. 	 Consider learning a foreign language to open doors to international organizations and future study. Learn about short-term, semester and year-long study abroad options. Attend VCU cultural events, including the monthly Global Café, VCU Diversity Scholars in Research week, or VCU Electrical and Computer Engineering department-related events. Check out the VCU Office of Multicultural Student Affairs (OMSA) and follow @vcuemsa. 	 Find out about VCU REAL and learn about VCU's REAL graduation requirement. Attend Career & Internship Fairs throughout the year. Acquire career related experience (e.g., job, internship, organization involvement). If your GPA is 3.5 or higher, consider applying for the VCU Honors College. 	 Using LinkedIn, connect to at least 10 people. Check out the VCU alumni page in My Network. Conduct informational interviews or shadow someone in a field of career interest. Use the cost calculator to estimate your tuition/fees as an upperclassman at VCU. Explore the types of aid available at VCU. Consider who you would like to have serve as professional and academic references for future letters of recommendation.

Electrical Engineering, Bachelor of Science (and accelerated masters)

Virginia Community College System (A.A.&.S. or A.S. in engineering)

Title

Course

Virginia Community College System courses

VCU courses

Credits

Requirements

Course	Title	Equivalent course	Credits	Requirements
	Studer	nts who ea	arn th	nis

associate degree before enrolling at VCU will be eligible for a waiver of VCU's general education requirements.

SDV 100 or 101	College Success Skills	UNIV 101	1	Elective
ENG 111	College Composition I Note: students with credit for AP English Language and Composition will only receive credit for UNIV 111 at VCU and should take ENG 112 to fulfill the VCU composition requirement.	UNIV 111- 112	3	General education
ENG 112	College Composition II	UNIV 200	3	General education
MTH 263	Calculus I (earn minimum grade of "B")	MATH 200	4	Major (Ancillary)
MTH 264	Calculus II (earn minimum grade of "B")	MATH 201	4	Major (Ancillary)
MTH 265	Calculus III (earn minimum grade of "B")	MATH 307	4	Major (Ancillary)
MTH 267	Differential Equations (earn minimum grade of "B")	MATH 301	3	Major (Ancillary)
PHY 241	University Physics I (earn minimum grade of "B")	PHYS 207	4	Major (Ancillary)
PHY 242	University Physics II (earn minimum grade of "B")	PHYS 208	4	Major (Ancillary)
CHM 111	General Chemistry I (earn minimum grade of "B")	CHEM/Z 101	4	Major (Ancillary)

Your GPA Doesn't Transfer With You Although you worked hard to earn your grades at your current institution, they will only be considered by VCU for an admission decision. Once you enroll at VCU, your GPA will reset to 0.0, and your new GPA will be determined by your level of success in your classes at VCU.

EGRE 245	Engineering Programming (if VCCS course is not C++)	0 to 4	Major
EGRE 246	Advanced Engineering Programming	3	Major
EGRE 303	Electronic Devices	3	Major
EGRE 306	Introduction to Microelectronics	4	Major
EGRE 309	Introduction to Electromagnetic Fields	3	Major
EGRE 310	Electromagnetic Fields and Waves	3	Major
EGRE 335	Signals and Systems	4	Major
EGRE 336	Introduction to Communication Systems	3	Major
EGRE 337	Statistical Information Processing	3	Major
EGRE 364	Microcomputer Systems	4	Major
ENGR 402 + ENGR 403	Senior Design Studio (Seminar)	2	Major
	Select one of the following sequences: EGRE 404 + EGRE 405 or EGRE 406 + EGRE 407	4	Major

Course	Title	Equivalent course	Credits	Requirements
EGR 121 + EGR 122	Foundations of Engineering + Engineering Design (both must be completed to receive credit for VCU equivalents) (earn minimum grade of "B")	EGRE 101	5	Major
EGR 125	Introduction to Computer Programming for Engineers (programming language must be C++ to receive credit for VCU equivalent)	EGRE 245	3	Major
EGR 270	Fundamentals of Computer Engineering (earn minimum grade of "B")	EGRE 254	4	Major
EGR 271	Electric Circuits I (earn minimum grade of "B")	EGRE 206	4	Major
EGR 272	Electric Circuits II (earn minimum grade of "B")	EGRE 207	4	Major
PHI 220	Ethics	PHIL 201	3	Major (Ancillary)
ECO 202	Principles of Microeconomics (substitute for the ECON 205 requirement)	ECON 210	3	Major (Ancillary)
	Complete general education requirements for associate degree	VCU equivalents	6	General education
6	unity college credits tran	- f d t 14044	66	

