

Bypasses, Planning and Economic Development: A Case Study of Havelock,  
North Carolina

An Internship Research Report

Presented To the Faculty of the Department of Geography, Planning and Environment

East Carolina University

In Partial Fulfillment of the Requirements for the Degree

Master of Science in Geography

By

Nola E. Roberts

December 2016

Bypasses, Planning and Economic Development: A Case Study of Havelock,  
North Carolina

By

Nola Roberts

APPROVED BY:

DIRECTOR OF RESEARCH: \_\_\_\_\_

Mulatu Wubneh, Ph.D.

COMMITTEE MEMBER: \_\_\_\_\_

Anuradha Mukherji, Ph.D.

COMMITTEE MEMBER: \_\_\_\_\_

Misun Hur, Ph.D.

CHAIR OF THE GEOGRAPHY DEPARTMENT: \_\_\_\_\_

Burrell Montz, Ph.D.

## **Internship Overview**

Pursuant to the requirements set forth by the East Carolina University's masters of Geography degree, with a concentration in Urban and Regional Planning, I completed a 360-hour internship with the City of Havelock. This internship took place in the summer of 2015. While my chief duties consisted primarily of nuisance abatement through the Planning and Inspections Department, there were opportunities to become familiar with the overall organization of City Hall. Other learning opportunities included attending meetings, such as the technical review committee, the Down East Regional Planning Organization, the Joint Land Use plan update, and a citizen based Brownfields steering committee, all of which gave me insight into Havelock's current planning concerns.

Havelock operates under a non-partisan, council-manager form of government, which does not recognize term limits. Top government officials include a city manager, a five-member board of commissioners and a mayor, whose role is largely ceremonial in nature (Urban Resource Group, 2009). There are seven committees that make recommendations and requests to the board of commissioners. These committees are the Appearance Committee, the Board of Adjustment, the Planning Board, the Recreation Advisory Board, the Havelock-Craven County Public Library Board, the Eastern Carolina Aviation Heritage Foundation, and the Havelock Youth Advisory Committee. Additionally, the City is composed of nine departments, which are administration, public works, utilities, fire and rescue, police, parks and recreation, information technology, finance and planning and inspections. There is also a local chamber of commerce which operates independently from the City of Havelock.

The City of Havelock's Planning and Inspections Department is made up of four positions, which include the planning director, planning and code enforcement officer, building inspector, and permit technician. The majority of the internship dealt with code enforcement, daily tasks consisted of verifying complaints dealing with nuisance properties. Nuisances included tall grass, improperly stored refuse, graffiti, and prohibited accessory structures. The internship required working with a contractor to abate nuisances when property owners did not, and working with the Craven County tax administrator to place liens on properties to recover the cost of nuisance abatement. There was also coordination with the Havelock finance department to ensure proper payment of the contractor.

Havelock planners work with the planning board, the technical review committee, and the board of adjustment. The internship provided an opportunity to sit in on these meetings. The technical review committee is responsible for a preliminary review of new and redevelopment proposals, special use permit applications and variance requests. These projects, as well as requests for rezoning, move forward to the planning board followed by the board of adjustment for final approval. The planning board also serves as an advisory committee in terms of new development of the City, and verifies unified development ordinance (UDO) compliance of existing and proposed uses. The planning director represents Havelock in cases of regional development planning. This includes transportation planning for the Down East Rural Transportation Planning Organization, which evaluates highway infrastructure funding and needs of Craven, Carteret, Jones, Onslow, and Pamlico Counties. The planning director also participates in the Eastern Carolina Joint Land Use Study (JLUS), which determines how military installations and civilian communities can jointly achieve beneficial growth and

development, and identifies potential encroachment concerns which may negatively impact military operations. As part of the internship, I attended each of these meetings.

The City of Havelock's planning department works to achieve goals set forth in *The City of Havelock 2030 Comprehensive Plan* (Urban Resource Group, 2009). The plan shares the community's vision of future land use based on available land and infrastructure. The plan gathered an extensive amount of public opinion through meetings, focus groups, and committees to help identify planning priorities. The plan proposes a vision of redevelopment, spurred by the U.S. Highway 70 Bypass, calling for the creation of a city center and infill development along the original route. Included is a site plan for the proposed city center, which consists of a mixed-use design and open space, designated as a civic campus. The Comprehensive Plan also acknowledges that the bypass may shift growth patterns toward, and beyond, the city's extraterritorial jurisdiction (ETJ) zone. Of concern is that growth beyond the ETJ may be incompatible with current JLUS recommendations. The plan further cites growth potential at the future bypass interchange, which is partially in Havelock's ETJ and partially beyond the ETJ. While the future land use map allows for some industrial use at this location, there is no proposed site plan in response to growth potential at the interchange. While Havelock's Comprehensive plan is thoughtful in the possibility of redevelopment along Main Street/ U.S. Highway 70 in response to this route being bypassed, the plan offers little insight into the economic ramifications of the bypass. Another concern is how important is the bypass in consideration to MCAS Cherry Point, Havelock's largest employer. These issues inspired this research.

## **Acknowledgements**

I would like to thank my committee for their advice, insights, time, and encouragement. Thank you to my advisor, Dr. Wubneh, for you for working with me and lending me your expertise. Thank you to Dr. Mukherji for keeping me on track and helping me get through the IRB process. Thank you to Dr. Hur for helping me adjust my research goals to a manageable workload and your continued optimism.

I would like to the City of Havelock and the Planning and Inspections Department for offering me a valuable internship experience, and making me feel like part of the family. A special thanks to Katrina Marshall for serving as a mentor for me, and insuring that my internship was filled with a range of opportunities and knowledge. Thank you to the City for providing me with the 2015 Havelock Community Summit data and participation in my city leader's survey.

I would also like to thank my family for their support and patience during this process. Thank you for believing in me, when I did not always believe in myself, and your endless encouragement.

## Table of Contents

List of Tables .....	viii
List of Figures .....	x
Executive Summary .....	1
Chapter 1: Introduction .....	6
Chapter 2: Literature Review .....	9
Chapter 3: Research Design and Methods .....	23
Chapter 4: Havelock Labor Force, Economy, and Income.....	36
Chapter 5: Survey Results and Findings .....	54
Chapter 6: Discussions and Recommendations .....	89
References .....	100
Appendices .....	104
Appendix A: City Leader’s Survey .....	104
Appendix B: City Leader’s Survey Responses .....	111
Appendix C: Institutional Review Board (IRB) Approval Letter .....	119
Appendix D: Havelock Community Summit Opinion Survey .....	120
Appendix E: Sun Journal Article on Research .....	121

## List of Tables

Table 4.1: Labor Force Participation 2000 and 2010-2014	
Persons 16 Years and Over, City of Havelock .....	37
Table 4.2: Employment Status of the Labor Force, 2000 and 2010-2014 Estimates	
Persons 16 Years and Over City of Havelock .....	38
Table 4.3: Comparison of Employment by Occupation, 2010-2014 Employed	
Civilian Population 16 Years and City, County, State and US .....	42
Table 4.4: Comparison of Employment by Industry, 2010-2014 5-Year Estimates	
Employed Civilian Population 16 Years and Over City, County, State, and US .....	44
Table 4.5: Craven County Location Quotients 2009-2014 US Base Comparison .....	46
Table 4.6: 25 Top Employers Craven County 2015 .....	47
Table 4.7: Educational Attainment, 2000 and Current Persons 25 Years and Over	
City of Havelock .....	48
Table 4.8: Comparison of Median Family and Median Household Income 2010-2014	
City of Havelock, Craven County, and North Carolina .....	49
Table 4.9: Number of Households by Income Grouping 2010-2014	
City of Havelock and Craven County .....	50
Table 4.10: Population Estimates, City of Havelock and Craven County .....	51



Table 4.11: Historic Population Trend, 2000, 2010 and 2010-2014 Estimates

City of Havelock, City Plus ETJ, and Craven County .....	52
Table 5.1: Vision Board 1: What Do You See in Havelock Now .....	79
Table 5.2: Vision Board 2: What Would You Like to in Havelock in the Future? .....	80
Table 5.3: Infrastructure Related Issues .....	83
Table 5.4: Parks and Recreation Related Issues .....	84
Table 5.5: Issues Concerning Business .....	85
Table 5.6: Issues Concerning City Appearance and Design .....	86
Table 5.7: Issues Concerning Jobs and Economic Growth and Development .....	87

## List of Figures

Figure 3.1: Havelock and City Limits .....	26
Figure 3.2: Havelock Planning Jurisdiction .....	27
Figure 3.3 Havelock Existing Land Use .....	28
Figure 4.1: Craven County Labor Force, 2011-2015 .....	39
Figure 4.2: Craven County Employed, 2011-2015 .....	40
Figure 4.3: Craven County Unemployed, 2011-2015 .....	40
Figure 5.1: Respondents Years of Service .....	55
Figure 5.2: Respondents Level of Education .....	56
Figure 5.3: Havelock’s Economic State .....	57
Figure 5.4: Economic Competitiveness Compared to 70 Corridor .....	58
Figure 5.5: Economic Competitiveness Compared to Cities East of I-95 .....	58
Figure 5.6: Havelock Economic Development Efforts .....	59
Figure 5.7: Route Patronage .....	60
Figure 5.8: Significance of U.S. 70 to Cherry Point .....	61
Figure 5.9: Rankings of U.S. Highway 70’s Roles .....	62
Figure 5.10: Improved Corridor Benefits .....	65
Figure 5.11: City Consideration of Economic Outcomes .....	67

Figure 5.12: City’s Future Development Plan ..... 68

Figure 5.13: Compatibility of Bypass Development ..... 70

Figure 5.14: Necessity of ETJ Expansion ..... 71

Figure 5.15: Benefits of ETJ Expansion ..... 72

Figure 5.16: Businesses Preferred to Create Economic Growth and Diversification ..... 74

Figure 5.17: Best Approach to Economic Growth ..... 74

Figure 5.18: Quality of Life Gains and Economic Growth ..... 75

Figure 5.19: Havelock Community Summit Vision Board ..... 78



## Executive Summary

The inspiration for this research came about during an internship with the City of Havelock, completed as a requirement set forth by the East Carolina University's masters of Geography degree, with a concentration in Urban and Regional Planning. Of interest, is that highway bypass projects are common in transportation planning, however, the debate on their economic impact on communities persists. In 2018, the NCDOT will commence construction on the U.S. Highway 70 Havelock Bypass. Currently, U.S. Highway 70, also known as Main Street, serves as Havelock's commercial corridor and as a main thoroughfare. The bypass will divert through-traffic out of Havelock, and its extra-territorial jurisdiction (ETJ) zone. The City actively engages with its citizens, through functions such as community summits, to help assess current economic conditions and to determine future development options. The creation of the bypass is one of the local development projects that serve as a catalyst for economic planning of the City. The purpose of this research is to analyze the potential impact of the bypass construction on the City of Havelock, and the planning processes and responses with concern to the economy. Achieving this purpose required understanding local economic conditions, investigating impacts of the bypass on local business, and assessing local perceptions on Havelock's development potential. Research questions include:

- What are the characteristics of the current economy of Havelock in regards to employment, industry and occupational mix, and workforce?
- What are the available planning alternatives for addressing the changes resulting from the U.S. 70 Highway Bypass with respect to the local economy?
- On what basis should alternative plans be considered?

Analysis of Havelock's economic condition includes data from the 2000 and 2010 U.S. Census and 2010-2014 American Community Survey Estimates (ACS). The data show that current unemployment estimates are at 11.6 percent, which is higher compared to the state average of 6.6 percent. However, inclusion of members of the military drops Havelock's unemployment rate to 7 percent. ACS estimates show Havelock has a higher rate of civilian employees working in public administration (22.3%), compared to Craven County (11.9%), North Carolina (4.5%), and nation (4.9%). This is attributed to Marine Corps Air Station (MCAS) Cherry Point, which borders Havelock to the east, and is the largest employer in the City and in Craven County. Overall, Havelock is reliant on MCAS Cherry Point in terms of jobs, and for this reason Cherry Point can be characterized as the economic base of the City. Location quotients, obtained from the U.S. Bureau of Labor Statistics, show the study area also has a large representation of retail, accommodation and food service occupations when compared to the U.S. as a base. Industries that cater to pass through traffic are representative of these types of occupations, and tend to be the types of industries that are negatively impacted when their routes are bypassed.

Perceptions of community leaders and residents furthered understanding of how construction of the Havelock Bypass might affect these industries, and possible development preferences in response to the bypass. Methods used included surveys distributed to community leaders in government and business, to solicit their views on how the bypass will affect the local economy and industry base, what opportunities can be created due to the bypass, how the City might plan in response, and on what basis should the City choose such plans. The survey was distributed to 41 community leaders within government and business and was completed by 18, resulting in a 44 percent response rate. The results show that:

- Forty-four percent of respondents believe businesses along U.S. Highway 70 serve an equal share of locals and through traffic. (Fifty-five percent believe these businesses primarily serve locals.)
- Over 83 percent of respondents feel that Havelock's current economic state is either stagnating or declining, and also that the City does not have a diverse industry mix or a range of employment opportunities.
- Over 61 percent of respondents think that the loss of through traffic due to the bypass will have a lasting negative impact on the commercial sector, yet the same percent believe the bypass will have an overall positive economic effect.
- More than 72 percent of respondents do not believe the bypass will spur development that is incompatible with local development goals.
- Over 83 percent of respondents believe U.S. Highway 70 is very significant to the economic success of MCAS Cherry Point and local industries. Additionally, 81 percent feel that expanding the extraterritorial jurisdiction (ETJ) boundary toward the bypass is necessary to the well-being of Cherry Point. However, 56 percent feel the benefits of extending the ETJ are small compared to the cost of extending services there.
- Forty-seven percent of respondents would prefer to see future growth at the bypass interchange compared to 53 percent who prefer the original route.
- Sixty percent of the respondents have no preference on the size of business that might have an impact on the future economic growth and diversification of the City.

Additional methods include the analysis of opinions given by residents of Havelock, given during a community summit that was held to learn about development preferences for Havelock's future. The comments helped to determine what opportunities may be created due to

the bypass and how Havelock might plan in response, and the options to consider when choosing plans for the City. When asked to rank City goals, 48 residents ranked, on average, increasing economic development and growth as the top priority. This was followed, respectively, by creating additional recreation opportunities, maintaining a small town atmosphere, improving the community image, and transportation and road improvements. Additional questions were open-ended, and methods of context analysis revealed common themes. When asked the open-ended question of what residents' value most about Havelock, 36 out of 78 residents mentioned the small town atmosphere, followed by 24 who mentioned the people and shared values. One hundred and nine residents answered open-ended questions on what types of projects residents would like Havelock to prioritize, and development that they personally would prefer. Results show that the main priority is infrastructure improvement, which includes improvement of roads, removal of medians, increasing sidewalks and improving water and sewer services. Additional recreational opportunities was the second most cited priority, and included desires for increased activities for youth and some demands for athletic centers and dog parks. The third most important priority was bringing in new business with an emphasis on retail and dining. Desires to improve the appearance of the existing urban landscape closely followed prioritizing new business. These desires included addressing vacant buildings and improving urban design standards. Job development and growth was the least cited priority with only 10 individuals listing jobs, and job creation, as a priority for the City to achieve.

The research identifies some major economic concerns as a result of the bypass. Some of these concerns include the potential for new development along the route to conflict with Cherry Point operations, and the diversion of through-traffic hurting commercial business along the original route. While community leaders believe it is likely that diverting traffic from this route



will negatively impact some of these businesses, it is not necessarily a complete draw back as community members demonstrated an interest in transitioning local businesses and lands toward more local serving uses. In fact, community leaders feel that, overall, the bypass will be beneficial. While residents' ranked economic development as a top priority, when asked to list specific projects, most projects are focused on redevelopment and improving the existing landscape. Additionally, community leaders show no preference toward the size of businesses which locate within town, and would not necessarily need to develop large tracts of land near the bypass, which also serves to protect Cherry Point by limiting sprawl development.

Capitalizing on ideas put forth in *The City of Havelock 2030 Comprehensive Plan* (Urban Resource Group, 2009) will help to accomplish these goals. Ideas include infill development, redevelopment of underutilized parcels, and designating an area as the city center. The City should also move beyond the plan and adopt growth management policies that focus growth along Main Street, as well as allowing for mixed-use design along all of Main Street, and redevelopment of existing buildings. The Planning Department can utilize its powers of code enforcement to help improve the condition and market appeal of existing buildings, and focus abatement efforts in areas targeted for growth. For development aspects that fall outside of the Planning Department's capabilities, the local economic developer can step in with actions such as marketing properties along Main Street to potential real estate developers and attracting industries underrepresented in Havelock. Overall, residents prize the tight-knit, small community atmosphere, and all plans should work to preserve this quality by focusing on development consistent with quality instead of quantity.

## **1: Introduction**

Planners must not only keep an eye on the present, but also plan with consideration to the future. When considering the future of Havelock, there are multiple assets of the City to plan for. The City of Havelock is located in eastern North Carolina, within Craven County, and is home to the Marine Corps Air Station (MCAS) Cherry Point. It is the second largest city in Craven County, and the City estimates its population to be about 22,500 (havelocknc.us). The 2010-2014 American Community Survey estimates put civilian unemployment at 11.6%, which is higher compared to the state of North Carolina average of 6.6%. In light of these facts, Havelock's plan must focus on how to improve the economic condition of the city. One of the most imminent economic concerns is the impact of U.S. Highway 70, a major thoroughfare through town, being converted to a bypass outside the City of Havelock by the North Carolina Department of Transportation (NCDOT, 2011). This will divert through-traffic from the currently opened access route, dominated by commercial uses, to a limited access, bypass route. Estimates from 2004, find portions along the route may experience traffic counts between 17,000 and 30,000 a day (Urban Resource Group, 2009).

The state of North Carolina plans to commence construction of the 10-mile relief route, including one interchange, beginning in 2018 (NCDOT, 2015). The bypass will divert traffic at the northern and southern most points of Havelock, through portions of the Croatan National Forest. Multiple businesses along the current U.S. Highway 70, such as gas stations and fast food restaurants, currently serve through-traffic. Frontage along the route is zone commercial use (Figure 3.3), however, multiple commercial properties are vacant. Diverting traffic may further hurt further weaken commercial corridor. The bypass's draft environmental impact statement acknowledges that traffic diversion may result in negative impacts to traffic oriented businesses

in the city (NCDOT, 2011). However, the bypass is part of a larger infrastructure project to make U.S. Highway 70 a more accessible route to Raleigh, the state capital. Another concern, that is central when planning for the future of Havelock, is the potential closure of MCAS Cherry Point. The 2005 Base Realignment and Closure (BRAC) Commission recommended the reformation of the commission in 2015; which President Obama later supported in his Fiscal 2016 Budget Request (Wilson, 2015). While Congress has not yet approved funding of a new BRAC, Havelock officials are concerned about planning projects in the City that might have harmful effects on Cherry Point's operations, making it more susceptible to closure. A likely impact of the bypass project is that commercial businesses will see some decline in customers. Additionally, if growth along the new bypass route goes unchecked, it could lead to sprawl that conflicts with Cherry Point's flight operations.

The role and responsibilities of planning departments vary from town to town. Havelock offers an interesting case study, in consideration of how planners can influence the economic outcome of bypass construction in smaller cities. First, the question of *what is the current economic condition* was answered, followed by the research question of *what are the available planning alternatives for development in response to U.S. Highway 70 Bypass*. By engaging in community outreach and bypass workshops, the City of Havelock has shown an interest in planning ahead of this issue before it becomes a reality. Participation in an internship with the City during the summer of 2015 also made these planning interests evident. This gave rise to the research question of *on what basis should one alternative be chosen*. The objective of answering these questions was to understand the event of bypass construction within the City of Havelock and the planning processes and responses with concern to the economy, including how the

planners of Havelock might proactively plan to deter economic decline or take advantage of benefits presented due to the Havelock Bypass.

The methodology is largely qualitative in nature and the data were collected based on surveys given to city officials responsible for planning and business stakeholders, as well as citizen's perceptions of local strengths and weaknesses recorded during a community summit conducted in 2015. The objective is to assess the current economic climate of the City and determine local preferences toward planning alternatives in response to the bypass. Each of these perspectives were taken into consideration to determine the benefits of alternate planning strategies.

## 2: Literature Review

### *Bypass and Highway Infrastructure Construction*

Many policy makers see highway construction, and investment, as a way to stimulate economic growth, and it was a popular economic development tool for rural areas during the 1990's (Gkritza, 2008). Investment in highway construction can create jobs and also increase the movement of people and goods, which increases economic productivity (Wachs, 2011). Another economic benefit is the saving of lives associated with accident reduction. Perceptions that highway investment is beneficial are not limited to political officials and affected residents alone. In discussions with business executives Weisbrod and Beckwith (1992) found that highway access is a significant factor when deciding new site locations; it is among the top ten site selection criteria used by businesses.

