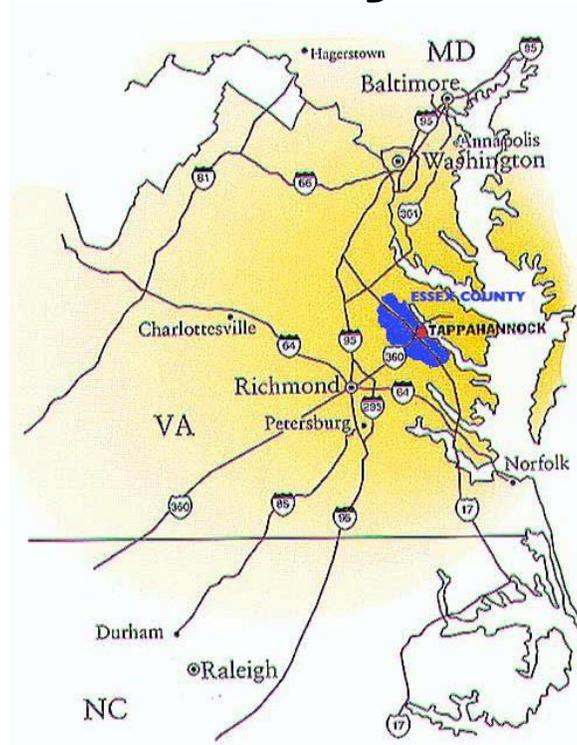




Situation Analysis Report



Essex County 2018

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Introduction

A situation analysis was conducted by the staff of the Essex County Unit of Virginia Cooperative Extension (VCE) throughout the fall of 2018, and early months of 2019. The purpose of this process was to assess the local needs of the community and stakeholders in Essex County, and allow extension staff to identify where educational programming delivered through the Essex VCE may address those issues. Meetings with informal advisory boards, as well as discussion with local citizens were a large source of feedback and information. As a starting point, data from various sources was collected and summarized to provide a Unit Profile which included information on demographics, census, and socio-economic information for the county. The framework for the Unit Profile was developed in 2013, and was updated with data obtained in 2018. The Situation Analysis was then conducted publically utilizing a Qualtrics survey consisting of 35 issues of which respondents ranked from being very unimportant to very important. The survey also asked some general demographic information such as age range, sex, and if the respondent had participated in VCE programs in the past. The survey link was advertised on the Essex County government website, as well as on the Essex VCE website. The effort was also presented at a county Board of Supervisors meeting, and distributed to an email listserv of agent contacts. Several paper copies were also printed and distributed. After leaving the survey open for several months, and then attempting an alternative approach of paper copies, a total of twelve residents responded to the survey. Key findings from the unit profile and the survey results were analyzed, and summarized to identify several priority issues for Essex County. It is probable that low participation may have been a result of the lack of staffing in the office for over a year, coupled with a new agent hire and transition to Unit Coordinator in the fall of 2018, as well as recent turnover in county administration.

Unit Profile

Essex County is a rural county located in the Middle Peninsula region of Virginia, about 45 miles northeast of Richmond. The largest town in Essex County is Tappahannock which is located centrally in the county on the Rappahannock River with an estimated population of 1,800 people, and is the main site of shopping for Essex residents. The population of Essex County is estimated at slightly over 11,100 and has grown slightly since 2011 by roughly 1%.

The demographic breakdown of Essex citizens is estimated at 46% males and 54% females which has shifted slightly since 2011 in which it was 48% and 52% respectively. Youth between ages 5 and 19 were estimated by the Census Bureau at 17.8% in 2016, which is a slight decrease compared to 2011. Roughly half of the population is between the ages of 20 and 59, with 27.4% above the age of 60.

The majority of the population in Essex County is racially made up of white and African American ethnicities estimated at 55% and 40.9% respectively. Compared to data from 2011, there has been a 5.6% increase in African American numbers, and a 6.5% decrease in the

white population. According to Census data, there continues to be a decrease in Hispanic populations from 1.2% in 2011 to 0.3% in 2016.

There was a rise in median household income from 2011 to 2016 from \$44,581 to \$47,527. This income continues to be lower than the state median income of \$66,149. There was roughly a \$7,000 increase in mean household income from 2011 to 2016 in Essex. Child poverty rates in Essex are 10% higher than the state estimates of 14%. Single parent households increased by 1%, and are 10% higher in Essex County than the state average of 30%.