Course	Title	Credits	Requirements				
	Technical electives	18	Major				
SPCH 321	Speech for Business and the Professions	3	Major (Ancillary				
	Open electives	7	Elective				
	Credits completed at VCU	64					
Minimu	m credits required for bachelor's degree	130					

The accelerated B.S. and M.S. program allows qualified students to earn both the B.S. in Electrical Engineering and M.S. in Engineering with a concentration in electrical and computer engineering in a minimum of five years by completing approved graduate courses during the senior year of their undergraduate program. Minimum qualifications for entrance to this accelerated program include completion of 98 undergraduate credits, including the prerequisite courses for the capstone project and a minimum of 12 courses from the major requirements; an overall minimum GPA of 3.0; and a minimum GPA of 3.2 in major course work.

Appendix G

Transfer Steps Academic Plan Worksheet

TRANSFER STEPS - ACADEMIC PLAN WORKSHEET

 Complete the following worksheet in order to establish your course of action toward graduation!

 Fall Semester
 Hours
 Summer Semester
 Hours

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Fall Semester	Hours	Spring Semester	Hours	Summer Semester	Hours
Total Hours		Total Hours		Total Hours	

Fall Semester	Hours	Spring Semester	Hours	Summer Semester	Hours
Total Hours		Total Hours		Total Hours	

Fall Semester	Hours	Spring Semester	Hours	Summer Semester	Hours
Total Hours		Total Hours		Total Hours	

Appendix H

Shore U Capstone Executive Summary



Putting the "U in Shore U": Expanding Postsecondary Education on the Eastern Shore of Virginia

Executive Summary

Introduction

The University of the Eastern Shore of Virginia Foundation was established in 2018 to chart a path for founding an institution for postsecondary education, the University of the Eastern Shore of Virginia (Shore U). The Foundation believes that establishing a university on the Eastern Shore of Virginia will benefit the region through economic stimulation, population retention, and growth.

Purpose of the Study

The purpose of this study is to outline a comprehensive five-year plan that lays out the steps necessary to create a new, attractive postsecondary education option on the Eastern Shore of Virginia.

Research Questions

- A.) How can expanded postsecondary education offerings stimulate economic development on the Eastern Shore?
 B.) What potential economic impact could Shore U have on the Eastern Shore of Virginia?
- 2. How can a proposed partnership with the local community college and a four-year institution keep Eastern Shore residents from leaving the area for higher education?
- 3. What academic programs would be a good fit for an academic partnership on the Eastern Shore?

Methodology

Using a mixed-methods research approach, this study seeks to answer the following: (1) how will a Shore U fulfill the educational pursuits of Eastern Shore residents, (2) what postsecondary programs will be attractive to college-going students from the Eastern Shore, and (3) what ways can business and industry contribute to promoting the Eastern Shore and support Shore U.

Qualitative Research Plan - Surveys and secondary data collection/review.

Quantitative Research Plan - Focus groups and interviews, secondary data analysis.
 We will develop an understanding of the educational interests and motivations of Eastern Shore high school students and Eastern Shore Community College students. We will also develop our understanding of the needs of the Eastern Shore, awareness of the Foundation, and support of/agreement with the Foundation's mission. We will also explore the benefits to colleges and

universities that may partner with the Foundation to move this plan forward, explicitly considering the potential benefits for VCU, as well as the academic programs and majors that are most likely to succeed at the Shore U.

To access and complete the survey:

Please only complete the survey that best aligns with your role – only one submission per individual.