However, research regarding economic growth and highway infrastructure is not in agreement as to whether there is a significant correlation between the two. Gkritza et al. (2008) feels that this may be attributed to a lack of research on the topic prior to the 1980s, resulting in shorter observation periods. Rephann and Isserman (1994) further note that few comprehensive empirical studies have been conducted to determine the associated impacts of highway investment, which may be due in part to the complex relationship between highway investment and economic development. Among the research challenges are the fact that highway effects differ over time, highways attract specific industries, effects vary by region, and highways become influenced by the surrounding regions that become linked. Nevertheless, infrastructure improvement has purposefully been used as a tool for stimulating regional growth. Ball and Nanda (2014) find that the literature is further divided on whether infrastructure truly stimulates growth at a regional level and found very little correlation through their analysis of infrastructure

and building supply. Similarly, Evans and Karras (1994) found that government investment in infrastructure did not have a significant impact on increasing productivity, and Kuehn and West (1971) found it played no role in economic development. It appears that impacts may be best evaluated on a case-by-case basis (Gkritza et al., 2008).

### ***Case Studies of Bypasses and Relief Routes***

While there are a wide array of procedures and analytical methods in regards to bypass studies (Sabol, 1996), a large portion of recent research has been done through case studies, with particular interest in small to medium sized cities (System Metrics Group, 2006; Handy et al., 2002; Rogers & Marshment, 2000; Yeh et al., 1998). Most of these studies have found that locations which service pass-through oriented traffic, such as gas stations and fast food restaurants, are more likely to have some short-term, yet small, negative impacts than areas which primarily serve local residents. In a review of 61 bypass cases, Sabol (1996) observed that 30 percent had declining sales of pass-through oriented business. A newer case study employing econometric analysis (Srinivasan & Kockelman, 2002) of single bypass Texas towns with populations between 2,500 and 50,000, agrees that gas stations were the most likely to have a decline in per capita sales followed by restaurants. The severity of these impacts were found to be marginal when compared to total retail sales, yet were statistically significant. Sabol (1996) found that overall gross annual sales grow quicker in areas where bypasses have been constructed. Additionally, towns with niche economic foundations, such as government employment, are not as likely to be negatively influenced (Handy et al., 2002).

However, rurality and proximity to metro areas may also play a role. Stonewall, OK, a rural town of just over 500, far removed from metro areas, had no significant impacts, positive or negative, due to bypass construction. Of note is that this bypass did not involve interstate

connection, which did not factor into the analysis (Rogers & Marshment, 2000). Bypasses had little impact on business sales growth in larger communities as well. A study of four bypassed cities with populations of 50,000 found the overall economic impacts to be relatively small (Collins & Weisbrod, 2000). Conversely, it has been found that negative effects are more likely to occur in cities or towns with small populations below 5,000, that are within 25 miles of larger cities (Handy et al., 2002; Sabol, 1996; Srinivasan & Kockelman 2002; Yeh et al., 1998).

Other factors observed include higher traffic diversion to bypass routes near larger cities, and more diversion the longer the original route is, each increasing the severity of impact to the local economy (Handy et al., 2002). For lands in proximity to bypasses, uses tend to shift to commercial and industrial uses, and land value tends to increase along both routes (Sabol, 1996). Some towns have found that after bypass construction, new traffic oriented businesses have located within bypassed towns, with no proximity to the bypass. This was attributed to old routes having higher traffic counts in comparison to bypasses, and the cost of extending additional infrastructure to the new route (Yeh et al., 1998). Old routes may also experience increased traffic because bypasses attract truck and through traffic, increasing the appeal of the old route to local traffic (Collins & Weisbrod, 2000). In terms of population, Srinivasan and Kockelman (2002) did find that population growth rates dropped 0.036% every year after the bypasses were opened in small to medium cities within Texas.

There is the possibility of biases existing within each of these case studies. Many of these studies were performed at the local and state levels (Handy et al., 2002; Rogers & Marshment, 2000; Srinivasan & Kockelman, 2002; Yeh et al., 1998), and each state may have certain criteria before constructing relief routes. For instance, there are states that make economic development a part of their highway policies, and they may choose project sites where growth is projected

(Boarnet, 1997). The timing of research and completion of bypass projects should be considered as well, and verified against recessions and economic booms, including the strength of the local economy. There is also concern over the length of time after the completion of a bypass which studies observe. Sabol (1996) found that most researchers only observe a length of 10 years or less, yet Collins and Weisbrod (2000) note that it may take at least 20 years for small cities to see impacts due to bypasses. Business trends, and the type of businesses attracted to new bypasses, may also have implications, and they could condition the effects of bypass development. Handy et al. (2002), performed a case study of Texas relief routes, and noted the “Wal-Mart effect.” This is a trend toward growth of larger scale (i.e., “big box”) stores that offer lower prices, and often out-price local business. Bypasses may be appealing to such businesses. While these stores may create some employment opportunities, such service jobs are weak in terms of inducing growth (Wubneh, 2004).

Noted local attributes that diminish of the severity of bypasses include higher volumes of traffic, being a natural or tourist destination, and proximity to larger cities (Srinivasan & Kockleman, 2002). For cities that do not possess these attributes, there are a number of measures that can be employed to alleviate the potential negative impacts of bypasses; however, these measures have not been tested to verify for significance (Sabol, 1996). A California Department of Transportation study identified ways to alleviate the economic impact of being bypassed, which include redeveloping downtowns, marketing, reorienting businesses to serve new clientele or purposes, or relocating to interchanges (System Metrics Group, 2006). However, the success of relocating to interchanges depends on the distance from cities, distance from other interchanges, existing development near the highway, and the volume of highway traffic (Rephann & Isserman, 1994). This is also assuming that zoning near interchanges allows for



development, and that the land has been annexed by a municipality which can extend necessary infrastructure such as power, water and sewer lines. Handy et al. (2002) found that each of the cities in their case study had new development at the bypass site in proximity to interchanges. Yet, most of this development was limited, and consisted mainly of national chains. Development was also more likely the closer a bypassed town was to a major city. Studies did not find that pre-existing businesses chose to relocate closer to new bypasses or interchanges. Interviews determined this was due to lack of resources to do so (Handy et al., 2002; Yeh et al., 1998). Lastly, in order to condition a positive economic outcome, Collins and Weisbrod (2000) note that industrial development may be spurred when local officials proactively plan for interchange development. This may include actively raising funds to extend water and sewer to targeted industrial sites.

In terms of social perceptions towards bypass construction, case studies have found that respondents believe that these relief routes are beneficial and were necessary (Handy et al., 2002; Otto & Anderson, 1995; Sabol, 1996; & Yeh et al., 1998). A survey of Iowa and Minnesota business owners in bypassed cities reported improvements in quality of life, including a reduction of noise and dust problems (Otto & Anderson, 1995). Rerouting traffic has the potential to reduce truck traffic, which communities may take advantage of by creating a pedestrian friendly, main street atmosphere along the old route (System Metrics Group, 2006). However, research is lacking in regards to the opinions of residents of bypassed areas (Sabol, 1996).

### ***General Highway Infrastructure***

In consideration of infrastructure projects in general, state transportation agencies primary focus is the implications of traffic on congestion, more than how the inflow of traffic

affects economic development (Sabot, 1996). However, congestion itself may play a role in determining the economic climate. Sweet (2013) found that higher rates of average daily traffic are associated with decreasing regional employment and slower productivity growth, which could potentially be mitigated through construction of a bypass/relief route. Yet, a Wisconsin case study (Yeh et al., 1998) found that over the long term traffic counts on bypassed routes often returned to, or exceeded previous levels, indicating that this is not a permanent solution. In contrast, studies that measure productivity against highway infrastructure itself found there is little contribution on the state scale (Boarnet, 1997).

Studies have found that highway placement influences residential location, and private housing value and stock, which in turn influences decisions towards commuting, place of employment, and location of industry (Rephann & Isserman, 1994; Ball & Nanda, 2014). Using a quasi-experimental research design which matched regions with and without highway improvements, Rephann and Isserman (1994) found that areas most likely to receive an economic boost from highway creation are those in close proximity to large cities with populations over 25,000, with little effect on towns outside of a 25-mile radius of these cities. The main result of this strengthened proximity is a residential and industrial (mainly services) spillover and increased total income. These are followed in later years by manufacturing, transportation, and public utilities.

Various thoroughfare improvement projects have also been shown to be beneficial. In order of increasing positive impact, they are, the creation of interchanges, the addition of travel lanes and new roads. Gkritza et al. (2008) has found that adding travel lanes to existing rural highways has a larger impact than doing so to an urban highway. Highway improvements that are least effective at stimulating the economy include simple improvements, such as resurfacing,

and the addition of medians. U.S. highways also have a bigger influence than state highways. Weisbrod and Beckwith (1992) have also found that freeways, which restrict access, tend to have a greater economic impact than limited access highways. Gkritza et al. (2008) further stipulate that “the larger the project the greater its impact on economic activity, measured in terms of employment, income, output and gross regional product (p. 558).” Contributing to these benefits is the lower travel cost associated with increased accessibility from infrastructure improvements (Boarnet, 1997). While these improvements may be attractive to new business, regions may further increase appeal through business marketing and economic development (Weisbrod & Beckwith, 1992).

In consideration of the impacts of highway construction on existing business, Weisbrod and Beckwith (1992) have found that benefits depend on the location of a given businesses buyers, suppliers and competitors, noting that different industries tend to have different shipping patterns. Businesses which tend to see a direct benefit from improved access include manufacturing, distribution, and trucking firms. Specifically, Weisbrod and Beckwith (1992) have further found that trucking firms, petroleum product firms, and paper manufactures tend to be more affected in consideration of shipping costs. Retail and service related businesses tend to have more localized shifts in trade areas, without having an overall impact at the regional and state levels. The ability to attract new industry may also have multiplier effects, which extend to existing businesses in the form of increased material and equipment sales, or as new workers spend income on products and services (Weisbrod & Beckwith, 1992).

While the previous studies found instances of economic growth due to highway investment, other studies cite the causality dilemma. The causality dilemma makes it harder to assess whether economic development is a byproduct of highway investment, or if highway

expansion occurs due to increased development (Wubneh, 2008). Evans and Karras (1994) point out criticism of earlier studies which link infrastructure investment to productivity, falsely assuming that correlation implies causation. Economists feel such studies fail to consider the dynamics of urban industrial growth and economics of agglomeration (Kuehn & West, 1971). Businesses may benefit more from locating near complementary businesses than highways. One last aspect few studies consider is the cost of foregone opportunities, or income that could have been generated had the land been put to other uses (Wachs, 2011). Other forgone costs include alternate investments that might have been made with funds that went to infrastructure projects instead.

### ***North Carolina Specific Infrastructure Studies***

Jiwattanakulpaisarn et al. (2009) used a dynamic panel regression analysis to compare county level employment to highway infrastructure within all 100 counties in North Carolina. Researchers looked at data from 1985 to 1997, when North Carolina implemented several road widening projects. County level private sector employment was compared to density of highway lane-miles with results run through multiple modeling frameworks and found no relationship between these factors. Jiwattanakulpaisarn et al. (2009) do not offer a breakdown of data by each county, or geographic area, and present the findings as uniform for the state. Wubneh (2004) found similar results when measuring county level per capita income convergence against local infrastructure investment and mileage of paved highway (among other variables) in North Carolina from 1970-2000. Wubneh (2004) found that state infrastructure investment and mileage of paved highway throughout the state had an insignificant relationship to per capita income growth and convergence. Further study of the state's mountain, piedmont, and coastal regions found that this trend holds true, and that there was little difference in local infrastructure

expenditure per region (Wubneh, 2004). These studies suggest that highway infrastructure alone may not be a solution to economic growth within North Carolina.

### ***Eastern North Carolina Infrastructure and Economy Studies***

U.S. Highway 17 is located in eastern North Carolina and serves tourist, military, and port traffic. Eastern Carolina University conducted an economic impact study on proposed improvements to U.S. Highway 17 (Wubneh, 2008). The study suggested that improvements might contribute to short-term impacts such as growth in output, earnings, and employment, which might lead to a multiplier effect of additional benefits. The projected long term benefits included increased safety, reduced travel times and transportation costs, and improving the investment climate of the region. The study noted the complexity of highway investment as an economic growth strategy, but argued that the investment offers localities a comparative advantage in attracting transportation reliant industries when compared to areas which lack adequate highways. One of the primary economic benefits from improving U.S. Highway 17 is the creation of construction jobs, with NCDOT investing about \$2.4 billion into the project. This money will spread to other industrial sectors through the purchase of construction materials, and as workers spend their incomes. However, about a third of the U.S. Highway 17 investment is thought to leak out of the region due to taxes as well as the non-metro nature of localities along the route. For goods and services which are not supplied within the region, money will flow to other areas providing these goods and services (Wubneh, 2008).

The U.S. Highway 17 study found that socioeconomic factors along the route tend to be more favorable when compared to the rest of the eastern region, which as a whole typically lag behind the rest of the state economically (Wubneh, 2004). This portion of the state lacks an interstate system, with U.S. Highway 17 serving as the major north-south connector to Virginia

and South Carolina. (The New Bern portion of this route is approximately 24 miles away from Havelock and U.S. Highway 70.) U.S. Highway 17 counties tend to have higher educational attainment, higher per capita income, and lower instances of poverty when compared to the rest of eastern North Carolina (Wubneh, 2008). Eastern North Carolina overall tends to be more dependent on government employment than the rest of the state which can be attributed to Camp Lejeune and MCAS Cherry Point (ATKINS, 2013). Data from 1970-2000 has found that 59 percent of the counties in the eastern coastal region have 50 percent of their population within 10 miles of a 4-lane highway (Wubneh, 2004). Future growth is projected to occur primarily along, and at the ends of the U.S. Highway 17 corridor improvements (ATKINS, 2013). This suggest that for this portion of the state, highway infrastructure does play a role in terms of residential location, and perhaps quality of life factors.

The US 70 Corridor Commission was formed as a partnership between local, regional, and state agencies which are serviced by U.S. Highway 70, and are east of Johnson County. The commission authorized an economic assessment of this portion of U.S. Highway 70 in 2014 and found that improvements to U.S. Highway 70 would help to increase economic growth along the corridor. The findings suggest that in 2011, most industries along the corridor were non-basic, or local in nature, and dependent primarily on local demand and service, without necessarily being able to fill these demands. This leads to the assumption that it may be necessary to import goods into these counties, and that current industries are not economically competitive. The strongest basic industry along the 70 corridor is construction. Other emerging industries throughout the corridor are mining, manufacturing, wholesale trade, and service related industries, with most employment being within service industries (Cambridge Systematics, 2014).

In order to gain insight into public perceptions of bypass construction within eastern North Carolina, Kleckley (2011) conducted informal interviews with officials of towns which were bypassed between 1991 and 2010. The U.S. Highway 264 Bypass in Wilson has not caused changes in business along the original route, and new development has been concentrated along the bypass interchange. In Clayton, the U.S. Highway 70 Bypass also has not caused changes in business along the original route. Development along the new route has been limited as it is outside of available infrastructure. The author speculates that the effects of bypasses may be tempered by active local planning efforts, such as infrastructure extension. The officials of Washington felt that construction of the U.S. Highway 17 Bypass gave the town an economic boost, as the NCDOT hired a large number of local workers. However, development potential along the bypass is limited by swampy terrain (Kleckley, 2011).

The *US 17 Economic Impact Study* (ATKINS, 2013) conducted interviews with Military Growth Task Force planners and US Marine Corps officers understand of how U.S. Highway 17 corridor improvements affects local bases. The study “noted improvements to U.S. Highway 17, U.S. Highway 70, and NC 241/11 as drivers of growth in the region (pg.32).” The military recognizes that these improvements have both positive and negative impacts to base operations. Possible population growth may create competition for water and sewer, bring increased low-flying aircraft and noise complaints, increase construction of tall structures, and create encroachment upon bases. However, improved roadways may increase safety and improve operational mobility and logistics. Overall the military officials show neutral positions towards highway investment and potential outcomes. The study notes that in order to mitigate potential pitfalls of improved corridors, planning should precede growth (ATKINS, 2013).

### *Small City Economic Development Planning*

There are a range of ways in which communities may restructure in order to achieve a sound economic base that will withstand uncertain impacts. It is essential to have a general knowledge of redevelopment options when planning against economic shocks. A locality may choose to develop its existing asset base and invest in town aesthetics, or search for new economic opportunities and plan for such future land uses (Kitchen, 2003). Malizia (1986) feels that the city should be in agreement whether they want economic development, those aspects which involve improving quality living standards, or economic growth, including attracting new industries or increasing capacity and output. Economic growth can more clearly be understood as factors which influence local income levels, and GDP. In order to put an economic plan in place the city needs to involve more than just planners, but local officials and leaders as well. Further there should be a comprehensive plan defining the approach to economic planning, and the city's role (Boothroyd & Davis, 1993). This plan should also define what economic development means to the given area, which helps establish goals (Malizia, 1986). There should be an inventory of assets and needs, bringing an industry to town for which there are no skilled workers does little to help the economic base. Markusen (2004) notes that most towns attempt to attract industries, noting there should be consideration towards attracting specific occupations as well. Additionally, Kitchen (2003) and Malizia (1986) agree that towns should look to enhance their current assets, whether it's supplemental businesses or community attractions and resources.

While economic growth strategies tend to be favored over developmental strategies, growth produces its own challenges. Longlands (2013) found that growth creates demands for housing, transportation infrastructure, and quality of life. Planners should consider that growth



alone may not always have the trickle-down effect that they hope for. There should be a concern that the needs of the entire community are met in order for the economic effects to be felt throughout the community, and that plans preserve local social constructs. However, an area which is predominately residential may run into tax revenue shortfalls, and have issues funding public services (Morgan, 2009). Another issue with funding is that often times attracting new industry requires tax breaks or subsidies, yet most local governments have limited funding to carry out such programs (Porter, 2008). These are areas that the city will need to plan proactively for and use as a guide in its planning efforts. Overall, Morgan (2009) finds that public investments made over time, and long-term programs put localities in a better position to withstand economic ups and downs.

While it is the community and local stakeholders who ultimately decide the plan, the locality may consider implementing a local developer role which understands the community's long-term needs and acts upon local interests. The economic developer should ultimately help in planning efforts and collecting local economic data, which they will then use to promote the area. The developer also serves as the liaison between city, regional and state development agencies and officials (Morgan, 2009). Morgan (2009) notes that sound planning is key to successful economic development. This planning should consider trends, objectives and strategies in the context of the given area, as well as an inventory of local industry and employment sectors, as well as community assets. Porter (2008) proposes growth management programs as a planning method that can influence economic development through the improvement of community amenities and investments in local institutions, ultimately providing a long-lasting lure to new businesses. Growth management practices guide local growth in a way that it keeps pace with city services and limits sprawl development by utilizing redevelopment

and infill development within a city's corporate limits. Additionally, Porter (2008) feels that growth management techniques improve control of the development process, as comprehensive plans and zoning lack strategic force.

### *Gaps in the Literature*

Overall, the literature on infrastructure investment suggests that there are conflicting opinions on the benefits of highway investment. The causality dilemma is cited as a major source of this conflict as it is not always clear if highway investment is a result of development, or a driver of it. The literature does not address how research might address this gap, and this research is designed to shed light on how this dilemma could be better understood by using case studies. Specifically, this research identified local perceptions on economic growth and development and the potential for transforming the economic characteristics of the City of Havelock as a result of bypass construction. Another gap in the literature is that there are few studies on how infrastructure investment impacts communities which are dependent on military bases. This is significant because development has different implications for bases than towns. Of note, many bases were purposefully built in areas that were originally considered remote (Cambridge Systematics, 2014). In light of this, this research demonstrated the importance of adopting an effective local plan to avoid land use conflicts, specifically, the change in land use and its potential impact on Cherry Point air station.

### **3: Research Design and Methods**

#### ***Research Questions***

The intent of this research is to understand the event of bypass construction within Havelock, and, with consideration of current economic conditions, how planners within Havelock can plan to create a favorable climate for economic growth in response to the construction of the U.S. Highway 70 bypass. The literature review offers a general understanding of what may occur based a city's size, economic strength, industrial mix, the original routes primary uses, whether or not the bypass has interchanges, and the routes proximity to the city. These criteria are important to understand in relation to Havelock because previous research has shown that development outcomes vary by location. The literature review also offers insights into how a city might encourage economic growth due to bypass construction; it is the intent of this research to understand how these planning methods match up to local economic needs and planning preferences of Havelock. In order to come to this conclusion, this research will try to assess the current economic condition and industrial mix within Havelock, and explore available economic development planning alternatives. In addition, this research aims to investigate how alternatives may be executed through the local planning department. The research questions are as follows:

- What are the characteristics of the current economy in Havelock in regards to employment, industry and occupational mix, and workforce?
- What are the available planning alternatives for addressing the changes resulting from the U.S. 70 Highway Bypass with respect to economy?
- On what basis should alternative plans be considered?