Health of the population in Essex County shows mixed results. While premature death, sexually transmitted disease, and teen birth rates have decreased since 2011, there has been an increase of adult obesity from 33% to 35%, and estimates of the percent living in poor or fair health increased 5% totaling 17%. Positive aspects include a decrease in the uninsured rate, and a 4% increase in high school graduation rates from 79% to 83%. Essex County Schools have become accredited, and this may be a result of this accreditation. Unemployment decreased significantly from 8.2% to 4.8%, and is more closely aligned to the state average now of 4.0%. While there are many businesses that employ Essex citizens, many travel outside of Essex County for work.

Agriculture and Forestry account for roughly \$89.3 million in economic impact in Essex. The most recent Agriculture Census is from 2012, and it estimates the total number of farms in Essex at 98, which decreased from 102 in 2007, and the average farm size is 579 acres. There is roughly 37,129 acres in cropland and 86,940 acres in forestland. The majority of cropland is utilized for cash grain crops such as corn, wheat and barley, as well as soybeans and forages. Corn and soybeans continue to have the largest production with estimates of 927,382 bushels and 858,783 bushels respectively being produced annually.

There are several nursery operations in Essex County, as well as a few grape vineyards with a recent increase in grape acreage. A small volume of vegetable production is present, as well as a small volume of specialty crops. Cattle production decreased from 1,190 head in 2007 to 924 head in 2012. This may decrease further due to an increase in the distance to the closest stockyard.

Farm consolidation continues as older generations retire, and farmers are becoming larger due to increased machinery size and changes in crop production practices which allow for decreased labor and time, allowing more land to be farmed. Unfortunately, a decrease in market prices and increases in production costs have also burdened farmers and forced smaller farms out of business. There are several grain producers in Essex County that farm several thousand acres, and the majority of the cropland in Essex County is farmed by roughly 12-15 operations.

Community and Resident Perspectives

The data for this Situation Analysis was collected using a Qualtrics Survey, as well as informal conversation with citizens of the county and governing bodies such as members of the Board of Supervisors and the Economic Development Authority.

Unfortunately, there were only twelve responses to the survey which represent a very limited population of the county. However, there was a good range of diversity within those respondents with regard to age, sex, and race. The survey asked residents to rank 35 issues on their opinion of importance, and were also given the opportunity to add additional comments. The majority of respondents ranked all issues somewhat or very important. It is important to note that the Essex Office was minimally staffed during 2017 and 2018. Involvement with local advisory groups was limited since an agent retirement in 2017, which may have contributed to the lack of public response.

Responses were summarized and counted, and were compiled with informal conversation with residents and county officials as well as results from the unit profile to rank topics based on priority. Priority issues identified for Essex County as a result of these efforts are listed below.

Priority Issues

Issue 1: Activities/Education for Youth & Youth Community Involvement

Description: Many issues ranked high in the results regarding youth. 11 out of 12 participants ranked life skills/decision making for youth as very important, with the same number ranking youth activities as either somewhat or very important. There were many comments on the need for increased education opportunities for youth through the school system, including after school and in-school programs. Agricultural education was mentioned and supported by a high ranking of the issue of public awareness of agriculture.

Directly linked to this topic are the issues of youth violence, child development, teen community involvement, youth volunteers, and school dropout. All of these issues were ranked as somewhat important or higher by 75% or more of the participants. Comments provided by participants also supported the need to address these issues.

Currently, there is limited opportunities available to youth in Essex County, but there is Parks and Recreation, Little League, 4-H, the public library, and Boy and Girl Scouts.

VCE's role in addressing this issue: Essex VCE has a part-time coordinator position for the 4-H program which limits the amount of time and resources we can offer through programming. This position is funded by the county and their support is greatly appreciated. However, the position was recently requested to be full time, and if approved, this will allow the

office to expand its programming potential greatly to address youth related issues, and expand volunteering efforts from the community.

Currently, the Essex 4-H program consists of annual 4-H Residential Summer Camp, Livestock Club, Sewing Club, and in-school programming. These opportunities allow youth to develop life and decision making skills, as well as become involved in the community. Teens that participate in camp as councilors develop leadership skills as they attend 24 hours of mandatory training regarding their responsibilities at camp.