Eastern Shore Community College administration/faculty/staff Eastern Shore Community College students Eastern Shore of Virginia High School administration Eastern Shore of Virginia High School students Eastern Shore of Virginia community members (residents/professionals) Wallops Island Space Community (professionals) Virginia Commonwealth University administration/faculty/staff

For More Information

For more information about the Foundation, visit the University of the Eastern Shore of Virginia Foundation webpage (www.shoreu.org) or contact:

President/Founder: Terry Malarkey - londoner@ieee.org or (757) 710-3001 Vice President/Treasurer: Kristine Marcy Secretary: Ed Murdy

For more information about this Capstone Project, contact the members of the Capstone Team: Karen Belanger - <u>kbelanger@vcu.edu</u> or (804)385-6857 Katy Jones - <u>joneskd10@vcu.edu</u> or (229)921-1492 Takeya McLaurin - <u>tmmclaurin@vcu.edu</u> or (804)836-0651 Katharine Wise - <u>wiseks@vcu.edu</u> or (804)933-1581

Appendix I

Emails from Dr. James Shaeffer, ESCC President, to ESCC Students and Staff

SURVEY INVITATION EMAIL - ESCC Students

Dear Your Eastern Shore Community College Students:

I am writing to make you aware of a survey being conducted by four doctoral students in the School of Education at VCU. They are requesting your participation in a survey of the postsecondary interests of students currently attending the Eastern Shore Community College (ESCC).

These students are working on behalf of the University of the Eastern Shore of Virginia (ShoreU) Foundation in support of the foundation's mission to bring a four-year degree-granting institution to Virginia's Eastern Shore (ESVA). To learn more about ShoreU, the purpose of the survey, how the data collected from the survey will be used, **and to participate in the survey**, please visit <u>https://shoreu.org/survey</u>.

Note! Your participation in this survey is completely voluntary. Responses received will be anonymous and will not be connected to identifying information. The survey should take approximately 10-15 minutes to complete and *participants will automatically be entered into a drawing to win one of three \$100 Amazon gift cards.*

If you have any questions about the survey or have difficulty accessing the ShoreU website, please contact Takeya McLaurin at tmmclaurin@vcu.edu.

Sincerely,

James Shaeffer, PhD President, Eastern Shore Community College

SURVEY INVITATION EMAIL - ESCC Faculty & Staff

Dear Your Eastern Shore Community College Colleagues:

I am writing to make you aware of a survey being conducted by four doctoral students in the School of Education at VCU. They are requesting your participation in a survey of the postsecondary interests of students currently attending the Eastern Shore Community College (ESCC). I've been in discussions with representatives from ShoreU for the last 3 plus years making it clear that I support providing additional postsecondary educational opportunities and that they need to flow through the college to create degree completion programs.

These students are working on behalf of the University of the Eastern Shore of Virginia (ShoreU) Foundation in support of the foundation's mission to bring a four-year degree-granting institution to ESVA. To learn more about ShoreU, the purpose of the survey, how the data collected from the survey will be used, **and to participate in the survey**, please visit https://shoreu.org/survey.

Note! Your participation in this survey is completely voluntary. Responses received will be anonymous and will not be connected to identifying information. The survey should take approximately 10-15 minutes to complete. Survey participants will automatically be entered into a drawing to win one of three \$100 Amazon gift cards.

If you have any questions about the survey or have difficulty accessing the ShoreU website, please contact Takeya McLaurin at tmmclaurin@vcu.edu.

Sincerely,

James Shaeffer, PhD President, Eastern Shore Community College

Appendix J

ShoreU Foundation Board of Directors https://shoreu.org/board-of-directors

- Robert J. Bloxom, *Director:* Mr. Bloxom retired from a 30-year banking career in 2014 as Executive Vice President, Chief Operating Officer and Chief Risk Officer for Hampton Roads Bankshares and its affiliates. He previously served as Chair for the Eastern Shore Community Services Board and is a graduate of Broadwater Academy (located on Virginia's Eastern Shore) and Virginia Tech.
- Maureen Dooley, *Director*: Ms. Dooley was Professor of Adult Education at Eastern Shore Community College where she helped to grow the GED program. She also began the ESL program, the SPARK family learning program, and the Student Success Center at the Eastern Shore Community College. As a volunteer, Ms. Dooley helped start the Eastern Shore Literacy Council and as a member of the board of the Eastern Shore Public Library she helped to expand library services from the original library in Accomack to include the Station Library on Chincoteague and the Nassawadox and Cape Charles libraries.
- Parker Dooley, M.D., *Director*: Dr. Dooley Parker practiced at Eastern Shore Rural Health (ESRH) which he helped to grow as physician, medical director and board member. He was instrumental in securing funds for expansion and development of the dental program as well as for additional health care delivery sites up and down the Shore. Dr. Dooley has served on the board of Shore-Memorial Hospital and as Chair of the Accomack County Democratic Party.