### ***Study Site and Background***

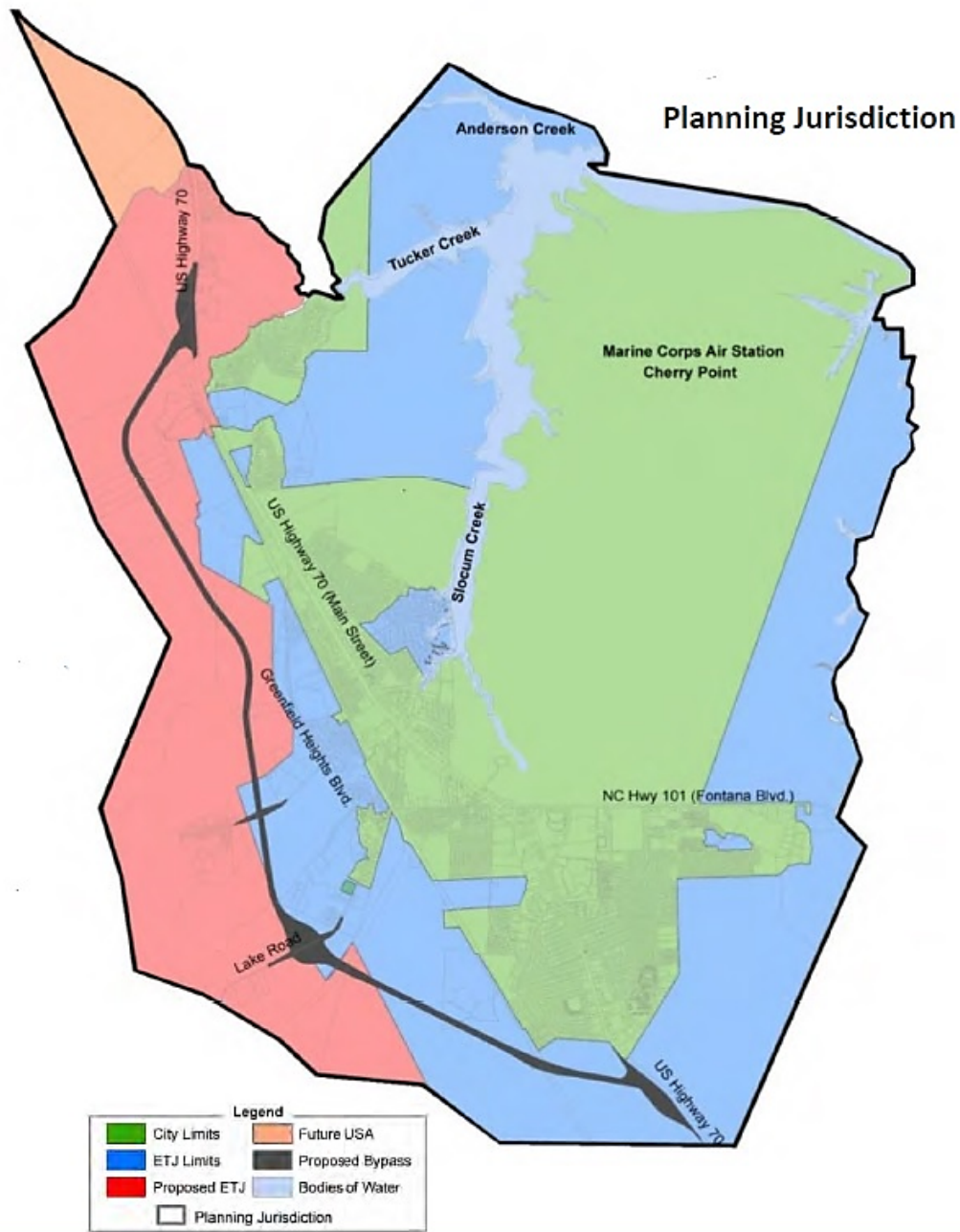
The City of Havelock is part of the inner banks of eastern North Carolina, and is within 30 minutes of New Bern and Morehead City. Established in 1941, Marine Corps Air Station (MCAS) Cherry Point, the city's largest employer, occupies over 29,000 acres of the northwest portion of Havelock (Figure 3.1). The construction of this base spurred employment and contributed exponentially to the population and economic growth of Havelock. The pre-base, 1940, population level of 723 rapidly expanded to 11,695 by 1950 (Urban Resource Group, 2009). Since its establishment, Cherry Point has been the lynchpin around which Havelock was built. Cherry Point published an economic impact assessment in 2016, which estimated the base's economic output for 2015 at just over \$2 billion. The assessment also found that there were 9,061 active duty personnel and 5,173 civilians working on base. These employees' salaries make up about \$1.2 billion of the base's economic output with the remaining output coming from procurement, contracts, health care, and utilities (MCAS Cherry Point, 2016). With calls for additional base realignments and closures by the president and past BRAC commissions, the possibility of this happening in Havelock is taken seriously throughout the community and by the City. The importance of the base to Havelock is made evident through the Eastern Carolina Joint Land Use Study (2002), which is a plan created by the City, Cherry Point and other surrounding communities. This plan details development that is most compatible with base operations, and includes limiting sprawl.

The majority of Havelock's built environment is concentrated around U.S. Highway 70, also known as Main Street throughout Havelock. U.S. Highway 70 is a major thoroughfare which spans the width of the state. This route connects the port at Morehead City to the state capital, on through to the mountains, continuing past Knoxville, Tennessee. The NCDOT has

begun plans to alleviate congestion along the eastern portion of U.S. Highway 70 through construction of several relief routes, which will improve access to the capital, port and beach destinations. The City of Havelock will be impacted by one of these bypass routes to the west of the city in its extraterritorial jurisdiction (Figure 3.2). This project will include an interchange to the southwest side of the city at Lake Road. A large portion of the bypass will run through the Croatan National Forest, which is owned by the US Forest Service, and managed by the NC Wildlife Commission. There is a possibility that this rerouting will have an economic effect on businesses, industries, and institutions along the current highway route. Multiple land uses exist along the current U.S. Highway 70 alignment; however, the main land use which fronts the highway is commercial, which includes through-traffic services. At writing, there are nine gas-stations and fourteen chain fast-food restaurants along this route. Havelock's largest employers, after Cherry Point and county schools, Walmart, and McDonalds, most of which are also located along the current U.S. Highway 70 (Havelock Chamber, 2015). Yet, the bypass route itself brings the potential for economic stimulus, which could mitigate any negative impacts caused to the through-town route. The influence both MCAS Cherry Point and U.S. Highway 70 have on Havelock's economic health make them important factors for Havelock's future planning.

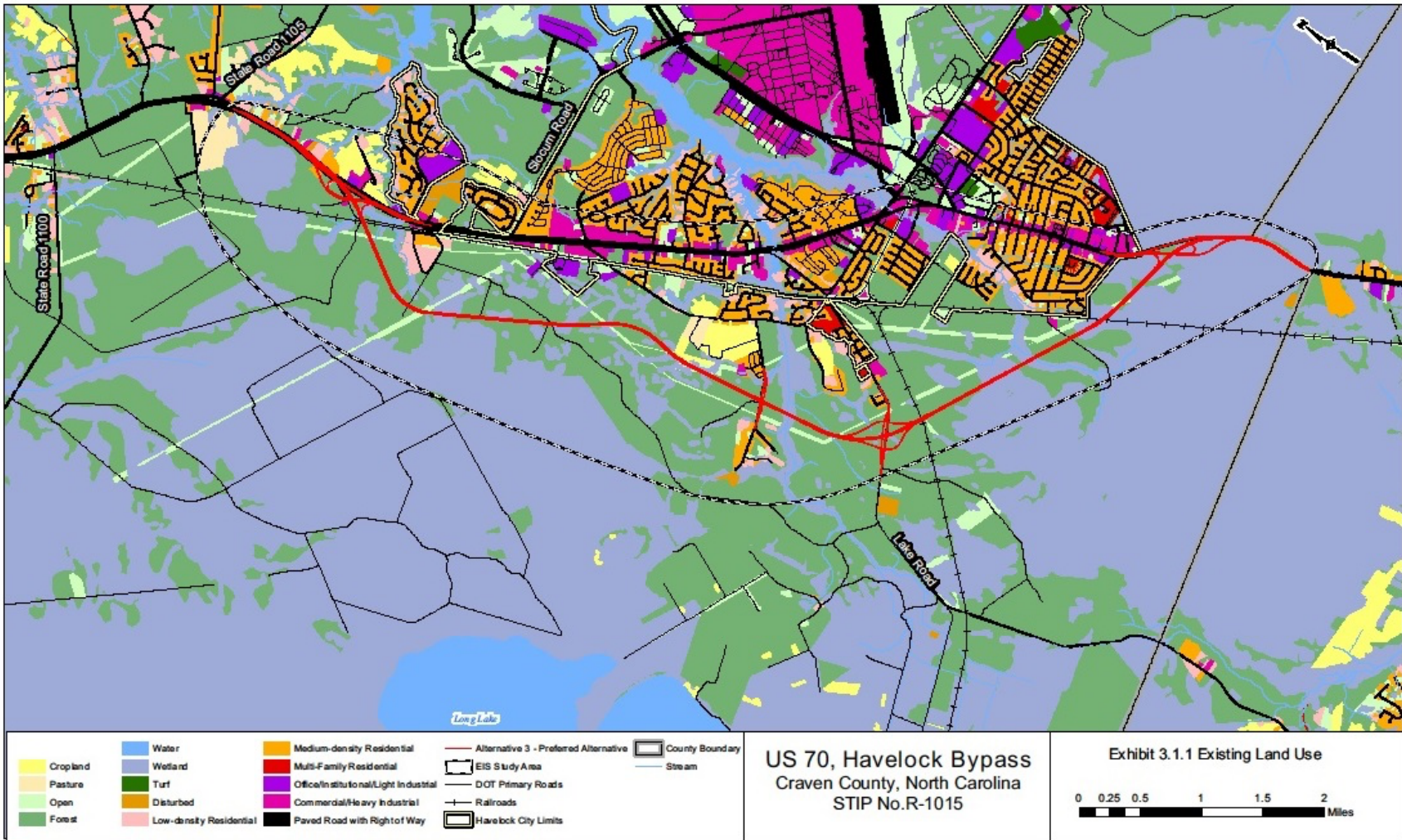


**Figure 3.1: Havelock and City Limits**  
Source: Openstreetmaps.org



**Figure 3.2: Havelock Planning Jurisdiction**

Source: Urban Resource Group, 2009: The City of Havelock 2030 Comprehensive Plan



**Figure 3.3 Havelock Existing Land Use** (Source: NCDOT FEIS US Highway 70 Bypass, 2015)



## ***Research Design and Methods of Analysis***

“In general the goal of doing a case study is to get in-depth understanding of something—a program, an event, a place, a person, an organization. Often the interest is in process.” (Bernard, 2010, p. 43). The primary purpose of this research is to understand the event of bypass construction within the City of Havelock and the potential planning processes and responses with concern to the economy. Qualitative methods were used in order to analyze these responses and potential economic impacts of the U.S. Highway 70 bypass on Havelock. These methods include a survey of city leaders and analysis of comments and opinions made in response to a City administered survey. The study is further supplemented by the quantitative analysis of Census data for the City of Havelock and Craven County, to help understand economic conditions. The research is primarily considered to be qualitative because the overall intent is to find meaning in the quantitative findings (Bernard, 2010). Moreover, the literature review shows that economic impacts of bypass creation vary based on location, and are best evaluated on a case-by-case basis (Gkritza et al., 2008). It is for these reasons the case study method is the preferred design.

In order to determine Havelock’s economic condition and industrial mix data from the U.S. Census and American Community Survey is used, and serves as an independent chapter (Havelock Labor Force, Economy and Income). The economic chapter compares local data gathered during the 2000 or 2010 Census and compares it to the 2014 American Community Summary (ACS) estimates to help identify trends. The ACS is different from the Census because its data come from a sample of the population instead of the entire population, for this reason ACS data are considered estimates. While Census data are preferable, ACS data are the best available data for the 2010-2014 time-period because the Census only distributed short forms

during the 2010 Census, which excluded economic factors ([factfinder.census.gov/help/en/short\\_form.htm](http://factfinder.census.gov/help/en/short_form.htm)). Additional data comes from the North Carolina Bureau of Commerce, location quotients from the U.S. Bureau of Labor Statistics, growth rates from The U.S. 70 Corridor Economic Assessment (Cambridge Systematics, 2014). Havelock's 2007 Economic Profile (HDR, 2007) offered a source of comparison on economic trends observed prior to the 2008 recession.

A deeper knowledge of Havelock's planning priorities, economy, and governing structure were needed in order to answer my research questions. For this reason, familiarization with the City through an internship, helped to identify planning priorities and the structure of the local government. The internship also helped to formulate questions for a survey, also referred to as the city leader's survey, which was used to gauge the current economic climate and perceptions of future growth in consideration of the bypass. The city leader's survey was given to business members who are affiliated with the local chamber of commerce through membership or serve on the chamber board. Surveys were also given to city officials concerned with planning, which includes commissioners, planners and planning board members, and other top ranking officials. Additionally, Havelock hosted an informal community summit, also known as the Havelock Community Summit, in October of 2015 after the internship was completed. During this summit the City collected feedback from residents regarding Havelock's strengths, weaknesses, and projects they would like to see the City prioritize for the future. A complete list of those comments were shared by the City and used to gain a further understanding of development potential and desired economic growth for the City of Havelock.

The city leader's survey was administered using Qualtrics research software. The city leader's survey consisted of 30 optional, close-ended questions, which were analyzed

quantitatively. There were also four open-ended questions that served as a follow-up to some of the questions. Questions asked for perceptions on the importance of the current and future highway route, and include items on current industrial diversity, preferred areas of growth, preferred form of growth, and city planners' role in future economic development (see Appendix A for a sample survey). To help answer the research question of *what is the economic condition of Havelock's current economy*, respondents were asked if they believed the economy was either growing, stagnating, or declining; if they thought Havelock was competitive compared to other nearby cities; if they thought Havelock offered a range of employment; and if there is a diverse industry mix. To help answer the research question of *what are the available economic planning alternatives*, respondents were asked questions such as which route (bypass vs. original) they would prefer to see future growth; benefits created by an improved U.S. Highway 70 corridor; the size and form of future business they would prefer to see; and through which department they would prefer to see future economic development planning.

In the spring of 2016, forty-one respondents, who either represent the city in a planning capacity or who are associated with the local chamber of commerce, were identified to participate in the city leader survey. Additionally, an article describing the survey of city leaders and accompanying research was published in the local newspaper, The Sun Journal, halfway through the survey period in May of 2016 (Wilson, 2016). After a five-month period, and multiple attempts to reach possible respondents, 18 surveys were completed, or a 44% response rate. The smaller sample size can be justified due to the intent of the city leader's survey. Given the size of available city leaders with knowledge of the local economy, the survey was not designed with an expectation of a representative sample, rather it was meant to assess the city leader's opinions regarding the current economic conditions, and planning in relation to the

bypass. This required interviewing those who have knowledge of the local economy and local planning. Using a structured survey, consisting primarily of closed-ended questions, increased the comparability of this data. Further, Sabol feels the use of survey data provide “an interpretive richness sometimes lacking in strictly statistical studies” (1996, p. 4).

The Havelock Community Summit was hosted by the City of Havelock in the fall of 2015 and was open to all members of the community. Attendees were asked to share thoughts on communal vision boards which were manned by city staff. The vision boards asked attendees to identify “what they currently see in Havelock”, and “what they would like to see in Havelock”. Responses were made immediately visible to all in attendance as means to encourage new ideas from additional participants. The city also gave community summit attendees a personal, opinion survey, which they were asked to turn in at the end of the summit. The opinion survey (Appendix C) contained three open-ended questions and one rank order question, all in regards to the City of Havelock’s strengths, weaknesses and priorities. The open-ended questions were completed by 109 people, although there were some questions not answered. The rank order question was completely answered by 48 of the attendees, with partial responses being omitted to avoid biasing the final averages. Opinions expressed during the Havelock Community Summit helped to answer the research questions of whether *one planning alternative should be chosen over another, and on what basis* through an examination of what type of growth the community would like to see in the future.

The Havelock Community Summit findings were analyzed in two ways. The communal vision board comment findings, and the rank order averages in response to the city planning priorities question were reported in the results chapter and used for further discussion. Quantification of the vision board comments was not justified because participants were

encouraged to come up with additional comments instead of duplicating previous responses. Responses made on the vision boards were also replicated in response to the summit opinion surveys, which provided a better opportunity for quantification. Averaging of a rank order question, which was included in the opinion survey, was completed by the City as part of the documentation of the event. This question asked participants to rank planning priorities identified in a previous year's community summit one through five, with one being the most important priority, through five, the least important.

Comments to three open-ended questions required further analysis which was qualitative in nature. The questions were:

- What do you value most about Havelock?
- If you could improve one thing in Havelock, what would it be?
- What issue/project would you like to see the City prioritize for the future?

In order to understand areas of consensus, a process of theme identification was used. The themes identified were primarily a priori in nature, or determined based on a prior understanding of planning concerns (Bernard & Ryan, 2003). Additional planning themes were identified by reading the comments twice to identify repetition of phrases consistent with planning concerns. Themes which were identified include those of infrastructure, parks and recreation, business growth, city appearance and design, and economic growth and development. In order to further identify which comments correlated to a given theme, and what subthemes existed in relation to the meta-themes, the comments were coded. The process of coding used was one of sorting like comments into groups, similar to the cutting and sorting described by Bernard and Ryan (2003) in *Field Methods*. In order to understand the primary issues and concerns expressed during the community summit, the frequency of each theme was recorded along with an analysis of the

subthemes. Due to the similar nature of the last two questions, responses to both questions were analyzed side-by-side.

Among the primary justifications for the two separate survey methods are the varying degrees of knowledge in terms of planning between city leaders (within government and business) and Havelock residents. Leaders have a better idea of capacity for development than residents. The city leader's survey was designed to gain insights from city officials and members of the business community who have a more intimate knowledge of local planning practices and the business atmosphere. Sampling a larger number of residents can help uncover planning and development needs and community wants. Residents who responded to questions and opinion surveys administered during the Havelock Community Summit better represent the local economic driving force. In order for citizens to stay and participate within the community and local economy, they would prefer that certain needs be met. The Havelock Community Summit offered a means of understanding those needs and helped to gain an understanding of how the community and local economy could be strengthened.

There are limitations associated with this research as well. Because the city leader's survey has a smaller sample size it does not allow for a representative distribution of the larger population of Havelock. Another limitation is not knowing how much pass through traffic stops within Havelock in total, which is difficult to calculate as this is not something businesses track. Having a better estimate of how much business serves through traffic on the original route would allow for better insights on the economic impacts of a bypass. The lack of insight from Cherry Point officials and personnel is another limitation. Most of the assumed impacts from the bypass to the base comes from the opinion of officials outside of the base and secondary data. Additionally, enlisted personnel and family members who live on base, but frequent amenities

within Havelock, may have different development preferences for Havelock than the residents who were at the community summit. Future research should attempt to gain these perspectives to offer a comparison to those presented in this research.

## **4: Havelock Labor Force, Economy, and Income**

### ***Introduction***

This section evaluates the City of Havelock's current economic condition and compares the results to the City's 2007 Economic Profile when possible (HDR, 2007). The intent is to gauge the current direction in which the economy is heading, and where it stands prior to construction of the U.S. Highway 70 Bypass. The primary source of data comes from the 2000 and 2010 US Census, and 2014 American Community Survey (ACS) estimates. Additional sources include county level labor force and employment data from the North Carolina Department of Commerce, and location quotients from the Bureau of Labor Statistics. The analysis will look at the characteristics of labor force, education and income, and population.

### ***Labor Force***

Census and American Community Survey data was used to compare the number of residents 16 years and older who were participating in the labor force in 2000 and 2010-2014 (Table 4.1). The 2000 Census found that 22,442 people were residing in Havelock (including ETJ), with a total of 16,867 being over the age of 16, or 75 percent of the population. Of this population, almost 78 percent were in the labor force in 2000, which is very similar to over 77 percent in the 2010-2014 estimates. This shows a stable trend in workforce participation within Havelock.



**Table 4.1**  
**Labor Force Participation, 2000 and 2010-2014**  
**Persons 16 Years and Over**  
**City of Havelock**

Labor Force Status	2000		2010-2014	
	Persons 16 Years and over	% Total 16 Years and Over	Persons 16 Years and Over	% Total 16 Years and Over
In Labor Force	13,136	77.9	11,982	77.2
Not in Labor Force	3,731	22.1	3,544	22.8
Total 16+ Years	16,867	100%	15,526	100%

Source: U.S. Census Bureau. Census 2000, Summary File 3, Table DP-3. American Community Survey 5-Year Estimates, Table DP03.

To get a better understanding of the civilian labor force status of residents 16 and over who are participating in the labor force, employment statuses were obtained. Table 4.2 shows data from the 2000 Census and 2010-2014 ACS estimates for the employment status of the City of Havelock’s residents. While the ACS estimates projected a growth in the population which is 16 years and older, there was insignificant projected growth in the number of employed civilians, resulting in a 5.6 increase in unemployment, from 6 percent. This means that unemployment for the City of Havelock was estimated to be around 11.6 percent for the 2010-2014 time period. If the entire labor force of 11,982, including military (4,744), is looked at for this time period, unemployment drops to 7 percent (U.S. Census) from 11.6 percent for civilians alone. However, the ACS estimates should be looked at with caution as they are based off population samples which are much smaller compared to the U.S. Census.

**Table 4.2**  
**Employment Status of the Labor Force, 2000 and 2010-2014 Estimates**  
**Persons 16 Years and Over**  
**City of Havelock**

Civilian Labor Force Status	2000		2010-2014 Estimate	
	Persons 16 Years and Over	% Total 16 Years and Over	Persons 16 Years and Over	% Total 16 Years and Over
Employed	6,396	94.0	6,395	88.4
Unemployed	405	6.0	843	11.6
Total 16+ Years	6,801	100%	7,238	100%

Source: U.S. Census Bureau. Census 2000. Summary File 3, Table DP03. American Community Survey 2010-2014 5-Year Estimates, Table DP03.