We hope to expand our 4-H programs and increase our enrollment in future years. There is great potential to partner with other local agencies and organizations to offer programming. An example of this is Agricultural Literacy programs which would allow the 4-H position, ANR Agent, and other local agencies such as Three Rivers Soil and Water Conservation District and Farm Bureau to offer education opportunities and experience related to agriculture and natural resources.

Issue 2: Agricultural and Forestry Production, Profitability, Sustainability, and Preservation

Description: Essex County is largely rural and the two major land uses and economic drivers are forestry and agriculture. The 2012 Census of Agriculture estimated Essex County containing roughly 56,705 acres in farms with 98 total farms. Results from the survey show that many aspects of agriculture are important to the citizens of Essex. The issues of Agriculture Marketing, Agriculture Production/Profitability, Agriculture Sustainability/Preservation, and Animals/Livestock all were ranked as having some importance. Agriculture is a business and way of life and producers need to remain profitable in order to continue operation. Agriculture and forestry also support many businesses and provide jobs and reinvestment into Essex County. Increases in production as a result of better management will ultimately result in increased on-farm profits and long term viability of farming operations. External threats of land development and urbanization continue to be a concern as they would result in decreased farmland and forests. Essex County currently utilizes a land-use taxation system which has reinforced farmland and forest preservation, as well as many landowners utilizing conservation easements to protect farmland and the agricultural assets in Essex County. Land use also ranked highly with the same result as farm transition. There is also a concern for the continuation of farming operations as many principal operators are aging and farm transition is approaching. This concern was also made evident from the survey with 11 of 12 participants ranking it somewhat or very important.

VCE's role in addressing this issue: Programs are held both locally (Essex) and regionally (Middle Peninsula) to assist producers by delivering research-based and non-biased information and resources from the land grant university system. ANR agents work cooperatively with each other to provide single and multi-county programs addressing many aspects of crop production and marketing. Unfortunately, there is a current shortage of ANR agents in the Middle Peninsula, and many counties are limited in their programming

opportunities as a result of this. Agents work with producers to do On-Farm research plots assessing different hybrids and varieties, as well as agronomic practices. Crops Conferences and field days serve as educational opportunities which allow producers to interact and ask questions to agents and specialists. There is also a high level of interdisciplinary cooperation with other agencies and organizations in Essex County such as NRCS, FSA, TRSWCD, and others to completely meet producer goals and needs.

There is a great need for more efforts on the farm business, marketing, and profitability aspects. Unfortunately, staffing in Farm Business Management is limited within VCE. Producers need updated information and education in these vital aspects of their operations to insure profitability. Diversification and opportunities for expanded markets and value-added products can be explored further and offered to producers. Also, future cooperation with the Department of Forestry could allow programming efforts for forest owners to address management and harvest of timber.

Issue 3: Water Quantity/Quality, Natural Resource Use, and Environmental Impacts

Description: Environmental concerns are greatly pronounced in Essex County as it borders the Rappahannock River and Dragon Run watershed, and is in the Chesapeake Bay watershed. There have been rigorous efforts at the local, state, and federal level in the past decade or so to change human practices to minimize the addition of sediment and nutrients into the Chesapeake Bay, and mitigate the negative changes that have been documented as a result of human activity. Water quality is of great concern in both the Rappahannock River and Chesapeake Bay as they are heavily utilized for many reasons including transportation, fisheries, irrigation, wildlife habitat, irrigation, and many other important ecosystem services.

Efforts at a local level have been made by many agencies such as the Three Rivers Soil and Water Conservation District (TRSWCD), Natural Resource Conservation Service (NRCS), Department of Conservation and Recreation (DCR), and many other agencies to implement programs that provide cost-share to producers to allow them to change production practices to become more sustainable and limit adverse effects on the environment. Many of these agencies have identified and promote Best Management Practices (BMP's) that are addressing the Chesapeake Bay clean up initiative. Being that all of the producers, manufactures, businesses, and homeowners in Essex County fall within the Chesapeake Bay watershed, there is a need for education and promotion of these BMP's. As future studies are conducted and better management strategies are developed, it is possible that legislation will become stricter in order to protect these natural resources.