- Art Fournier, M.D., *Director*: Dr. Fournier is currently a Professor Emeritus, Departments of Family Medicine & Community Health and Internal Medicine at the University of Miami Miller School of Medicine. While Dr. Fournier graduated from Merrimack College and Tufts University School of Medicine, his residency training at the University of Miami Miller School of Medicine was followed by two years' service in the National Health Service Corps on Virginia's Eastern Shore. On the Shore, Dr. Fournier serves on several boards, including Eastern Shore Rural Health, The Library Foundation, and The Historical Society.
- Brittany Gracik, Ed.D., *Director*: Dr. Gracik has been working in higher education for a decade, serving in various roles at Virginia Commonwealth University, where she currently serves as the Executive MBA Associate Director. Dr. Gracik has been collaborating with the ShoreU Foundation since 2021.
- Karen Gravelle, Ph.D., *Director*: Dr. Gravelle holds a doctorate in Biopsychology/Animal Behavior and a Masters in Social Work. Following her career as a psychotherapist, she joined the psychology departments of Hunter College (part of the City University of New York) and Hamilton College, teaching developmental psychology and ecology. In recent years, she has focused on medical writing, translating complex medical research into language accessible to the public, and a range of non-fiction and fiction books for younger readers.
- Kate Hughes, *Director*: Ms. Hughes holds a master's degree in Educational Technology Leadership from The George Washington University and bachelor's degrees in English Education and English Literature from Villanova University. She is currently a Secondary English teacher in Northern Virginia. Prior to her role in secondary education, she earned

professional certificates from the Workforce Development Division of Northern Virginia Community College (NOVA) and taught English as a Second Language (ESL) at NOVA. While consulting for the United States Agency for International Development (USAID), Ms. Hughes managed economic growth training projects. As an Information Technology Trainer for an international non-profit organization, Ms. Hughes first witnessed the transformative power of education and technology in rural communities.

- Terry Malarkey, *President/Founder*: Born and raised in London, England, Mr. Malarky was educated in Wales where he received a B.Sc. in Electronics from Bangor University. He moved to the U.S. in 1970 where he first worked at Westinghouse Electric Corporation and received several patents for Power Electronics systems, including the world's first production induction range. Mr. Malarky is a Chartered Engineer, a Senior Member of the Institute of Electrical and Electronics Engineers (IEEE), and a Fellow of the Institution of Engineering and Technology (IET). He is the inspiration behind ShoreU.
- Kristine Marcy, Esq., *Vice President/Treasurer*: Ms. Marcy received a Bachelor of Arts from the University of Hawaii, a Masters of Foreign Service from Georgetown University and a JD from The George Washington University. Ms. Marcy is a member of the Bar of the District of Columbia and has resided on the Shore for 20 years. Professionally, she is a former federal, career public servant and charter member of the Senior Executive Service. She served in 10 federal agencies and departments and previously worked on the establishment of the US Department of Education where she served as a Deputy Assistant Secretary. Ms. Marcy has served as the Chief Operating Officer of the Small Business Administration, Associate Deputy Attorney General (DOJ)

and Assistant Director of the US Marshals Service. Following retirement from the federal government, Kris consulted in government relations for numerous private businesses and served as CEO of the National Academy of Public Administration.