The Labor and Economic Analysis Division (LEAD) of North Carolina’s Bureau of Commerce reports that Craven County had an unemployment rate of 6.6 in 2015, which is comparable to Havelock’s combined unemployment rate. This rate is down from the previous year, which was 7.4. However, Craven County’s unemployment rate is still above the pre-recession average annual rate (from 2001-2005) of 5.6 (HDR, 2007). The LEAD also reported a 6.3 percent unemployment rate for the New Bern – Morehead City combined statistical area, suggesting that while there may be fewer civilian employment opportunities in Havelock, residents may be able to take advantage of employment nearby, which might be further facilitated by improved connectivity of the U.S. Highway 70 Corridor.

The following graphs compare Craven County’s employment patterns from 2011-2015. Figure 4.1 shows Craven County’s labor force trends in the past five years, with a noticeable spike in employment during the summer months. This can be attributed to a larger than normal tourist industry with Craven County being in close proximity to the beach. Overall, Craven County’s labor force has been declining. The U.S. 70 Corridor Economic Assessment, also projected that Craven County will experience increased outmigration, with an estimate of over

2,900 residents leaving the county from 2010 to 2030. The Assessment found that from 2001-2011 Craven County’s total employment growth rate was .29%, compared to .84% for the state (Cambridge Systematics, 2014). These are consistent with Wubneh’s (2004) findings that North Carolina’s coastal region experienced lower growth rates compared to the rest of the state from 1970-2000, demonstrating that low growth is typical for this region.



**Figure 4.1: Craven County Labor Force, 2011-2015**  
 Source: NC Department of Commerce (<http://d4.nccommerce.com/LausSelection.aspx>)

Figures 4.2 and Figure 4.3 compare Craven County’s number of employed and unemployed, respectively. The County tends to have fewer people employed during the winter months (Figure 4.2), which can be attributed to the tourism industry. Overall, employment during the time period examined is increasing. In comparison, unemployment (Figure 4.3) is decreasing at a significant rate, although there seemed to be a leveling out of the number of unemployed in 2015. So while the labor force is diminishing, employment levels are improving.



**Figure 4.2: Craven County Employed, 2011-2015**  
 Source: NC Department of Commerce (<http://d4.nccommerce.com/LausSelection.aspx>)



**Figure 4.3: Craven County Unemployed, 2011-2015**  
 Source: NC Department of Commerce (<http://d4.nccommerce.com/LausSelection.aspx>)

### ***Occupation and Industry Comparisons***

It has been well established that MCAS Cherry Point is the largest employer in the City of Havelock, as well as Craven County. Havelock's 2007 Economic Profile stated concerns that the City may be too dependent on the base and recommended that the City needs to diversify its industry mix. For this reason, it is important to examine occupation type within the region and determine where opportunities for industry expansion exist.

Data from the 2010-2014 American Community Survey, regarding occupation type (Table 4.3), was obtained in order to gain a better understanding of the capacity in which Havelock's labor force is employed. This data was compared against occupations at the county, state, and national levels. Of note, is that the City of Havelock is lagging behind primarily in managerial professional and related jobs, being 9.8 percent below Craven County and 14.7 percent below the national estimates. This may signal a climate which is not conducive to entrepreneurial start-ups, and also occupations which do not require higher levels of education are more dominant. Production, transportation and material moving represented the smallest share of occupations in the City of Havelock, and was at least 2.5 percent behind the other areas studied. The most common occupation for the City of Havelock is services, with the City leading the other study areas in services by at least 5.5 percent.

**Table 4.3**  
**Comparison of Employment by Occupation, 2010-2014**  
**Employed Civilian Population 16 Years and Over**  
**City of Havelock, Craven County, North Carolina and the United States**

<b>Occupation</b>	<b>City of Havelock</b>	<b>City %</b>	<b>Craven %</b>	<b>NC %</b>	<b>U.S. %</b>
Managerial professional, and related	1,389	21.7	31.5	35.9	36.4
Service (healthcare, protective, food)	1,701	26.6	21.1	17.7	18.2
Sales and office occupations	1,546	24.2	22.0	23.7	24.4
Natural resources, construction, and maintenance occupations	1,151	18.0	13.4	9.4	9.0
Production, transportation, and material moving	608	9.5	12.0	13.2	12.1
<b>Total</b>	<b>6,395</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: U.S. Census Bureau, American Community Survey, 2010-2014 5-Year Estimates DP03.

In order to gain a further understanding of Havelock’s workforce, industry data was obtained from the 2010-2014 American Community Survey. This data was compared against Craven County, North Carolina, and the United States (Table 4.4). Havelock has 6,395 persons in the work force, spread among thirteen different industries. The largest share of Havelock’s labor force, 22.3 percent, is within the public administration sector, which includes government jobs. This large share of the workforce can be attributed to Cherry Point. While Cherry Point is the largest employer for Craven County, the public administration sector is much more dominate in the City of Havelock, accounting for over 10 percent more of its labor force. This industry share becomes even higher when compared to state and national levels, exceeding each of these areas by more than 17 percent. This illustrates the economic dependence Havelock has in regards to the military base.

Havelock’s second biggest industry (20.8 percent) is arts, entertainment, recreation, accommodation, and food services. This industry is twice the size of Craven County’s level

(10.3%), as well as the state (9.4%) and national level (9.5%). There are 1,328 residents employed in this industry. A further break down of this sector shows that out of these 1,328 residents, 1,200 are estimated to be employed in accommodation and food services. Havelock's proximity to tourist destinations, such as Atlantic Beach, may account for a larger concentration of workers in this industry. It is also a concern, as there are a larger proportion of food services along the current U.S. Highway 70 which cater to through traffic going to these tourist destinations.

The City of Havelock and Craven County's employment levels for the information industry lag behind both North Carolina and the U.S. The U.S. 70 Corridor Economic Assessment found that between 2001 and 2011 Craven County had experienced a reduction of 4.24 percent in this industry. There was also a 4.41 percent loss in forestry, and 3.64 percent loss in manufacturing, both areas in which Havelock has weaker concentrations as compared to the other study areas. However, Craven County had a strong gain in professional services from 2001 to 2011, increasing by 8.6 percent (Cambridge Systematics, 2014). Of note, is that the Final Environmental Impact Statement for the bypass found that the professional services sector had a -4 percent change from 2006 to 2011 (NCDOT, 2015). This may be attributed to the fluctuations in employment related to Cherry Point, and changes in base operations.

**Table 4.4**  
**Comparison of Employment by Industry, 2010-2014 5-Year Estimates**  
**Employed Civilian Population 16 Years and Over**  
**City of Havelock, Craven County, North Carolina, and the United States**

<b>Industry</b>	<b>Havelock</b>	<b>Havelock %</b>	<b>Craven %</b>	<b>NC %</b>	<b>U.S. %</b>
Agriculture, forestry, fishing and hunting, and mining	10	0.2	2.3	1.4	2.0
Construction	442	6.9	6.1	6.6	6.2
Manufacturing	264	4.1	10.7	12.5	10.4
Wholesale trade	8	0.1	1.1	2.8	2.7
Retail Trade	797	12.5	11.3	11.8	11.6
Transportation and warehousing and utilities	307	4.8	4.3	4.3	4.9
Information	86	1.3	1.6	1.8	2.1
Finance, insurance, real estate and rental and leasing	182	2.8	3.9	6.3	6.6
Professional, scientific, management, administrative, and waste management services	373	5.8	7.2	10.1	10.9
Educational, health and social services	989	15.5	24.1	23.6	23.2
Arts, entertainment, recreation, accommodation and food services	1,328	20.8	10.3	9.4	9.5
Other services (except public administration)	186	2.9	5.3	4.9	5.0
Public administration	1,423	22.3	11.9	4.5	4.9
<b>Total</b>	<b>6,395</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: U.S. Census Bureau, American Community Survey, 2010-2014 5-Year Estimates Table S2043.

Location quotients were used to determine the ratio of employment in a given sector as compared to the nation. Location quotient ratios were obtained from the location quotient calculator on the Bureau of Labor Statistics website ([bls.gov/cew/cewlq.htm](http://bls.gov/cew/cewlq.htm)). The purpose of location quotients is to help understand employment ratios, compared to a base, and where employment may be concentrated in a specific area. Craven County's ratios for multiple years (2009-2014) were examined to offer insights into employment trends, and identify sectors which are underrepresented. Craven County's location quotients (Table 4.5) were found using the United States as a base for comparison. (NAICS 11 and 21 were not analyzed due to non-disclosure during some years at the county level.)



Among the industries which have consistently been more concentrated from 2009-2014 in Craven County, than in the nation as a whole, are manufacturing (NAICS 31-33), retail trade (NAICS 44-45), health care and social assistance (NAICS 62), arts/entertainment and recreation (NAICS 71), and accommodation and food services (NAICS 72). The high concentration of the latter two industries, along with retail, is due primarily to beach tourism within the surrounding area. Higher manufacturing may be due primarily to Weyerhaeuser, which manufactures wood and paper products in the area. Of note is that from 2001 to 2011 Craven County's manufacturing sector had -3.64 percent growth (Cambridge Systematics, 2014). The larger concentration of health care services may be attributed to the retirement population which has become attracted to the area. Additionally, Craven County had somewhat higher concentrations in professional and technical (NAICS 54), and administrative and waste services (NAICS 56).

Industries within Craven County during the 2009-2014 time period which consistently had less than 50 percent as much concentration as the nation include management of companies and enterprises (NAICS 55), and educational services (NAICS 61). Educational services may play a smaller role due to Cherry Point's large active duty work force, with most service members being younger than child-rearing age, resulting in a lack of dependents. Additionally, there are no major universities within Craven County, which also affects the results. Another area of low concentration for Craven County is the finance and insurance sector (NAICS 52), averaging a .52 concentration for this time period. This may be due to the base offering financial services to both active duty and civilian personnel, reducing competition for these services here.

**Table 4.5**  
**Craven County Location Quotients 2009-2014**  
**United States Base Comparison**

<b>Industry</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Base Industry: Total, all industries	1	1	1	1	1	1
NAICS 11 Agriculture, forestry, fishing and hunting	ND	ND	1	1.1	ND	ND
NAICS 21 Mining, quarrying, and oil and gas extraction	ND	ND	0.32	0.28	ND	ND
NAICS 22 Utilities	0.73	0.76	0.79	0.79	0.86	0.95
NAICS 23 Construction	0.98	1.01	1.01	0.96	0.89	0.8
NAICS 31-33 Manufacturing	1.11	1.13	1.17	1.19	1.19	1.23
NAICS 42 Wholesale trade	0.63	0.65	0.62	0.61	0.59	0.57
NAICS 44-45 Retail trade	1.16	1.21	1.27	1.25	1.29	1.34
NAICS 54 Professional and technical services	0.95	1	0.93	0.93	0.9	0.91
NAICS 55 Management of companies and enterprises	0.29	0.31	0.31	0.32	0.36	0.34
NAICS 56 Administrative and waste services	1.13	0.95	0.89	0.92	0.95	1.07
NAICS 61 Educational services	0.35	0.41	0.35	0.32	0.41	0.44
NAICS 62 Health care and social assistance	1.22	1.19	1.14	1.12	1.18	1.14
NAICS 48-49 Transportation and warehousing	0.71	0.76	0.99	1.29	0.82	0.77
NAICS 51 Information	0.77	0.64	0.65	0.62	0.62	0.58
NAICS 52 Finance and insurance	0.56	0.54	0.5	0.5	0.51	0.49
NAICS 53 Real estate and rental and leasing	0.69	0.7	0.71	0.76	0.77	0.75
NAICS 71 Arts, entertainment, and recreation	1.07	1.06	1.09	1.03	1.01	1.02
NAICS 72 Accommodation and food services	1.32	1.32	1.33	1.3	1.3	1.26
NAICS 81 Other services, except public administration	0.82	0.82	0.82	0.75	0.82	0.83

Source: Bureau of Labor Statistics, Location Quotient Calculator ([bls.gov/cew/cewlq.htm](http://bls.gov/cew/cewlq.htm))

Table 4.6 shows the top 25 employers in Craven County. The importance of Cherry Point is made evident as the Department of Defense is ranked as the top employer, and the Marine Corps Community Services as eighth. Local government is also prominent on the list with Craven County Schools ranking second, Craven County ranking seventh, Craven Community College ranking ninth, and the City of New Bern ranking tenth. Of note is the reoccurrence of temporary staffing agencies on the list, which includes three agencies. McDonalds and Bojangles, which may be considered dependent on through traffic appear on the list and account for 350 to 748 employees.

**Table 4.6**  
**25 Top Employers**  
**Craven County 2015**

<b>Rank</b>	<b>Company Name</b>	<b>Industry</b>	<b>Employment Range</b>
1	Department Of Defense	Public Administration	1000+
2	Craven County Schools	Education & Health Services	1000+
3	Craven Regional Medical Center	Education & Health Services	1000+
4	Bsh Home Appliances Corporation	Manufacturing	500-999
5	Wal-Mart Associates Inc	Trade, Transportation, & Utilities	500-999
6	Moen Incorporated	Manufacturing	500-999
7	Craven County	Public Administration	500-999
8	Marine Corps Community Services	Trade, Transportation, & Utilities	500-999
9	Craven Community College	Education & Health Services	500-999
10	City Of New Bern	Public Administration	250-499
11	Weyerhaeuser Co (A Corp)	Manufacturing	250-499
12	Holden Temporaries Inc	Professional & Business Services	250-499
13	Olsten Staffing	Professional & Business Services	250-499
15	Nc Dept Of Public Safety	Public Administration	250-499
15	Hatteras/Cabo Yachts Llc	Manufacturing	250-499
16	Coastal Carolina Health Care Pa	Education & Health Services	250-499
17	Food Lion	Trade, Transportation, & Utilities	250-499
18	Temporary Employee Services Inc	Professional & Business Services	250-499
19	Mcdonalds	Leisure & Hospitality	250-499
20	Pruitthealth Therapy	Education & Health Services	250-499
21	Rha/Howell Care Centers Inc	Education & Health Services	250-499
22	Bojangles Famous Chicken & Biscuits	Leisure & Hospitality	100-249
23	Nc Dept Of Transportation	Public Administration	100-249
24	Trader Construction Co (A Corp)	Construction	100-249
25	U S Postal Service	Trade, Transportation, & Utilities	100-249

Source: North Carolina Department of Commerce

## ***Education and Income***

The level of education of a population may have an influence on which industries are willing to locate to the area. Educational attainment may also have an impact on employee wages, as skilled jobs tend to be higher paying. Table 4.7 compares the 2000 educational attainment level of Havelock residents 25 years and over to the 2010-2014 estimates. Of note is that the population 25 and older has decreased by 524 persons. Havelock's population without a high school diploma dropped significantly by 4.8 percent, while the percent with only a high school degree remained approximately the same. Residents with some college and associates degrees experienced increases of 4 and 2.9 percent respectively. There was a loss of population with bachelor's degrees of 1.7 percent while graduate or professional degree levels remained the same. With a loss of population, this suggests that there is an out flow of residents with bachelor's degrees and that Havelock is not capturing and retaining a population with advanced degrees.

**Table 4.7**  
**Educational Attainment, 2000 and Current**  
**Persons 25 Years and Over**  
**City of Havelock**

<b>Educational Attainment</b>	<b>2000</b>		<b>2010-2014</b>	
	<b>Persons 25 Years and Over</b>	<b>% Total 25 Years and Over</b>	<b>Persons 25 Years and Over</b>	<b>% Total 25 Years and Over</b>
Less than 9th Grade	201	2.1%	120	1.3%
9th to 12th Grade (No Diploma)	771	7.9%	359	3.9%
High School Graduate (+Equivalency)	3,065	31.6%	2,858	31.1%
Some College (No Degree)	3,364	34.6%	3,548	38.6%
Associates Degree	823	8.5%	1,048	11.4%
Bachelor's Degree	1,154	11.9%	938	10.2%
Graduate or Professional Degree	330	3.4%	313	3.4%
<b>Total Adult Population 25 Years and Over</b>	<b>9,708</b>	<b>100%</b>	<b>9,184</b>	<b>100%</b>

Source: U.S. Bureau of the Census. 2000 Decennial Census. American Community Survey, 5-Year Estimates, 2010-2014, Table S1501

Table 4.8 shows the 2010-2014 ACS estimates of median family and household incomes for Havelock, Craven County, and North Carolina. The City of Havelock lags behind both the county and state in median family and household incomes. However, Craven County is \$602 over the state in median household income. This suggest that industry within Havelock does not offer competitive wages. Families in the City have less buying power compared to Craven County and North Carolina, which may make it unattractive to industries which rely on local incomes.

**Table 4.8**  
**Comparison of Median Family and Median Household Income, 2010-2014**  
**City of Havelock, Craven County, and North Carolina**

Income	2010 - 2014 (Estimates)		
	City of Havelock	Craven	State
Median Family Income (\$)	42,364	55,293	57,328
Median Household Income (\$)	44,258	47,295	46,693

Source: American Community Survey, 5-Year Estimates, 2010-2014, Table S1901

Table 4.9 compares Havelock and Craven County 2010-2014 ACS estimates of the number of households by income grouping. 56.8 percent of Havelock residents received less than \$50,000 annually compared to 52.6 percent for Craven County. The City of Havelock has a smaller percent of residents receiving \$100,000 or more, with a combined 9.7 percent compared to 14.4 percent for Craven County. However, Havelock incomes are more closely grouped around the \$50,000 range, while Craven County incomes are more dispersed. This pattern was also evident in the 2007 Economic Profile which analyzed 2000 Census data (HDR, 2007). Overall, Havelock residents have more moderate rates of income. While the incidence of poverty is less, top earners in Havelock have less purchasing power compared to top earners within Craven County. Yet, Havelock’s income distribution has been stable over time.

**Table 4.9**  
**Number of Households by Income Grouping, 2010-2014**  
**City of Havelock and Craven County**

Income Grouping	2010 -2014			
	Craven County		City of Havelock	
	Households	% Total Households	Households	% Households
Less than \$10,000	3,311	8.3	502	7.6
\$10,000 to \$14,999	2,561	6.4	254	3.9
\$15,000 to \$24,999	4,046	10.1	579	8.8
\$25,000 to \$34,999	4,628	11.6	912	13.9
\$35,000 to \$49,999	6,488	16.2	1,481	22.6
\$50,000 to \$74,999	8,256	20.7	1,564	23.8
\$75,000 to \$99,999	4,878	12.2	636	9.7
\$100,000 to \$149,999	3,927	9.8	435	6.6
\$150,000 to \$199,999	931	2.3	201	3.1
\$200,000 or more	904	2.3	0	0
<b>Total Households</b>	<b>39,930</b>	<b>100%</b>	<b>6,564</b>	<b>100%</b>

Source: American Community Survey, 5-Year Estimates, 2010-2014, Table DP03

***Population***

This chapter ends with an analysis of population trends of the City of Havelock, the City’s extraterritorial jurisdiction (ETJ), and Craven County. Table 4.10 gives the City of Havelock’s and Craven County’s Population estimates for 2010-2014, compared to the 2010 Census. While the City experienced a slight increase in population from 2010 to 2012, it has since declined each year since. Craven County’s population has been variable over the study period, with an overall gain of just over 1,000 persons. The City of Havelock’s 2007 Economic Profile noted that Craven County experiences low growth with an overall net out-migration. The profile predicted that this pattern would persist through 2030 (HDR, 2007). The U.S. 70 Corridor Economic Assessment is in agreement with these predictions, predicting a loss of net migration of 2 percent. The Assessment also projects a 3 percent population increase for Craven County,

with a population of 108,704 by 2030 (Cambridge Systematics, 2014). This would translate into a gain of nearly 4,200 persons when compared to 2014 estimates.

**Table 4.10  
Population Estimates, City of Havelock and Craven County**

	1-Apr-10		Population Estimate (as of July 1)				
	2010 Census	Estimates Base	2010	2011	2012	2013	2014
<b>Havelock</b>	20,735	20,735	20,779	20,842	21,138	20,784	20,706
<b>Craven County</b>	103,505	103,505	103,919	104,675	105,309	104,455	104,510

Source: American Community Survey, 5-Year Estimates, 2010-2014, PEPANNRES

Table 4.11 analyzes historic population trends of the City of Havelock, the City’s ETJ, and Craven County as a whole. The City of Havelock lost over 1,700 people between 2000 and 2010, and was thought to recover less than 7 percent of that loss during the last estimates. The City with ETJ experienced similar fluctuations with a loss of over 4,000 people between 2000 and 2010, however this sector recovered almost 30 percent of its lost population in the most recent estimates. It was found in 2005 that 56 percent of Havelock’s 18 and over population was military. These fluctuations can be attributed to the buildup, and decreasing of military personnel, and changes in Cherry Point’s mission (HDR, 2007).

Craven County has experienced gains throughout this time period; however, they are smaller for the 2010-2014 estimates. During the last two counts Havelock and its ETJ have represented over 42 percent of Craven County’s population. However, the ETJ’s has increased while the City’s decreased. This may signal that growth is more favorable outside of Havelock’s city limits, and the City may wish to explore why.