VCE's role in addressing this issue: The Essex unit of VCE serves as a point of dissemination of information from the research and recommendations from the two land grant universities in the state. As research is conducted and recommendations from specialists are developed, they are shared with producers and homeowners at production meetings, trainings, and field days. Educational efforts are also delivered at local schools and events which teach

youth about natural resource conservation. Agents cooperate with producers to put in On-Farm demonstration plots such as different cover crop species and their ability to scavenge nutrients, fix nitrogen, or limit soil erosion and increase infiltration. BMP's such as no-till and matching nutrient applications to periods of crop uptake are also promoted. Soil testing through the VT Soil Testing Lab, limited tissue testing, and Pre-Sidedress Nitrate Testing is promoted by the Essex unit and is offered to producers and landowners to determine the appropriate nutrient and lime rates to avoid over-application. In the summer of 2019, the Essex VCE office will partner with the King and Queen and King William VCE offices to offer a Virginia Household Water Quality Testing Program which will allow homeowners to test their private water source.

Extensive inter-agency cooperation with TRSWCD, NRCS, DCR, and others serve as collaborative efforts to bring many specialist and knowledge banks together to look at broader scale issues, and develop strategic plans and goals to address water quality and environmental issues.

Issue 4: Leadership, Local Government, and Small Business/Entrepreneur Development

Description: Results from the survey and informal as well as formal meetings identified that citizens in Essex view local leadership, government, and small business/entrepreneur development in the county as important. 10 of 12 responses rated leadership as somewhat or very important, and 7 of 12 gave local government a similar rating. There has been some recent turnover in the leadership roles in Essex County, which presents the opportunity for new ideas and knowledge to be shared by these individuals. Essex County has a Board of Supervisors comprised of five representatives from across the county, as well as an Economic Development Authority, and an Agriculture and Forestry Industries Development Fund Advisory Board. Centralized in Essex County is the town of Tappahannock which is its own entity.

Through discussion with new administration and members of several of the above mentioned boards, coupled with survey feedback and comments, there is great interest in increasing the economic development of Essex County and encouraging an atmosphere that attracts businesses which could provide jobs, and reinvestment into the county. There has also been interest in utilizing the resources that Essex County has to diversify and explore strengths and assets that the county possesses.

VCE's role in addressing this issue: VCE is not involved in the selection or election of local governments or leaders. However, VCE can offer research-based advice and knowledge to local governments if they call upon VCE. Agents attend Board of Supervisor meetings and give unit reports on VCE programming within the county, and can attempt to address issues that are brought forth by local leaders and governing bodies that are within extension's scope of service. VCE is limited to serving as an advisory role in many instances.

The ANR agent is currently working with local leadership to identify potential areas of economic opportunity as they relate to agriculture and natural resources in Essex by providing information, resources, and research conducted by the land grant universities. The previous agent worked with the Economic Development Authority to conduct and publish an Agriculture and Forestry Strategic Plan for the county for 2015-2020.

Issue 5: Community Services, Financial Management, and Health

Description: Looking at the Unit Profile data, it can be concluded that there is an increase in the aging population and survey results showed that community services were of importance to citizens. There is one major hospital in Tappahannock, several fire departments and rescue squads in the county, and a police department. There is a public library as well as a public transportation system which travels around town stopping at many public service and shopping locations. Also, participants ranked financial management and health as being important overall, and some commented on services for the elderly and social service programs including parenting skills as being a necessity. Based on data in the unit profile, median household income for Essex residents is estimated at \$47,527, and is lower than the state estimate of \$66,149. Financial management programs may help to alleviate some of the concerns of lower income. This issue can be compounded by the fact that many households (40%) are single parent homes and is 10% higher than the state average. The rate of uninsured health patients is 4% higher than the state average, and the ratio of patients to primary care physicians is estimated at 5,571:1.

VCE's role in addressing this issue: Unfortunately, there is not much that VCE can do to address many of these issues. Essex currently has an FCS agent serving the county, but that agent also has responsibilities in several other counties. This agent offers financial management programs to adults and youth. At this time, there is no Snap-Ed agent or health and nutrition education being offered. Hopefully in future years, these positions will be available to serve the citizens of Essex County.