- Ronald May, Ph.D., *Director*: Dr. May is a retired college professor and administrator. He graduated from a community college and continued his education through a doctorate in higher education at Indiana University-Bloomington. His area of expertise is Public Policy in Higher Education and fourteen years of his career was spent as president of two small private two-year colleges.
- Malaika Mitchell, *Director*: Ms. Mitchell has very strong connections to the Eastern Shore through family and residence. As a lifelong activist in social justice movements, it is her belief that education is key in the effort to obtain equity for underserved populations. Professionally, Ms. Mitchell has worked as a journalist and editor. For the last 16 years, she has been a Case Manager for Catholic Charities of Eastern Virginia, Inc. in their Guardianship program.
- Ed Murdy, Ph.D., *Secretary*: Dr. Murdy received a B.S. and a M.S. in Biology from Old Dominion University and a Ph.D. in Wildlife & Fisheries Sciences from Texas A&M University. For 24 years he worked in various capacities within the Office of International Science and Engineering (OISE) where he served as Deputy Director. He is retired from the National Science Foundation and currently teaches at the Academy of Lifelong Learning. Dr. Murdy has 50 publications including four books, two of which deal with fish of the Chesapeake Bay. Dr. Murdy has resided on the Eastern Shore since 2016.

- Butch Sharma, *Director*: Director Sharma has a Bachelor of Arts and MBA from Old Dominion University and is a US Army veteran. He leads the weekend executive programs in Virginia Commonwealth University's School of Business and is an adjunct in the Marketing Department. He founded EBMP LLC, a digital marketing company, in 2012. Prior to VCU, Director Sharma served as a consultant, GM for a technology firm, and in leadership roles at Media General and other companies. He has been collaborating with the ShoreU Foundation since 2021.
- Patrick Tompkins, Ph.D., *Director*: Dr. Tompkins earned a Ph.D. in Community
 College Leadership from Old Dominion University. He also earned bachelor's degrees in
 English and Philosophy from Villanova University, a Master of Arts in English from
 Iowa State University, and a Master of Fine Arts in Creative Writing from Virginia
 Commonwealth University. He is the former Vice President for Academic, Student &
 Workforce Education at the Eastern Shore Community College and is currently the
 President of NHTI Concord's Community College. Previously, he served as Provost of
 Thomas Nelson Community College's Historic Triangle Campus, Dean of
 Communications, Humanities, and Social Sciences, and interim Dean of Science,
 Engineering, and Technology.
- Thomas Wescott, *Director*: Mr. Wescott studied at William & Mary, Campbell
 University, and the University of North Carolina (Theater Design). He has managed
 theaters at Duke, created kitchens, and worked as a chef. He is also a master cabinet
 maker, and his conference tables grace boardrooms up and down the Eastern Seaboard.
 Mr. Wescott was born on the Eastern Shore of Virginia and co-founded the Artisans Guild
 of the Eastern Shore of Virginia where he served as Vice-Chair.

Appendix K

Diploma Graduates and Completers

Diploma Graduates and Completers

Regular Term Plus Summer Term, 2021-2022 (Revised 01/05/2023)

	vision umber	Division Name	Fall Membership in Ninth Grade 2018- 2019	Standard Diploma	Advanced Studies Diploma	Other Diploma	Certificate of Program Completion	GED Certificate		Attending Two-year Colleges Count	Attending Two-year Colleges %	Attending Four- year Colleges Count	Attending Four-year Colleges %	Other Continuing Education Plans Count	Other Continuing Education Plans %	Employment Count	Employment %	Military Count	Military %	No Plans Count	No Plans %
	1	Accomack County	404	163	147	7	0	0	317	46	14.51%	201	63.41%	5	1.58%	25	7.89%	12	3.79%	28	8.83%
	65	Northampton County	131	69	37	0	0	0	106	16	15.09%	37	34.91%	6	5.66%	41	38.68%	4	3.77%	2	1.89%
_		STATE TOTALS	535	232	184	7	0	0	423	62	14.66%	238	56.26%	11	2.60%	66	15.60%	16	3.78%	30	7.09%

Regular Term Plus Summer Term, 2020-2021 (Revised 12/29/2021)

Division Number	Division Name	Fall Membership in Ninth Grade 2017- 2018	Standard Diploma	Advanced Studies Diploma	Other Diploma	Certificate of Program Completion	GED Certificate	Total Graduates & Completers 2020-2021	Attending Two-year Colleges Count	Attending Two-year Colleges %	Attending Four- year Colleges Count	Attending Four-year Colleges %	Other Continuing Education Plans Count	Other Continuing Education Plans %	Employment Count	Employment %	Military Count	Military %	No Plans Count	No Plans %
1	Accomack County	419	166	153	12	0	0	331	67	20.24%	182	54.98%	11	3.32%	46	13.90%	13	3.93%	12	3.63%
65	Northampton County	126	57	36	1	2	0	96	24	25.00%	27	28.13%	4	4.17%	27	28.13%	8	8.33%	6	6.25%
	STATE TOTALS	545	223	189	13	2	0	427	91	21.31%	209	48.95%	15	3.51%	73	17.10%	21	4.92%	18	4.22%