**Table 4.11**  
**Historic Population Trend, 2000, 2010 and 2010-2014 Estimates**  
**City of Havelock, City Plus ETJ, and Craven County**

<b>Jurisdiction</b>	<b>2000</b>	<b>%</b>	<b>2010</b>	<b>%</b>	<b>2010-2014 5-year Est.</b>	<b>%</b>
City of Havelock	22,442	24.5	20,735	20.0	20,850	19.9
City Plus Extraterritorial Jurisdiction (ETJ)	27,435	30.00	23,320	22.5	24,519	23
Craven County	91,436	100	103,505	100	104,574	100

Source: U.S. Department of Commerce, Bureau of the Census. 2000 and 210 Decennial Census.  
American Community Survey 2010-2014, 5-Year Estimate

***Economic Outlook***

While population growth projections appear to be unfavorable for Havelock and Craven County, it should be taken into consideration that the American Community Survey bases projections on trends established during the Census, outside influences, such as infrastructure investment and other development factors, are not taken into consideration. Focus groups conducted for the US 70 Corridor Economic Assessment (Cambridge Systematics, 2014) found an overall general agreement that the positive effects of corridor construction will outweigh the negative. “There was also unanimous agreement that the completion of the U.S. 70 bypass system was essential to improve safety and connectivity, and to allow communities to develop the economic development product that can provide jobs and investment to support current and future citizens (Cambridge Systematics, 2014, pp. 3-19).”

While retail and services trades account for about 33 percent of Havelock’s employment (Table 4.4), not all of it is dependent on through traffic service. Of the through traffic serving businesses, there is the likelihood that they will retain the business of Cherry Point employees who commute to work. Another concern is the impact the bypass and accompanying development will have on Cherry Point, the city’s largest employer. Research has found areas



with niche employment opportunities, similar to Cherry Point, are less susceptible to negative economic impacts of bypass construction (System Metrics Group, 2006). Kleckley (2011) cites the 2005 Base Realignment and Closure (BRAC) criteria, and the belief that future criteria will be the same. Criteria include “consideration of the availability of land, facilities, and associated airspace; and the ability to accommodate contingency, mobilization, surge, and future total force requirements to support operations and training (Kleckley, 2011, p. 18).” As long as the bypass does not attract development which is incompatible with base operations, it may help to strengthen its operations.

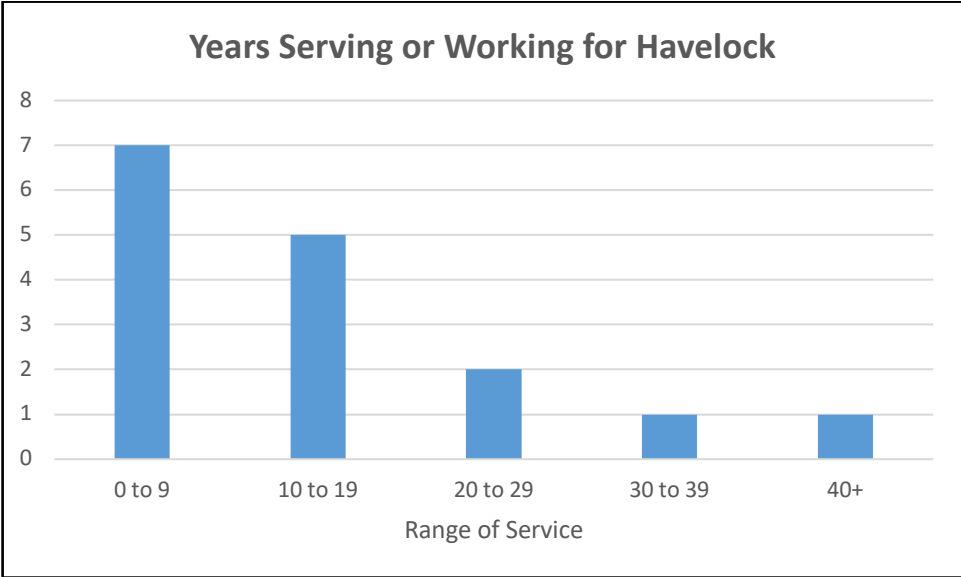
## 5: Survey Results and Findings

This chapter analyzes responses to the city leader's survey and the Havelock Community Summit opinion survey and vision boards described in the research design chapter. The city leader's survey consisted of 30 questions and was distributed to officials within Havelock who play a role in city planning, as well as members of the local chamber of commerce. The city leader's survey was designed to help understand the perceived economic climate and economic areas of strength and concern, as well as to answer, in part, the research question of *what are the available planning alternatives in response to construction of the U.S. Highway 70 Bypass*. The city leader's survey was also designed to help identify concerns tied to the bypass and future economic development which may be addressed by planners. Next, comments made by residents during the Havelock's 2015 Community Summit, including responses made to an informal opinion survey administered during the event, were used to further identify future economic growth goals, opportunities, and concerns.

This chapter is divided into two sections based on the data used in the analysis. The first section includes the case study based on city leader's surveys and the second section includes analysis based on Havelock Community Summit opinion survey data. These sections are further divided by related issues with discussion of how these findings relate to the research questions. Sections for the city leader's survey include Perceived Economic State and the Local Role of U.S. Highway 70, opinions on Future Economic Outcomes Due to the U.S. Highway 70 Bypass and Planning Actions taken, and Preferences towards Future Planning Goals.

**Case Study Based on the City Leader’s Survey**

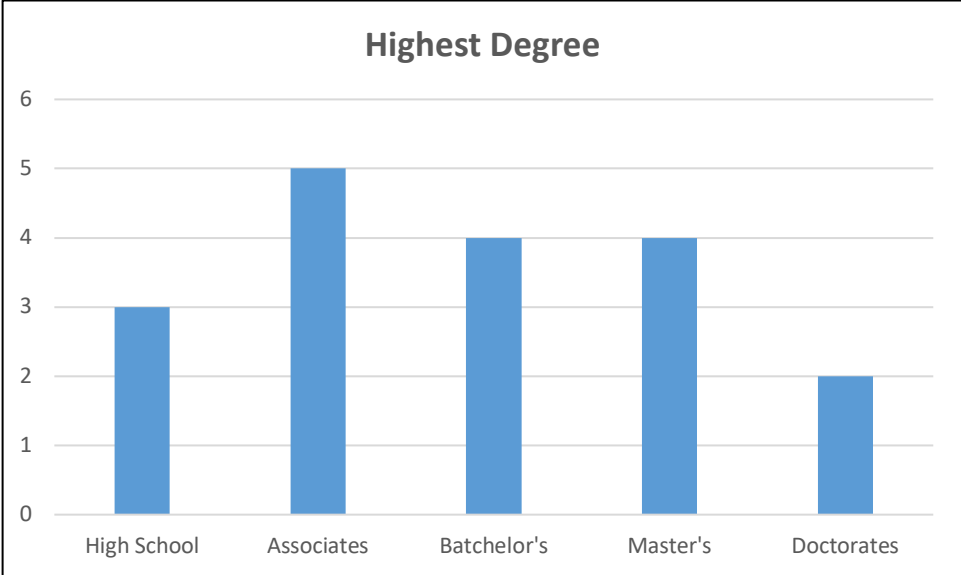
This section offers a report of the city leader’s survey findings and a discussion of how they help to answer the research questions of *what is the current economy*, and *what are the possible alternatives for planning due to the bypass*, and *on what basis should they be considered*. Although the city leader’s survey was distributed to 41 potential respondents, only 18 surveys were completed (however, two respondents opted not to answer some questions). This represents a response rate of 44 percent. Of those who responded, 12 have worked for or served the city in various capacities for less than 20 years, while 4 respondents have served Havelock for more than 20 years. Figure 5.1 illustrates the length of service of the respondents.



**Figure 5.1: Respondents Years of Service**

All respondents were over the age of 30, four fell between the ages 30-39, and two each between 40-49 and 50-59, and the majority, nine were 60 years old or older. One respondent did not provide their age. Three of the respondents were female, while the remaining fifteen were male. Respondents represent a range of academic backgrounds, which is reflected in Figure 5.2.

While Table 4.8 in the economy chapter shows that, on average, 25 percent of Havelock’s population has received an associate’s degree or higher, over 83 percent of the survey respondents have an associate’s degree or higher.

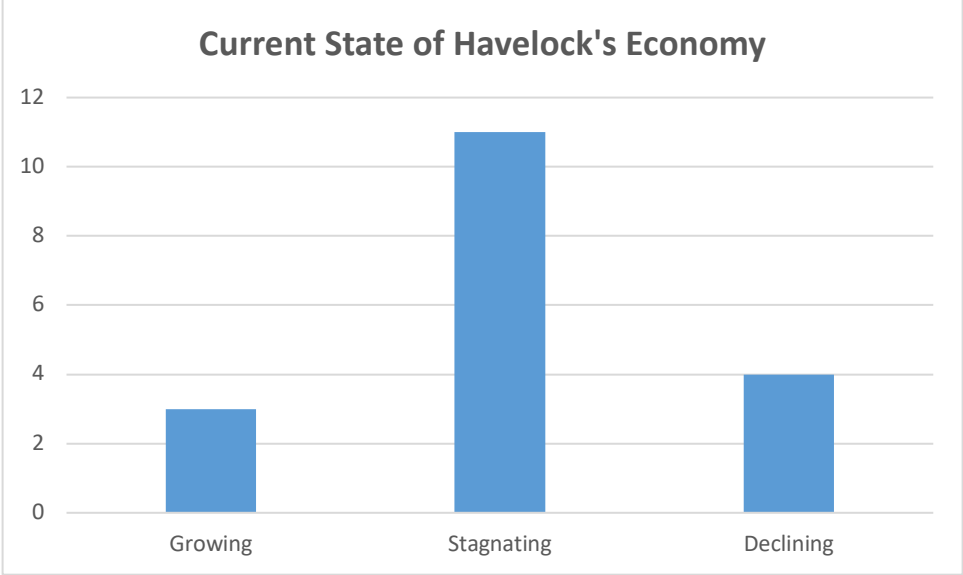


**Figure 5.2: Respondents Level of Education**

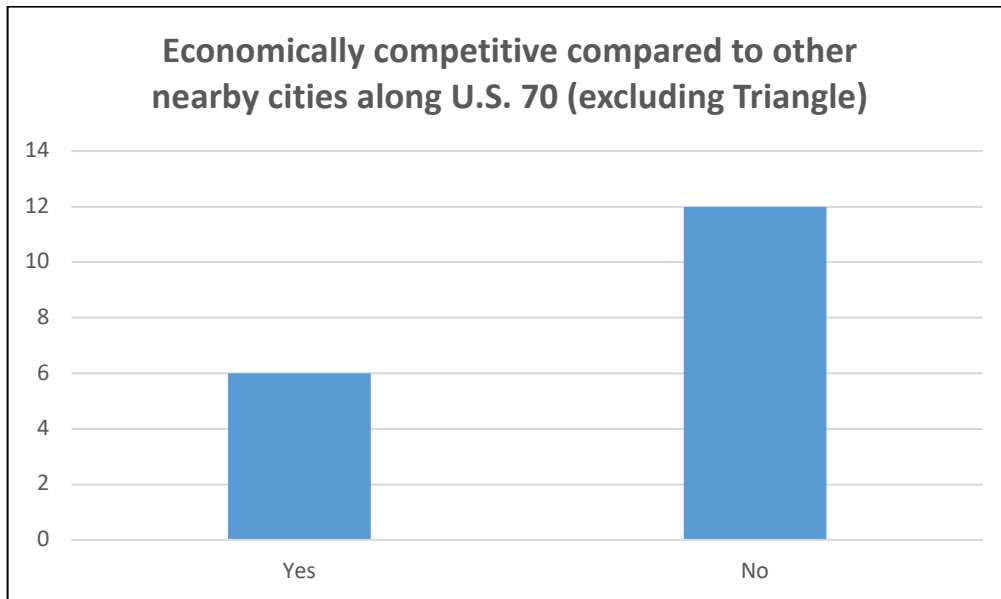
*Perceived State of the Economy and the Purpose of U.S Highway 70 in Havelock*

The first round of questions were developed to gain an understanding of the state of the local economy and how economically competitive Havelock is. Respondents were asked to rank Havelock’s economy as either growing, stagnating, or declining (Figure 5.3). Eleven out of eighteen respondents felt the economy was stagnating, with an additional four feeling that it is declining, and three said it is growing. Further questions included opinions of Havelock’s competitiveness compared to surrounding areas, including opinions on the range of employment and industrial opportunities offered within Havelock. Overall, respondents did not feel that Havelock was economically competitive compared to other locations along the U.S. Highway 70

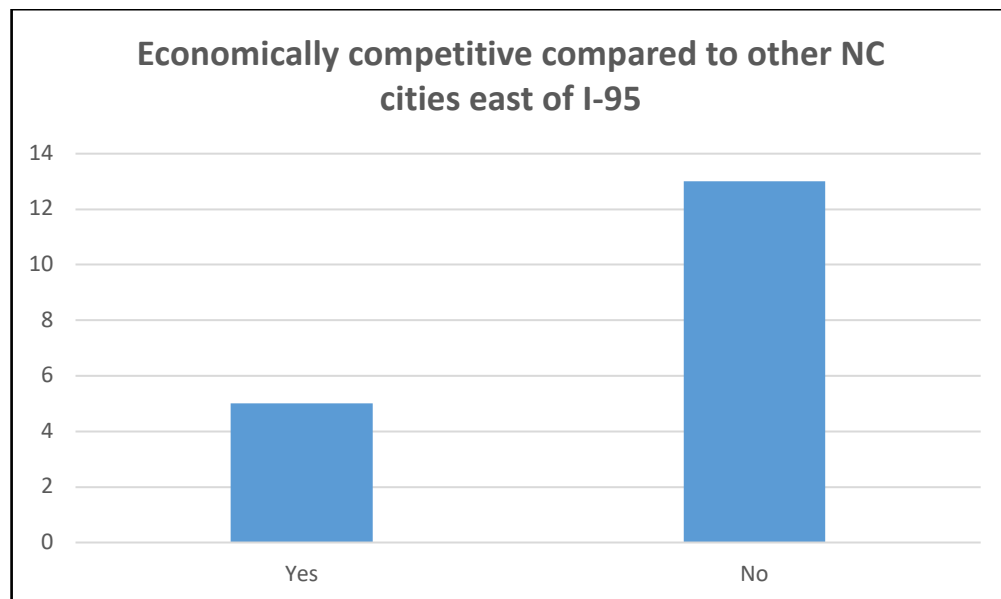
Corridor, east of the Triangle region, (Figure 5.4) or compared to North Carolina cities east of Interstate 95 (Figure 5.5). In all, two-thirds of the respondents felt that Havelock was not competitive compared to either region.



**Figure 5.3: Havelock’s Economic State**



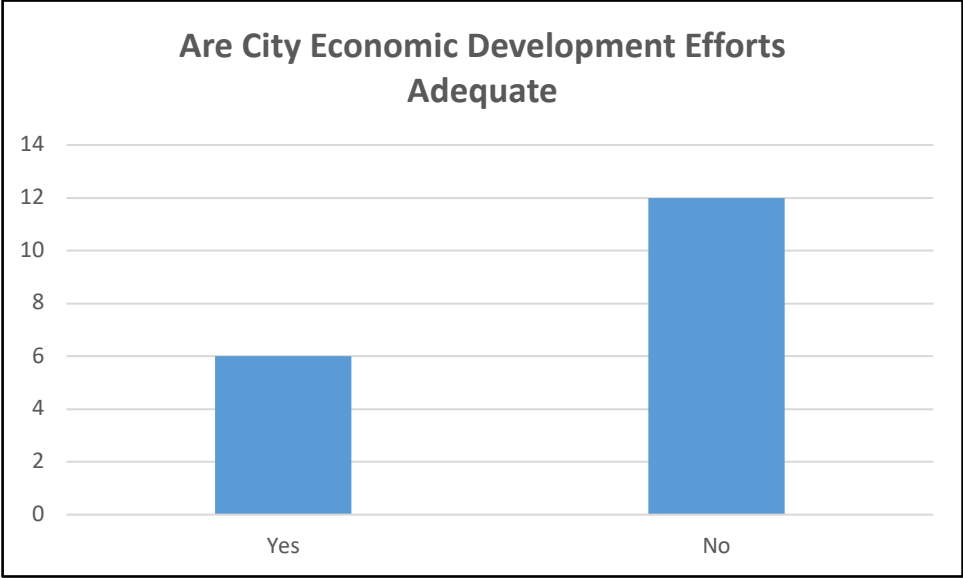
**Figure 5.4: Economic Competitiveness Compared to 70 Corridor**



**Figure 5.5: Economic Competitiveness Compared to Cities East of I-95**

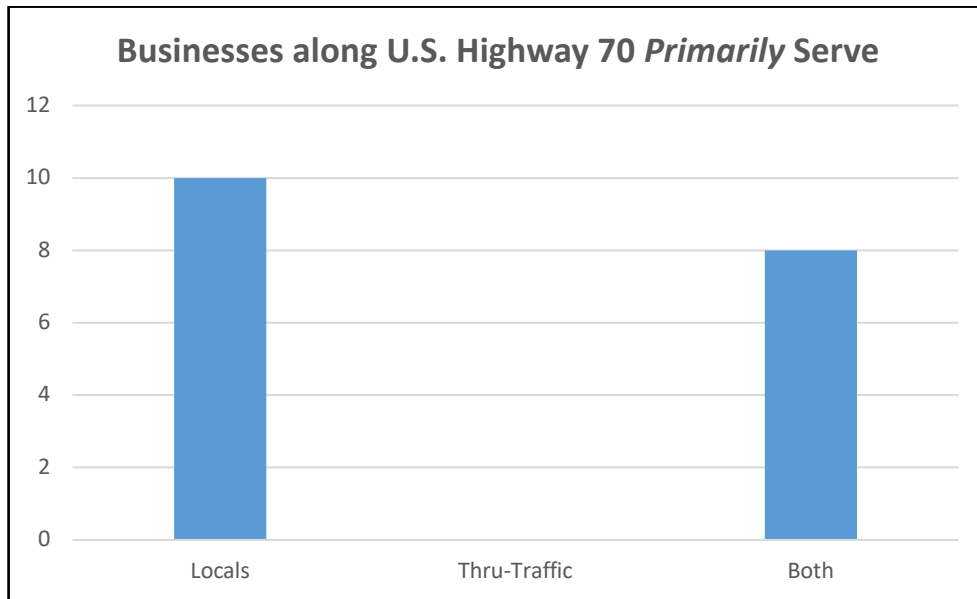
Other questions were used to gauge how economically competitive Havelock is in consideration of employment and industry mix. When asked if Havelock has a diverse industry

mix, and a range of employment opportunities, 15 respondents answered “no”, and three answered “yes” for each question. It should be noted that individuals who answered “yes” for Havelock having a diverse industry mix differed from those who answered “yes” for Havelock having diverse employment opportunities. Respondents were next asked if they felt the city has made adequate economic development efforts in all (Figure 5.6). Two-thirds (or twelve respondents) did not feel the City of Havelock has made adequate economic development efforts.



**Figure 5.6: Havelock Economic Development Efforts**

To understand whom business along the bypassed route is oriented to, respondents were asked whom they believe businesses along U.S. Highway 70 primarily serve, thru-traffic, locals, or both (Figure 5.7 presents the results). None of the respondents felt that Havelock businesses along U.S. Highway 70 primarily served thru-traffic, with most (ten) feeling that businesses mainly served locals, closely followed (eight) by a combination of both. This means, with nearly a 45% response rate, respondents believe that thru-traffic accounts for an equal share of business as compared to local business.



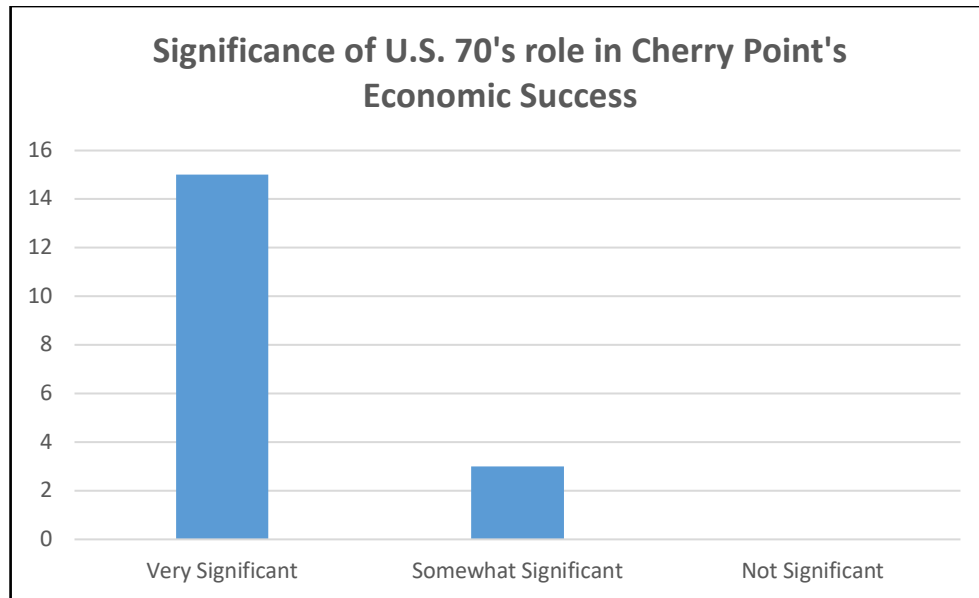
**Figure 5.7: Route Patronage**

One concern that tends to come up often among locals is the amount of vacant buildings that line the Havelock portion of U.S. Highway 70. Respondents were asked if they felt that there is an unusual amount of vacant store fronts along the route. Two-thirds (12) of respondents felt that there were an unusual amount of vacancies, while a third (6) did not. Of note, is that Havelock’s Comprehensive Plan (Urban Resource Group, 2009) mentions the use of vacant properties for redevelopment with a focus on commercial use.

Additional questions were included to gain an understanding of how important a role the current U.S. 70 Highway plays in the local economy. As MACS Cherry Point is the largest employer in the area, respondents were asked how important of a role does U.S. Highway 70 play in the base’s economic success (Figure 5.8). Most of the respondents (15) felt that the route plays a very significant role, while the remaining three felt it was somewhat significant. None of the respondents felt that U.S. Highway 70 did not play a significant role in Cherry Point’s economic success. When asked about how significant a role U.S. Highway 70 plays in other industries in

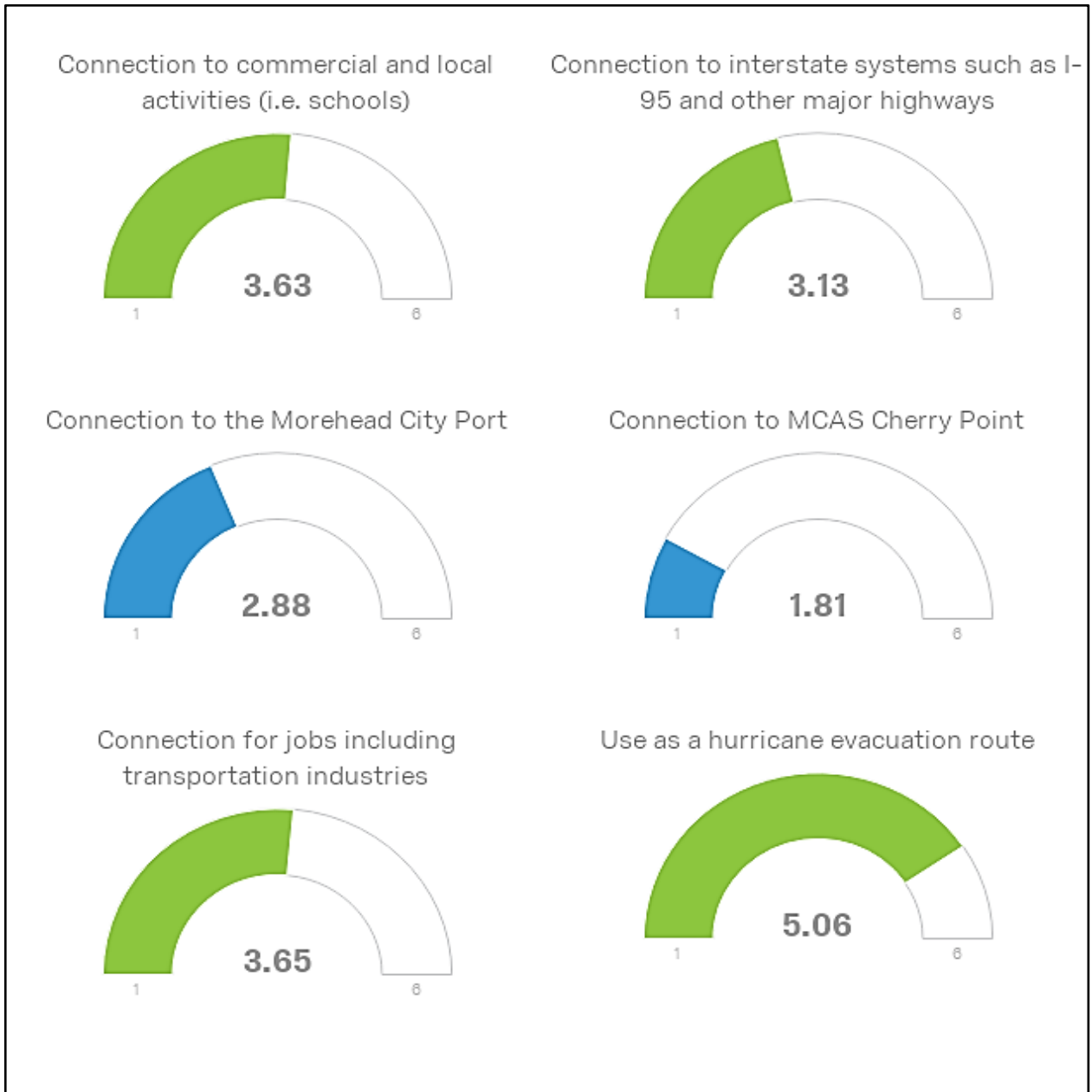


Havelock, responses were identical to responses for Cherry Point, with respondents believing the route plays a very significant role.



**Figure 5.8: Significance of U.S. 70 to Cherry Point**

Further questions were designed to gain an understanding of the current role U.S. Highway 70 plays in regards to the economic conditions of Havelock. Respondents were given a range of six purposes the highway offers Havelock and asked to rank them, with one being the most important to six, the least important. The respondents answers were averaged, with the over smallest rank signifying the most important purpose (Figure 5.9). Connection to MCAS Cherry Point was given as the most important factor, followed by the Morehead City Port. The least important factor chosen was the use of the highway as a hurricane evacuation route. Connection to commercial and local activities, connection to interstate highways, and connection to jobs are ranked around the middle.



**Figure 5.9: Rankings of U.S. Highway 70's Roles**

Averaged group rankings of the most significant roles of U.S. Highway 70. One represents the highest ranking through 6, the lowest ranking

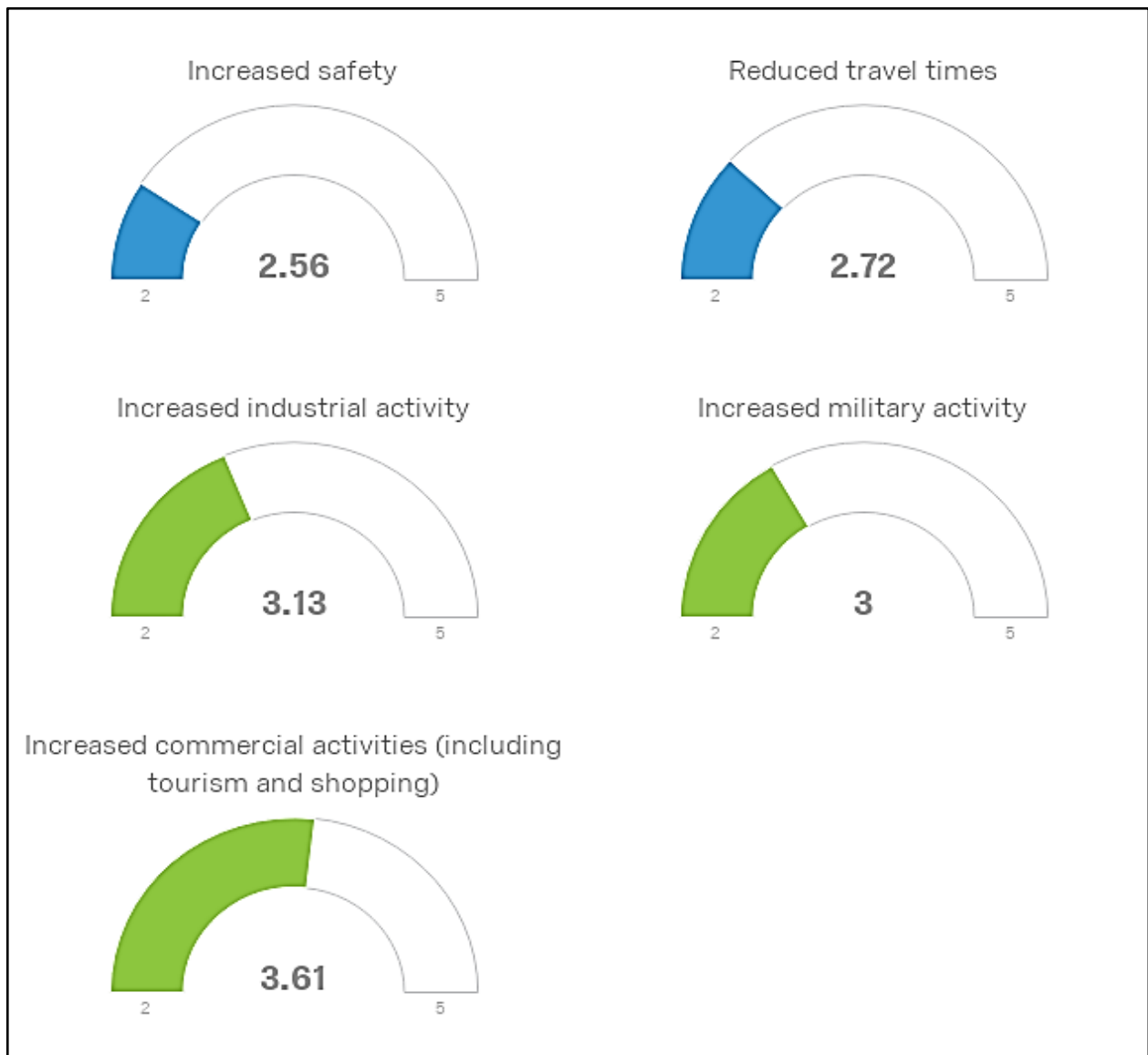
When discussing the city leader's survey findings, it is important to keep in mind that respondents were chosen by the researcher in order to understand current conditions and trends, and not to draw inferences on a larger population. In consideration of the research question of *what is Havelock's current economic condition*, this portion of the city leader's survey findings helps to give an understanding of what locals perceive the economic climate to be. Findings show that fifteen respondents (over 80 percent) report that Havelock's current economy is either stagnating or declining, and twelve (over 65 percent) see Havelock as less competitive than other nearby cities. Additionally, two-thirds of the respondents feel that the City's economic development efforts have not been adequate. These findings indicate that Havelock's economy, independent of the base, is weak. Of note, Collins and Weisbrod's (2000) findings state that strong economies tend to be the ones which receive a boost from bypass creation.

In order to understand how the U.S. Highway 70 Bypass might impact the local economy, it helps to understand the role the current route plays on local business. Stated earlier, two-thirds of the respondents feel that the route has an unusually high amount of vacant buildings. They are divided as to whether businesses along the route primarily serve locals or an equal combination of locals and thru-traffic. This acknowledges that the route is checkered with various business types and vacant stores. Further, access to commercial uses is ranked fourth as the most important role U.S. Highway 70 plays in the area (Figure 5.9). Over 80 percent of respondents to the city leader's survey indicate that U.S. Highway 70 plays a very significant role in the success of Cherry Point. This was further confirmed with respondents listing U.S. Highway 70's connection to Cherry Point as its most important role. This was highlighted in the chapter on economic development. Table 4.4 indicates that Havelock has a higher than usual rate

of public administration employment, and Table 4.7 confirms that the base is largest employer for the entire county.

*Economic Outcomes Due to the U.S. Highway 70 Bypass, and Planning Actions Taken*

The next section focuses on future local economic outcomes, as well as planning actions taken in response to the U.S. Highway 70 Bypass and an overall improved U.S. Highway 70 corridor. Respondents were asked to rank what they felt will be the primary benefits created for Havelock due to the improvement of the U.S. Highway 70 Corridor (Figure 5.10). They were asked to rank benefits one through five, with the most important benefit ranking as one through the least important, ranking as five. On average, respondents felt an improved corridor will most importantly bring to the area increased safety, followed closely by reduced travel times. Increased military and industrial activity fell in the middle of the rankings, and the least important benefit was thought to be increased commercial activities.



**Figure 5.10: Improved Corridor Benefits**

Averaged group rankings of the primary benefits created due to U.S. Highway 70 corridor improvements. One represents the highest ranked benefit, through five the lowest ranked benefit.

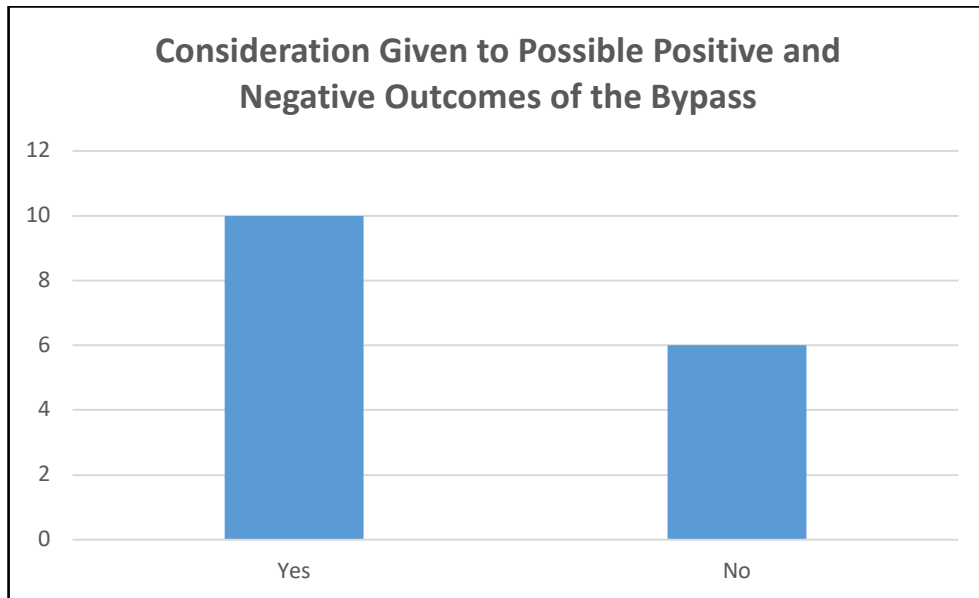
Why respondents felt that increased commercial activities would be the least important gain to Havelock due to corridor improvements is further explained by responses to the question of, whether they thought the loss of thru-traffic would have a lasting, long-term effect on the commercial or retail sector. Eleven respondents (61%) feel the loss of thru-traffic to the current route would have a long-term negative impact, while seven did not. As a reminder, the previous

section found that about 44 percent of the participants felt businesses along the route primarily serve both local and thru traffic (Figure 5.7), and it is assumed that most thru-traffic will prefer the bypass route. However, respondents were also asked if they believed that improved connection along the corridor would allow local industries to expand due to reduced travel times. Of the sixteen who answered this question, fourteen (88%) believed industries would potentially expand due to reduced travel times.

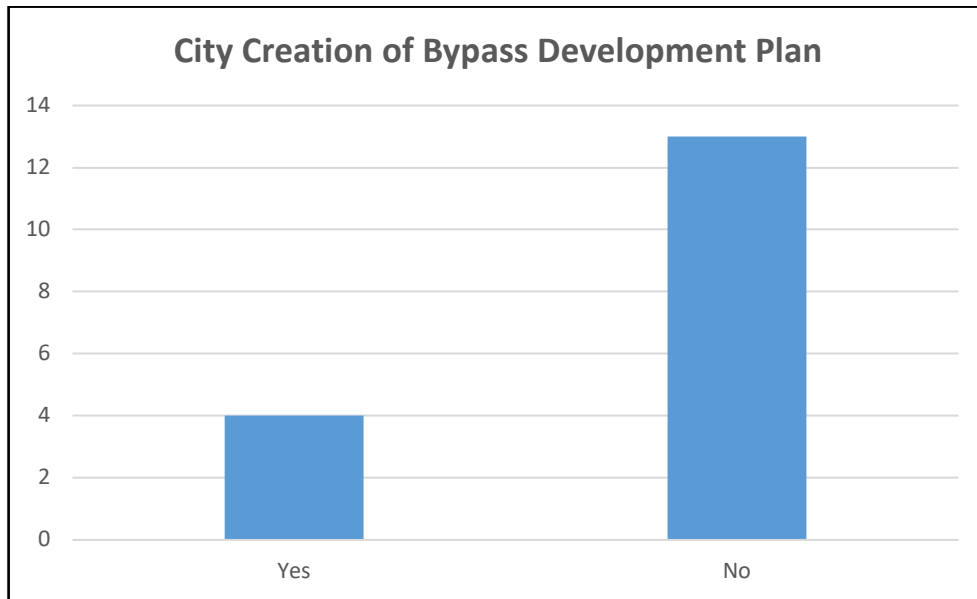
Questions more specific to the bypass includes whether respondents feel that the bypass was necessary to Havelock's future economic growth. Opinion was somewhat split, with ten (56%) respondents feeling that the bypass is necessary, and eight (44%) feeling that it is not. Respondents were then asked if they thought the bypass would have an overall positive economic effect on Havelock. Eleven (61%), felt that the bypass would have a positive effect, and seven (39%) did not. The respondents who did not see the bypass as having a positive economic influence were asked why they felt that way. Two of the respondents believe that the reduction of traffic will reduce potential business and exposure to Havelock. Another felt similar, but stated that lost business due to the bypass will only compound to losses created by military cutbacks. The last response was that Havelock does not have a clearly stated plan for recruiting industry and development, and that was why they felt the bypass would not have a positive effect.

Additional questions were included in order to understand what local planning actions have already been taken in response to the creation of the U.S. Highway 70 Bypass. Respondents were asked, if in their opinion, the City has taken into consideration both positive and negative economic outcomes of bypass construction in relation to future development goals (Figure 5.11). Ten of the sixteen respondents who answered this question believe the City has considered both

positive and negative economic outcomes of bypass construction. To follow-up, participants were asked if the City has a clear, and defined plan for future development around the bypass (Figure 5.12). Thirteen (76%) out of seventeen respondents who answered the question do not feel that there is a defined plan. Furthermore, all 16 respondents, who answered, opposed the idea that it is unnecessary to plan for economic growth as a result of the U.S. Highway 70 Bypass, as it will attract investment on its own.



**Figure 5.11: City Consideration of Economic Outcomes**



**Figure 5.12: City’s Future Development Plan**

The previous data lend insight into the research question of *what are the available planning alternatives in response to the bypass that will affect the economic development of Havelock*. Responses suggest what may occur if the City chooses a laissez-faire approach to planning for the bypass. Respondents indicate that the bypass will primarily be responsible for ameliorating traffic conditions (safety and speed), but may draw traffic away from the existing commercial sector. Further, respondents are split as to whether the bypass is necessary to future economic growth (10 “yes” and 8 “no”). However, 11 (61%) out of 18 respondents believe the bypass may still have an overall positive economic effect. There is a possibility that, without planning, the bypass alone will have a positive effect on existing industry, allowing it to expand and take advantage of the improved U.S. Highway 70 Corridor.

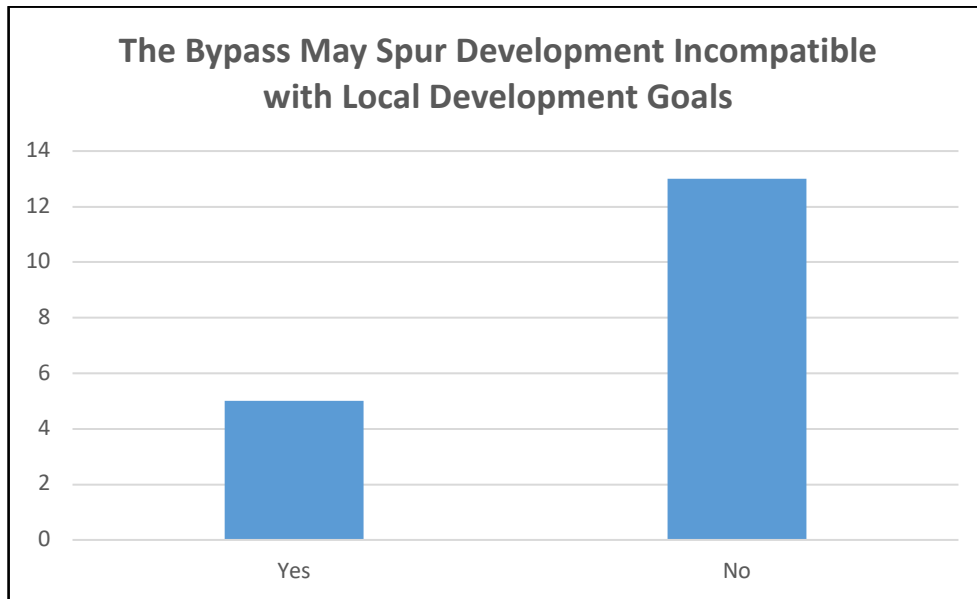
The literature suggests that areas with a higher level of commercial, pass-through oriented businesses (gas stations and fast food) may see a few negative economic impacts. However, areas that serve residential communities are benefited by increased safety (System Metrics Group, 2006). As shown in Table 5.7, 55 percent of the respondents indicate that the



original route primarily serves locals, while 44 percent believe it primarily serves both locals and pass-through traffic. This suggests that with planning, the original route may benefit from transitioning uses to those more aligned with local use. The city leader's survey underscores the need for local planning by indicating that, while 10 (63%) out of 16 respondents believe the City is aware of potential impacts, 13 (76%) out of 17 respondents do not believe there is a clear and defined plan in response to the bypass.

### *Challenges to Future Planning Goals and Local Preferences*

Respondents were asked the following questions in order to understand challenges to planning (or a lack there of) for development related to the bypass. First, participants were asked if they felt that the bypass may spur development that is incompatible with Havelock's development goals (Figure 5.13). Thirteen out of 18 respondents feel that the bypass would not spur incompatible development. Of interest, ten of the participants who did not feel that the City had a plan for bypass development (previous section), also did not feel that the bypass would conflict with development goals. To further understand why respondents answered either way to bypass growth compatibility, they were prompted to answer the open-ended question of why they gave either a "yes" or "no" answer.