Regular Term Plus Summer Term, 2019-2020

(Revised 11	(Revised 11/18/2020)																			
Division Number	Division Name	Fall Membership in Ninth Grade 2016- 2017	Standard Diploma	Advanced Studies Diploma	Other Diploma	Certificate of Program Completion	GED Certificate	Total Graduates & Completers 2019-2020	Attending Two-year Colleges Count	Attending Two-year Colleges %	Attending Four- year Colleges Count	Attending Four-year Colleges %	Other Continuing Education Plans Count	Other Continuing Education Plans %	Employment Count	Employment %	Military Count	Military %	No Plans Count	No Plans %
1	Accomack County	445	173	177	8	7	3	368	61	16.58%	226	61.41%	13	3.53%	21	5.71%	38	10.33%	9	2.45%
65	Northampton County	124	55	40	0	4	0	99	27	27.27%	35	35.35%	12	12.12%	12	12.12%	13	13.13%	0	0.00%
	STATE TOTALS	569	228	217	8	11	3	467	88	18.84%	261	55.89%	25	5.35%	33	7.07%	51	10.92%	9	1.93%

Appendix L

Capstone Analysis for IRB Review Form



Capstone Analysis for IRB Review Form

Ed.D. in Leadership Capstone Analysis for IRB Review

Section 45 CFR 46.102(d) of the HHS Regulations for the Protection of Human Subjects defines research as "a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for the purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes."

Section 45 CFR 46.102(f) of the HHS Regulations for the protection of Human Subjects defines a **human subject** as "a living individual about whom an investigator conducting research obtains: Data through intervention or interaction with the individual, or Identifiable private information"

According to the Office or Research Subjects Protection at VCU, studies meeting BOTH the definition of research and the definition of human subject, as defined by the Code of Federal Regulations, must submit to VCU's IRB review process. Studies that DO NOT meet BOTH of these definitions are NOT required to submit to VCU's IRB review process. * Studies conducted as program reviews typically do not require IRB approval, as they do not meet the definition of research, even if the results are shared.** Regardless of IRB determination, Capstone Chairs will follow standard research protocol (e.g. using pseudonyms to mask identities) if/when findings are presented or published.

Please complete the form below, attesting to whether or not this study meets the above definitions. A copy of this form must accompany the students' Application for Graduation if it is determined that the study is not subject to the IRB review process.

DocuSign Envelope ID: 1C173082-D547-47AC-B695-AEBF73A33801

Title of Capstone: Putting the "U" in ShoreU

Name of Principal Investigator/Chair: Dr. Jeffery Wilson

Names of Capstone Students: Karen Belanger, Katy Jones, Katharine Wise, Takeya McLaurin

I CERTIFY THE FOLLOWING:

Capstone MEETS CFR definition of research.	OR	X Capstone DOES NOT MEET CFR definition of research.							
AND									
Capstone MEETS CFR definition of human subject.	OR	▲ This capstone DOES NOT MEET the CFR definition of human subject.							
THEREFORE;									
Capstone MUST BE SUBMITTED to IRB for review.	OR	X Capstone DOES NOT NEED TO BE SUBMITTED to IRB for review.							

Signature of Principal Information

12/19/2022 Date

*MEMO FROM LLOYD H. BYRD, MS, DATED SEPTEMBER 14, 2010. CONFIRMED THROUGH PERSONAL COMMUNICATION WITH DONNA GROSS, IRB COORDINATOR, SEPTEMBER 22, 2010; AND IRB WEBSITE: HTTP://WWW.RESEARCH.VCU.EDU/HUMAN_RESEARCH/ACTIVITIES.HTM **JOSE ALCAINE, RESEARCH COORDINATOR, SOE, FALL, 2014.

Original copies to: Kelly Winn in the Graduate School Office Copies to: Capstone Chair; Student, Ed.D Coordinator