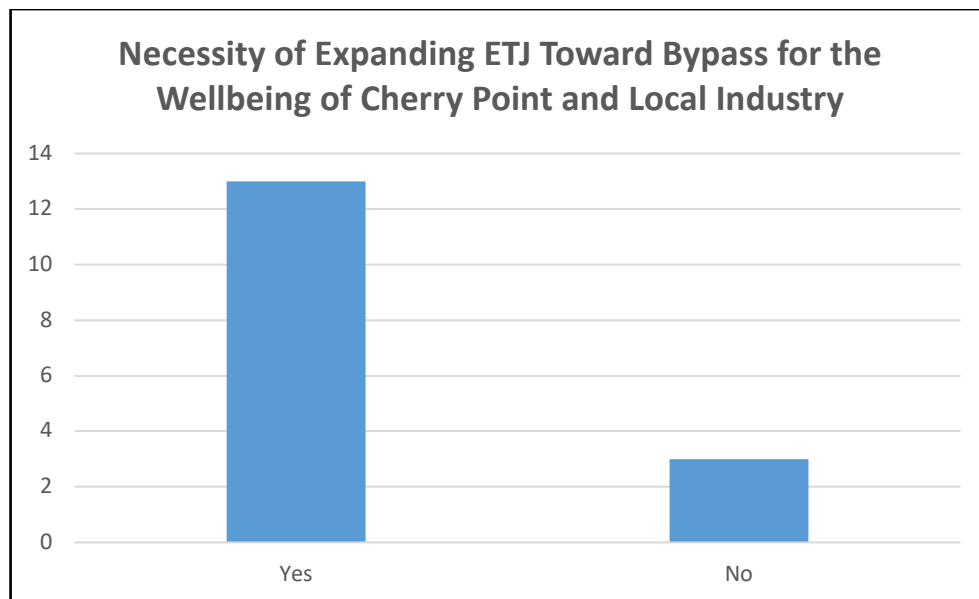


**Figure 5.13: Compatibility of Bypass Development**

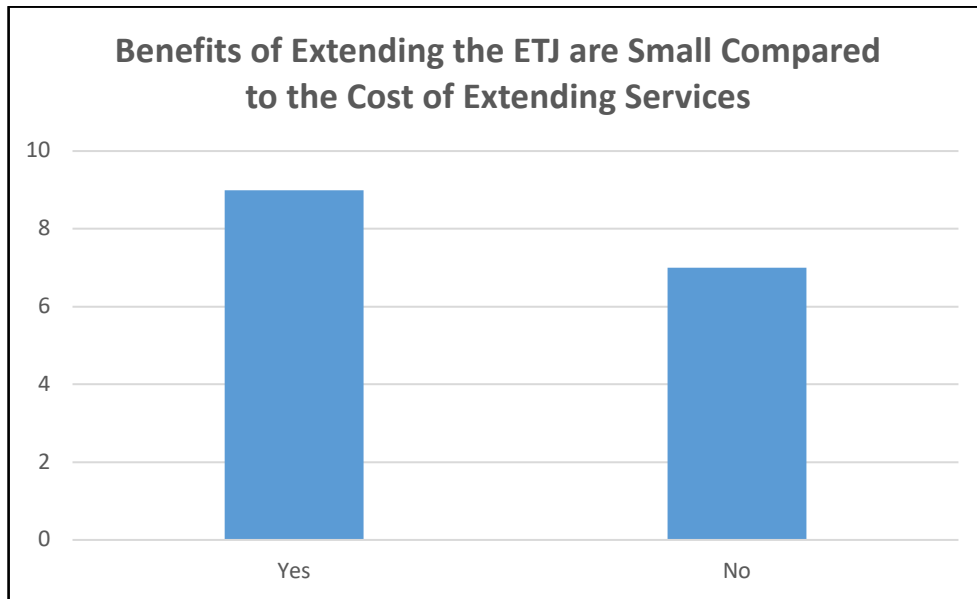
For respondents who felt that the bypass would not spur incompatible growth, compared to local development goals, two believed this was likely because Havelock has not created a development plan around the bypass. One respondent further commented that Havelock is anti-growth and development. Two other participants did not feel that the bypass would be incompatible because it would reduce in-town traffic, making the current route safer. One respondent felt that there was no conflict as the surrounding Croatan National Forest would not allow for much commercial development. Another reason given for lack of incompatibility is that city services do not extend to the bypass area, and it would need to be annexed and zoned for development to occur. However, one respondent who felt the bypass would spur incompatible growth also cited a lack of services to the area. They felt that if the bypass attracts development, Havelock could not provide accompanying services.

As MCAS Cherry Point is the largest employer in Havelock, it is important to gain a sense of how bypass development might affect the base, as well as other industries already established here. One way the City could potentially have greater control over development

around the bypass is by expanding the extraterritorial jurisdiction (ETJ) boundary. Respondents were asked if they thought allowing the City to expand the ETJ boundary toward the U.S. 70 Bypass is necessary to the well-being of MCAS Cherry Point and existing industries in Havelock (Figure 5.14). Thirteen (81%) out of 16 respondents, feel that expanding the ETJ boundary is necessary to the wellbeing of Cherry Point and existing industries. To understand how beneficial this planning option would be, respondents were then asked if they thought the benefits of extending the ETJ boundary are small compared to the cost of extending services to this area (Figure 5.15). Respondents showed less certainty as nine (56%) out of sixteen people believed the cost of expanding the services outweighed the benefits of expanding the ETJ boundary.



**Figure 5.14: Necessity of ETJ Expansion**



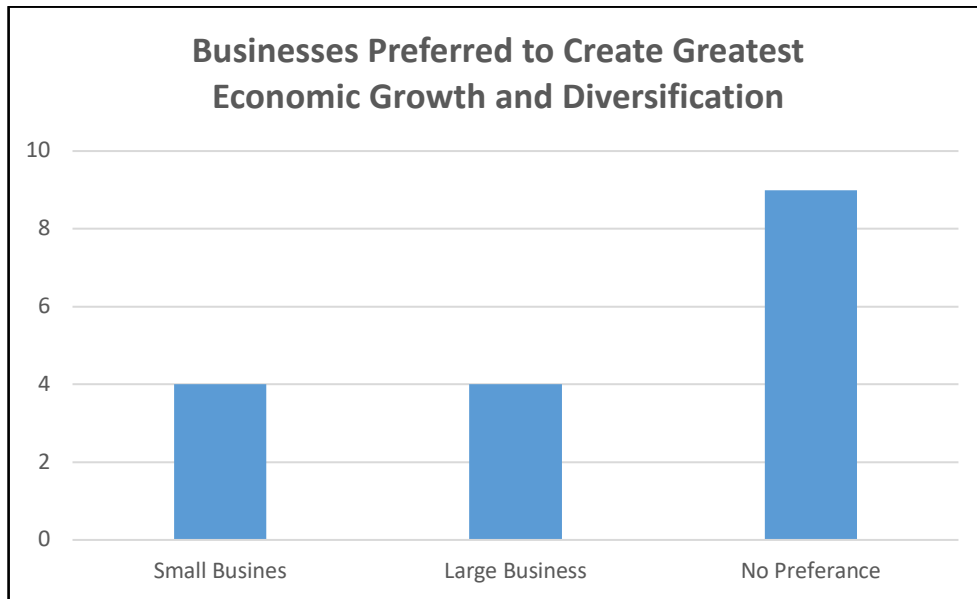
**Figure 5.15: Benefits of ETJ Expansion**

To better understand where growth might occur after the U.S. Highway 70 Bypass is completed, respondents were asked where they would primarily prefer to see near-term, future growth, followed by the open-ended question of why they chose their given location. The results were close, with nine respondents (53%) favoring Main Street, the current route, and eight (47%) preferred the future interchange, located off of Lake Road. Reasons given for focusing growth on the new interchange route included creating development which is better than the existing route, the interchange can attract job opportunities that will grow toward the city, more planning of the area upfront will mean better future growth here too, reduction of traffic on the old route will limit opportunities there, and the interchange route will be more accessible to travelers.

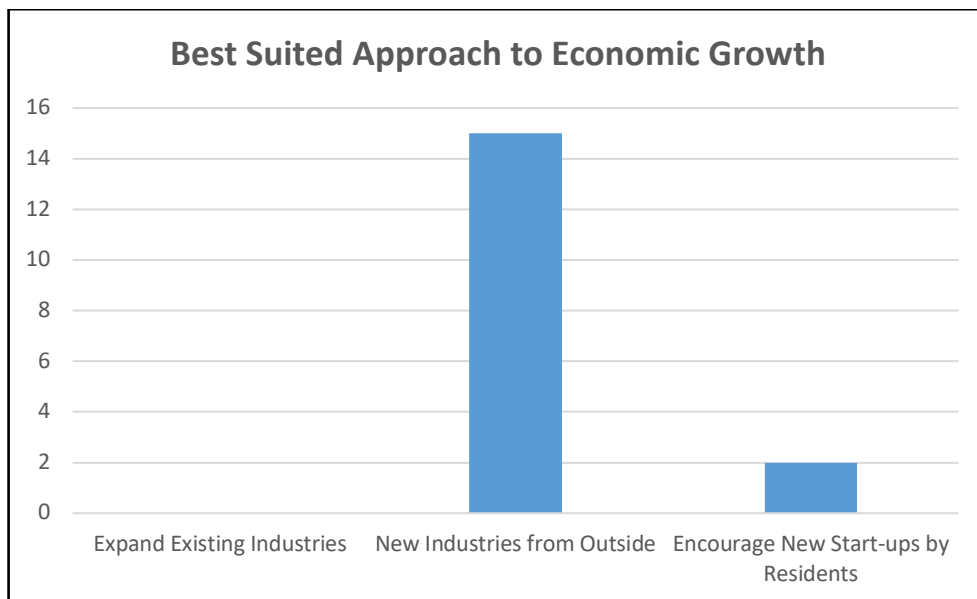
Those who favor focusing growth along the current U.S. Highway 70 route (Main Street) would like to see the “existing house” put in order. Main Street was also thought to have more room for growth in the form of redevelopment of old buildings. Another respondent pointed out that Lake Road cannot handle traffic going through to the City due to a railroad crossing and poor angling of a prime intersection. Due to this, most traffic entering Havelock, they believe,

will come through either the north or south bypass terminus. Another attraction of creating growth along the old route is to people draw within the City, and this is where family owned businesses are located. One respondent felt it was essential to have development along both routes, but that Main Street could benefit from both redevelopment and branding.

In order to determine how Havelock may grow and economically plan in response to the U.S. Highway 70 Bypass, respondents were asked what types of business they would prefer to have the greatest impact on future economic growth and diversification of the City; small business, large business, and no preference (Figure 5.16). Nine (53%) out of 17 respondents have no preference toward the size of businesses that could potentially fuel future growth, while the remaining eight respondents were equally split among both small and large businesses. In a follow up question, respondents were asked which of the following approaches to economic growth is best suited for Havelock, expanding existing industries, attracting new industries from outside, or encourage new start-ups by residents (Figure 5.17). Fifteen respondents (88%) would prefer to see growth from new outside industries, and two respondents (22%) would prefer to see new start-ups by residents. None of the respondents chose the expansion of existing industries as an approach to local economic growth.



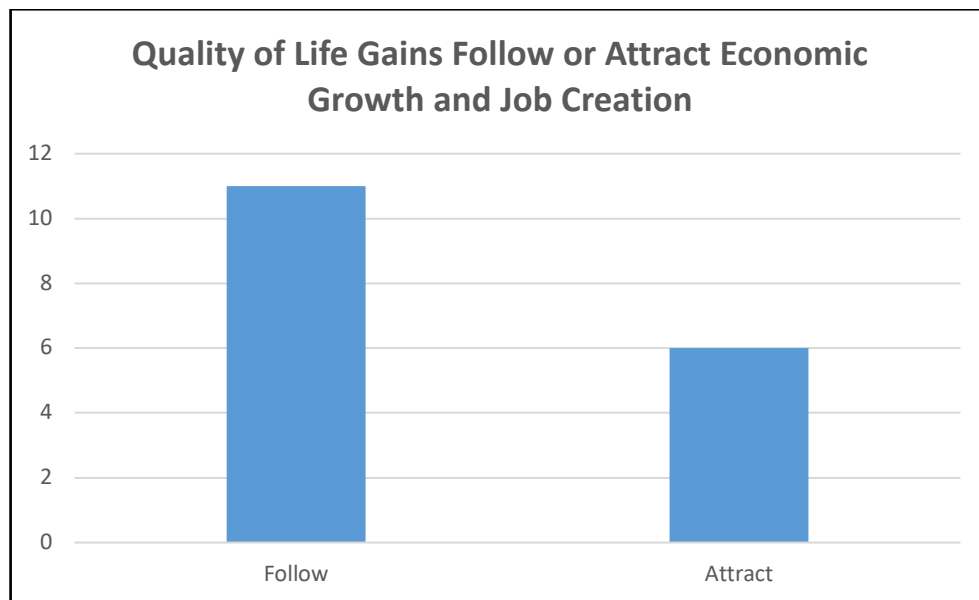
**Figure 5.16: Businesses Preferred to Create Economic Growth and Diversification**



**Figure 5.17: Best Approach to Economic Growth**

With regard to quality of life, respondents were asked if they would say quality of life gains, such as improved schools and medical facilities, typically follow job creation and

economic growth, or do they attract economic growth (Figure 5.18). This question was designed to better understand if City planning prefers more of a development approach (quality of life) versus a growth approach (job creation). Respondents felt eleven to six that quality of life gains typically follow job creation and economic growth.



**Figure 5.18: Quality of Life Gains and Economic Growth**

Respondents were also asked questions on which offices or departments they feel the City’s future economic development planning should be organized from. Foremost, out of the seventeen respondents who answered, all agreed that economic development planning should be a shared goal and responsibility of all City departments, as opposed to one assigned department. This is not to say that respondents do not believe Havelock should forgo an economic development department. When asked, as Havelock grows, if it would be best to establish an economic development department, 14 (82%) out of 17 respondents answered “yes”. The survey then prompted respondents who answered “yes” if they believed that any future economic development departments will best be housed under the planning department in order to align

with land use goals which protect MCAS Cherry Point. Twelve (86%) respondents agreed, while two did not. Last, respondents were asked if they agree that future economic development goals can best be realized through regional partnerships with Craven County and/or consulting firms. Most respondents agreed, 12 (71%) out of 17 that economic development goals can best be realized through partnerships.

This portion of the city leader's survey was design to help answer the research question of *what planning alternatives are preferable in response to construction of the U.S. Highway 70 Bypass*. Seventy-two percent of respondents felt that the development resulting from the bypass will not conflict with existing development goals, leading to the assumption that a laissez-faire approach will not have any conflicts with current development goals. But further questioning reveals that most do not feel there is a conflict, as there does not seem to be goals in place. If Havelock chooses to proactively plan in order to preserve existing industry, such as MCAS Cherry Point, respondents believe it is necessary to expand the ETJ boundary. Yet, a little more than half of the respondents indicated that the cost of expanding services here would outweigh the benefits it creates. This leads to the need for further consideration of where development should take place once the bypass is constructed. While the cost of extending the ETJ seems prohibitive in consideration of protecting the base, nearly half of the respondents would like to see development along the bypass interchange, which is primarily within the ETJ. Given this, it would seem development along the original route may prove to be less challenging.

Overall, respondents favor attracting new, outside industries in order to stimulate economic growth. There is no preference as to what size business and industries respondents would prefer to locate within Havelock. This would indicate that finding larger parcels to attract new industry is not a primary concern, and that redevelopment of existing structures, large and



small, may be an option. Owing to this, the City should consider an inventory of vacant buildings as well as parcels that may be attractive to new businesses and industry. As most respondents feel that quality of life gains follow economic growth, planning priorities should most likely focus on attracting investments to the City.

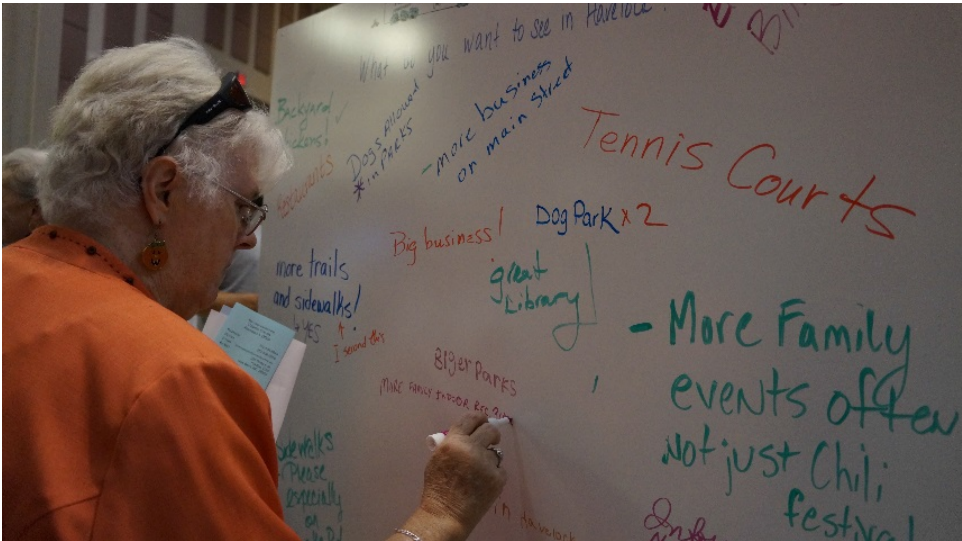
All respondents felt that economic development planning should be a shared goal of all the City's departments. As a result, Havelock should find a way of integrating economic development goals into the functions of each department. This would require a system of collaboration between each department and setting goals of economic development which are appropriate to each department. The majority (13 out of 16) of respondents believe that Havelock should establish an economic development office as the City grows and that department should monitor the goals of economic development. As this economic development department becomes a reality, respondents would like to see it housed under the Planning Department. Additionally, respondents would like to see economic development goals realized through regional partnerships or contracting agencies. In all, these responses indicate that Havelock should find a way to bring about more economic development planning within the City's operations. With this, a laissez-faire approach to bypass development planning is not a preferred alternate method.

(A table of the city leader's survey responses can be found in Appendix B.)

*Havelock Community Summit Introduction*

The City of Havelock hosted an informal Community Summit in the fall of 2015, which was open to residents, business owners, and other community stakeholders. The purpose of the summit was to create an opportunity for residents to provide input to the Board of Commissioners and City staff that would aid in creating a vision of Havelock’s future. Staff members manned stations where attendees provided responses to communal vision boards (Figure 5.19) which asked attendees to post “what they currently see within Havelock”, or how they perceive the current landscape and environment. Another board asked for the types of development that they would like to see in Havelock’s future. Residents were also given an opinion survey that consisted of one rank order question of planning priorities, and three open-ended questions, as follows:

- What do you value most about Havelock?
- If you could improve one thing in Havelock, what would it be?
- What issue or project would you like to see the City prioritize for the future?



**Figure 5.19 Havelock Community Summit Vision Board**

*Havelock Community Summit: Vision Boards Responses*

One of the vision boards at the Community Summit asked attendees to share thoughts of what it is that they see in Havelock now (Table 5.1). Most of these comments tended to be related to business, with comments about types of business (i.e. fast food), or the condition of local businesses (i.e. closed businesses). The next, most frequent type of comments made were related to the atmosphere that Havelock projects including “quiet community” and “home.” Other comments were related to city services (i.e. clean streets).

**Table 5.1  
Vision Board 1: What Do You See in Havelock Now?**

<b>Vision Board 1: What do you see in Havelock now?</b>		
<i>Business Related Comments</i>		
Too many vacant buildings	Closed businesses	Restaurants
Poor care of local businesses	Convenience Stores	Fast Food
Gas Stations	Furniture Stores	Banks
Walmart		
<i>Atmosphere Related Comments</i>		
Opportunity for Growth	Quiet Community	Home
Great Place to live/work	Lack of family events	Community
Friends everywhere we go	Family community	Children playing
<i>City Services Related Comments</i>		
Bad roads/pot holes	Fire trucks	City Hall
Great trash pick-up/recycling	Poor drainage	Clean streets

The Havelock Community Summit included a second vision board for residents to provide thoughts. This board asked summit attendees to list what they would like to see in Havelock in the future (Table 5.2). Overall, most of the comments were related to city and government services, such as public transportation and park lighting. The next, most frequent type of comments were related to business and the economy with comments like more grocery stores and job centers. Other comments were related to the appearance of the City.

**Table 5.2**  
**Vision Board 2: What Would You Like to in Havelock in the Future?**

<b>Vision Board 2: What would you like to see in Havelock in the future?</b>		
<i>City Services and Government Related Comments</i>		
More library funding/hours	Bigger library	Improved Drainage
More recreation/ activities	School safety	Public transportation
Swimming pool/ splash pad	Parks (play and pet)	Removing medians
More sidewalks/ walking trails	Park lighting	Activities for children
Community events/ festivals	Improved traffic flow	Gyms/ Tennis courts
Do not duplicate services	Bypass	Bike path
Enforcing city ordinances	More school books	Revise city ordinances
<i>Business and Economy Related Comments</i>		
Mall/ more franchise retail	Franchise restaurants	More grocery stores
Job/ skill center for youth	Family fun center	More employment
Affordable Commercial Rent		
<i>City Appearance Related Comments</i>		
Building & lighting cohesion	Designated downtown	Town appearance/ theme

During Havelock’s Community Summit City Staff distributed an opinion survey which included a rank order question that had attendees prioritize City goals. Respondents were asked to rank the most important goal as one, to the least important goal, five. The goals included:

- Maintain Havelock’s unique small town character
- Increase economic development and growth
- Additional recreational opportunities
- Transportation access/ road improvements
- Community image improvements

Averaging responses resulted in a group ranking. The goal with the lowest average ranking was considered to be the highest priority. Increased economic development and growth had an averaged ranking of 2.2 and topped the list as Havelock’s highest planning priority. This was

followed by the priority of creating additional recreation opportunities, with an averaged ranking of 3.0. Maintaining a small town character and community image improvements closely followed with averaged rankings of 3.1 and 3.3 respectively. While not far apart from these priorities, transportation and road improvements ranked last, receiving an averaged ranking of 3.4. While residents have prioritized increasing economic development and growth, Mailiza (1986) reminds us that these terms are often used interchangeably, but can cover a broad range of actions. The following portions of the community summit helps clarify what kinds of actions residents in Havelock would like have happen in order to achieve economic growth or development.

*Havelock Community Summit: City Improvements, Havelock Priorities*

The Community Summit opinion survey included three open-ended questions. The first question asked attendees what they valued most about Havelock. This question was answered by 78 respondents, with some people listing more than one attribute. Comments were analyzed to establish identical themes among the responses. Attributes that the respondents valued most about Havelock are related to the city environment including a small town feeling, and the small size of the city, with 36 respondents describing this theme as the most valued characteristic of Havelock. This was complemented by 9 respondents who described Havelock as a quiet, or peaceful community, and 5 more respondents describing it as a united, or tight-knit community. The overall theme is that of local cohesiveness based on size.

Second among Havelock's most valued attributes includes a sense of community based on interaction, or shared values. Twenty-four comments are related to this theme, with 14 respondents valuing the friendliness of people and 7 valuing the people of Havelock. Four people valued Havelock for its respect for the military and support of military families. The next, or

third most common response theme dealt with attributes related to raising a family, with 23 comments relating to this theme. Thirteen valued Havelock for being a family community, or a good place to raise children. Other respondents described attributes related to child rearing including having great schools (8), and family oriented events and activities (2). These represent an overall theme of family friendliness. This theme was measured separately from shared values because it is related to a need for resources, such as schools and amenities, whereas shared values are a measure of consciousness.

Appreciation of local police, and the safety of the city was the next, most valued Havelock attribute. Fifteen respondents mentioned safety, low crime rates, and good policing, or some combination of these, as something they value most about Havelock. While it was not prominent, there were people who valued Havelock in respect to commuting and traffic related issues. This includes 6 respondents who felt Havelock is centrally located and a convenient drive to other locations of interest, such as larger cities or the coast. Another respondent valued Havelock's ease of access to daily needs, with another noting that Havelock is close to the military base and their work.

The next open-ended question on the opinion survey asked respondents *if they could improve one thing in Havelock, what would it be* (represented as citizen's priority in tables). However, this question provided a fair amount of overlap with the third open-ended question of *what issue or project would you like to see the City prioritize for the future* (represented as city priority in tables). For this reason, responses to both questions were analyzed side-by-side. One or both of the questions were answered by 109 respondents, and some respondents listed multiple items per question. The issues most frequently cited by respondents dealt with infrastructure themes (Table 5.1). Twenty-five respondents listed an infrastructure concern as the

one thing they would change within Havelock, and 27 listed an infrastructure concern as a priority for the City, for a total of 52 mentions. On a closer examination, it was found that the top infrastructure concern was improving and repairing roads, with eight respondents listing road repair as the one change they would like to see, and ten listing it as a priority for the City of Havelock. Although it is related to road improvement, several commenters specifically mentioned removing U.S. Highway 70 medians built in the southern portion of Havelock in 2011. More people (7) listed removal of the medians as the one improvement they would like to see, compared to 5 who felt median removal should be a City priority. The next popular infrastructure related concern was increasing sidewalks and bike trails throughout the City, with an equal number (5 each) listing this as their priority and the City's. Stormwater drainage, and water and sewer pipe repairs were a smaller desired infrastructure improvement. Commenters were more inclined to see this as a City Priority (6), than as the one improvement they would like to see. Concerns related to the bypass were among the least cited infrastructure concerns, with 3 people listing it as a City priority to either accelerate the project, stop it, or protect property values as a result of it.

**Table 5.3**  
**Infrastructure Related Issues**

<b>Concern</b>	<b>Citizen Priority</b>	<b>City Priority</b>	<b>Total</b>
Infrastructure Related	25	27	52
Improve/ Repair Roads	8	10	18
Remove Medians	7	5	12
More Sidewalks/ Bike Trails	5	5	10
Stormwater/Water/Sewer	2	6	8
Other (Cost, Speed, Bypass)	4	7	11

The second most mentioned issue, or priority, in response to the Community Summit opinion survey was improving and creating recreation facilities, as well as having more activities (Table 5.2). This includes desires for sports complexes, pools, parks, dog parks, and family fun

centers and attractions. Overall, comments tied to recreation showed up 49 times, with 21 respondents listing some kind of recreation as the one thing they would improve, and 28 listing it as a priority for Havelock. Of all other issues, various types of recreational opportunities were listed most frequently as an issue for the City to prioritize. The comments were further analyzed to gain an understanding of what types of recreation were most preferred. Fifteen respondents listed youth and family related recreation and activities as the one thing they would improve in Havelock, and eleven listed it as a priority for the City. These ranged from fun centers, bowling alleys, sports complexes (specifically for youth), or an area which host youth related activities. Other people would like to see more, or improved athletic centers for all, including tennis, soccer, or a community pool. Four respondents listed athletic centers as the one thing they would improve in Havelock, and eight felt it should be a City priority. The remaining comments within this category covered a variety of concerns, such as, completing Slocum Park, improving various existing parks, and creating public spaces.

**Table 5.4  
Parks and Recreation Related Issues**

<b>Concern</b>	<b>Citizen Priority</b>	<b>City Priority</b>	<b>Total</b>
Recreation Related	21	28	49
Youth Recreation/ Activities	15	11	26
Athletic Centers	4	8	12
Dog parks	3	4	7
Other	2	6	8

The third issue most commonly mentioned was a desire to bring more business into Havelock, with a special interest in restaurants and retail. Bringing in more business was mentioned 32 times as the one improvement individuals would like to see in Havelock, and 15 times as an issue for the City to prioritize (Table 5.3). Overall, bringing in business was mentioned 47 times, making it the third largest priority to the Havelock Community Summit



attendees. In order to gain a further understanding of the types of businesses respondents would like to see, the comments were scrutinized in further detail. While some respondents mentioned business alone, and others mentioned both dining and retail, the comments were analyzed to see how often dining (or restaurants) and retail (or shopping) were brought up. Bringing in more retail was mentioned 21 times as the citizens’ one improvement, or priority, compared to four times as a priority for Havelock. Having more dining options was mentioned eleven times as the citizens’ one improvement compared to seven times as a priority for the City. Overall, more business is an improvement citizen’s would like to see, but they do not necessarily want it to be the City’s top priority.

**Table 5.5**  
**Issues Concerning Business**

<b>Concern</b>	<b>Citizen Priority</b>	<b>City Priority</b>	<b>Total</b>
Bringing in Business	32	15	47
Retail	21	4	25
Dining	11	7	18

City appearance and design (Table 5.4) came in fourth, as the most frequently listed concern among the community summit respondents. This category included concerns about the state and design of commercial buildings, the need for citywide branding, and the visual appeal and impact of vacant or neglected structures. In all, comments related to concerns such as these appeared 22 times as the one thing citizens would improve, and 16 times as a City priority, for a total of 38 comments. When the category is further analyzed, most commenters wanted to see an improvement in the appearance of the City’s commercial corridor in terms of renovation and a modern, unified design, while holding owners accountable for disrepair. More commenters (15) listed this concern as the one thing they would like to see improved, compared to ten commenters believing that it should be a City priority. A need to address both commercial and

vacant buildings also came up, while some respondents did not elaborate on the concern toward vacant buildings, others wanted to see owners held accountable for them to ensure surrounding property values were not affected. Other design concerns include branding, creating a downtown area or a gateway point for the Havelock.

**Table 5.6**  
**Issues Concerning City Appearance and Design**

<b>Concern</b>	<b>Citizen Priority</b>	<b>City Priority</b>	<b>Total</b>
All Appearance/ Design	22	16	38
Improve Appearance	15	10	25
Address Vacant Buildings	4	3	7
Other	4	3	7

Of interest is that job creation and economic development, excluding increasing business of a commercial nature, were not a top priority to respondents of the community summit opinion survey (Table 5.5). Commercial businesses were not analyzed under this category because most commenters associated them with amenity than with jobs and economic growth. In total, comments concerning jobs, and economic growth and development appeared 17 times among responses to both questions, with respondents being more likely to see this as a City priority. Further analysis of the comments show that respondents would like to see more employment opportunities and/or job centers that give youth skills to gain jobs. This area of concern was equally important as creating an environment which is conducive to jobs and economic growth. Improving the economic environment included developing economic development programs and having a more business friendly atmosphere through lower rents.

**Table 5.7**  
**Issues Concerning Jobs and Economic Growth and Development**

<b>Concern</b>	<b>Citizen Priority</b>	<b>City Priority</b>	<b>Total</b>
Jobs/ Development/ Growth	7	10	17
Attract Jobs/ Jobs Center	2	6	8
Improved Environment	3	5	8

*Havelock Community Summit Conclusions*

The Havelock Community Summit results help answer the research question of *what are the available planning alternatives for addressing the U.S. Highway 70 Bypass with respect to the economy*. Comments made during the summit highlight needs in the community which, if filled, could help strengthen the community, and as a result the economy. Summit results also help answer the question of *on what basis should one alternative be chosen over another*. The summit helped establish the wants and desires of the community, and helped build consensus as to what the community would like to see done in the future.

Of note, is that the summit participants ranked the goal of increased economic development and growth as a top priority. This suggest that the community would like to see more planning for the economy, and development in response to the bypass can be tied in to this. However, planning should work to preserve the community atmosphere, as the majority of respondents value this most about Havelock. The results suggest that future planning should be more focused on redevelopment, starting with improving existing infrastructure, followed by improving the appearance of existing structures. Another top priority is improving recreation facilities and creating more parks and recreation. While bring in more business is a priority as well, community members want to see more residential serving, or commercial businesses such as family dining establishments and shopping. While there were some concerns about increasing

job opportunities, they were few compared to issues relating to city redevelopment and recreation. Overall interests indicate that a growth strategy of strengthening the current asset base, in a way that preserves the community, while improving the quality of life is preferred.

## 6: Discussions and Recommendations

### *Economic Considerations*

This research has sought to answer the question of *what is the current economic base of Havelock*, to help establish what kind of economic impact the U.S. Highway 70 Bypass might have. While the city leader's survey indicates that the bypass is believed to have an overall positive effect, there were some concerns that business along the old route may suffer due to less pass through traffic. These reactions are in line with the literature review, which finds that businesses which see a negative economic impact due to bypass construction are through traffic serving. Yet, the effects are more pronounced in rural towns with populations under 5,000, compared to 24,519 for Havelock (plus ETJ). Of note, is that the economic analysis found that Havelock consists of a larger percentage (33%) of retail trade and accommodation, and food services occupations, jobs that may cater to pass through traffic. Still, an impact to this sector should be tempered, as the literature suggests that areas with niche economic foundations, such as government employment, are less likely to be impacted (Handy et al., 2002). The economic analysis demonstrated that MCAS Cherry Point is the largest employer in the region, and that Havelock employs a higher number of public administration professionals, as compared to Craven County, North Carolina, and the Nation. In light of this finding, there is the concern that bypass interchanges tend to attract development (Handy et al., 2002), some of which may interfere with base operations. However, city leader's survey respondents indicate that development near the bypass interchange will most likely be limited, which was also reflected in the literature review (Handy et al., 2002).

Some believe that the bypass may have a positive economic effect by spurring development along the new route and contributing to economic growth by increasing

productivity, as traffic and commuting times are reduced. The city leader's survey found that most respondents believed the bypass would overall have a positive effect. Wubneh (2008) notes that the construction period is likely to give the economy a short-term boost through the creation of labor and the purchase of local goods. Officials in Washington, NC noticed similar results, particularly because NCDOT hired local labor (Kleckly, 2011). Havelock has a somewhat higher percent of workers in construction than the county, state and nation, and bypass construction may capitalize on these workers. While the ratio of construction jobs in Craven County has been declining, work on the bypass may offer a way to reverse this trend. Yet, with limited local goods and services, similar to what was found during the Highway 17 corridor study (Wubneh, 2004), economic gains could leak out of the area. The literature also indicates that long-term economic effects, past the construction phase, are more uncertain. Studies at the state level (Jiwattanakulpaisarn et al., 2009, and Wubneh, 2004) have not found a relationship between increased employment, improved income, and infrastructure investment. Rephann & Isserman (1994) have found that highway improvements to cities within a 25-mile radius of large cities with populations over 25,000 are more likely to see a boost in growth. New Bern, a city of over 29,000 is just within 25 miles of Havelock. There is potential for the bypass to increase interaction and commerce between the two cities as accessibility is improved. However, the U.S. Highway 70 Corridor Economic Assessment (Cambridge Systematics, 2014) predicts that Craven County, which contains both cities, is likely to have outmigration and a slow economic growth rate. This suggests that the bypass alone may not be enough to influence economic growth or development, and to realize an economic boost, planning is necessary.

## *Planning Alternatives*

The Havelock Community Summit found that community members want local economic development and growth to be a top priority. Planning with the bypass in mind might help achieve these goals. The summit opinion survey found that residents value Havelock's community atmosphere and citizens, suggesting that it would not benefit the area to transition from a primarily residential city, to a more industrialized city. Residents tend to favor improving quality of life aspects, through redevelopment of the existing landscape and infrastructure, plus increasing recreational activities either through parks or events. Eppig and Brachman (2014) note that investments in non-profit institutions, such as parks or museums, "can have positive multiplier effects for their communities in terms of further investments, development, employment, and consumer spending" (pg.20). Havelock residents would like to see more commercial businesses that serve an amenity purpose, such as fine, or family dining, and shopping options. For this reason, it is suggested that Havelock consider an economic development plan utilizing redevelopment practices with the inclusion of recreation. Research suggest that increased safety and the reduction of truck traffic along bypassed routes offers cities an opportunity to redevelop bypassed routes in a "Main Street" fashion; cities that take advantage of this tend to benefit. Businesses may also transition in uses to those that are more local serving. Given this, cities should understand how the bypass, and its effects, will be integrated into their plans (System Metrics Group, 2006).

With this in mind, the research question of *what are the planning alternatives for addressing the U.S. Highway 70 bypass with respect to the economy*, becomes more focused. Of particular interest to this research is how planners can affect economic outcomes in respect of community goals. As stated, there are some people in Havelock who feel the bypass will draw

business away from the original route. The City may work with the NCDOT to provide signs that notify traffic of services “at the next exit”, and the City should make sure exits are properly marked, and lit, with access roads in good repair. Another option, which may require involving the local chamber of commerce, is to assist businesses in developing a business plan in response to traffic changes due to the bypass (System Metrics, 2006). This may involve educating local business owners of the possible effects due to bypassing traffic, including possible shifts in clientele from pass through traffic, to more local clientele. Havelock should also include these stakeholders in city planning efforts during public outreach sessions.

The city leader’s survey found that some respondents would prefer to see future development at the bypass interchange. System Metrics (2006) finds that the presence of infrastructure and planning controls (i.e. zoning) on undeveloped land may determine the pace of economic growth near the bypass. While Havelock would like to see beneficial development here, the City would also like to regulate development so it does not conflict with Cherry Point’s operations. Of concern is that the bypass and interchange are almost entirely within Havelock’s *proposed* ETJ, with the rest of the bypass falling within the ETJ. In order for city services to be extended to the ETJ, the City would have to annex the land due to local ordinances. The majority of respondents to the city leader’s survey felt that expanding Havelock’s current ETJ was necessary to the wellbeing of Cherry Point. North Carolina’s Session Law 2012-2011, House Bill 925 requires cities to hold a referendum, after adopting a resolution of intent to annex, where residents within the ETJ can vote for annexation during a regular municipal election. Otherwise, property owners can petition the city for voluntary annexation (canons.sog.unc.edu). As for the proposed ETJ, NC Statue 160A-360 of Article 19 bases ETJ location upon “existing or projected urban development, and areas of critical concern to the city, as evidenced by officially adopted



plans for its development” (ncleg.net). This may allow Havelock to extend the existing ETJ boundary to 2 miles outside its corporate limits in areas where it is currently less than this. The City would have to inform property owners, and adopt a resolution to be approved by Craven County, after meeting any special criteria. This would help put a greater majority of the bypass within Havelock’s ETJ.

While it is advisable that Havelock continue to apply land regulations to the ETJ, to guide development, the City would either have to wait to annex the land, or change its ordinances in order to offer city services there to attract industries. However, allowing for services here will raise infrastructure operating cost, which case study respondents felt exceeded the benefits of expanding the corporate limits here. Another concern is that half of the proposed interchange is outside of the current ETJ, leaving little recourse for planning. Havelock may consider adopting growth management strategies for the lands they do have jurisdiction over to limit sprawl and incompatible development. These strategies might include designating growth areas, which may allow for limited city services in the ETJ to areas delineated for future growth. Current ordinances restricting services outside Havelock’s corporate limits already work similar to urban service limits used in growth management. The city should also zone the ETJ to limit non-compatible development. However, Porter (2008) recommends seeking public participation from citizens and community leaders when developing a growth management plan. As there currently are no bypass route development plans, this offers the best starting point for the city. Additionally, this plan should continue to implement recommendations made in the Joint Land Use Study and work with base personnel to reduce conflicting development.

## *Recommendations*

Until the ETJ complications are resolved, it might be best for Havelock to consider focusing imminent economic actions, in relation to the bypass, along the original route. Further, this alternative is more in line with community economic development preferences, as demonstrated during the Havelock Community Summit. Residents' value Havelock's "small town feel", and extending growth outside of corporate limits may change this dynamic. This leads to the question of how planners can encourage economic development that is complementary to community goals of redevelopment of the built environment, increased recreation in the form of parks and activities, and increased commercial business which are residential serving. Havelock's 2030 Comprehensive Plan offers a good starting point for guiding future development with growth managing goals of infill development, and redevelopment of underutilized parcels. The plan also agrees with the literature that after the U.S. 70 Bypass is opened, the original route could transition to a more "Main Street" concept. Further, Havelock has done well in following the comprehensive plan's goals of creating a city center near the tourists and events center, off of the current U.S. Highway 70 route. Havelock has already made lighting and road improvements here, and will soon open Slocum Park at this location. The comprehensive plan further recommends that Havelock work to create a mixed-use development and civic campus at the city center. This goal has not yet been realized, as the proposed site is currently owned by a mobile home park, and there are no developers on board to create the mixed-use project. At this time, it would seem that this project is not feasible, and it is suggested that Havelock work on a redevelopment plan which may be more easily executed with planning tools already at its disposal.

One of the steps city planners should take is to create a corridor plan for the bypassed route. This plan can be included in the proposed growth management plan above, or the City may choose to create a separate, complementary, corridor plan to expedite the process. The comprehensive plan has zoned the proposed city center as mixed-use, and this is also reflected in the future land use map. The City should maintain this zoning in order to preserve future goals of transitioning the route to a more “Main Street” design, and follow the comprehensive plan’s guidelines for infill development. Havelock should also consider increasing mixed-use zoning throughout the corridor to increase the unification of design, and directing more growth along this route. Additionally, infill development and mixed-use principles fall in line with growth management planning. Offering a range of uses in a small space increases walkability and the presence of people. As residents demonstrated during the summit, they value the people of Havelock and this design offers a method to increase community interaction. Planners should also determine if there are any regulatory obstacles in the way of investors wishing to redevelop these properties as mixed-use. Eppig and Brachman (2014) note that vacant lands of little value, and weak market demand, can be transformed in to parks or greenspace. Other community preferences the community plan should consider are increased sidewalks, road repairs, and more residential serving commercial uses, such as restaurants and shopping, which may require marketing available parcels. While the City has an understanding of community preferences based off the summit and comprehensive plan, there should be continued public participation throughout the creation and implementation of a corridor plan.

Another community concern is addressing rundown properties which currently exist along the commercial corridor. One of the tools Havelock’s planning department has at its disposal is code enforcement powers. Eppig and Brachman (2014) believe that commercial

revitalization can be spurred through the deliberate use of code enforcement related to maintenance standards. However, this process should begin with educating business owners on minimum maintenance standards, as aggressive measures may force business owners in economically weak areas to abandon their buildings. Community members at the summit expressed specific concerns over the appearance of Havelock's commercial properties. The City's ordinances include minimum maintenance standards, which includes keeping buildings in good repair, and holding owners and occupants responsible for cleanliness of buildings. Eppig and Brachman (2014) suggest that code enforcement be targeted to areas designated for revitalization, and that other city departments and organizations should be involved. This approach may help Havelock strengthen the appeal of the proposed city center, and spur further investment along the corridor. Porter (2008) also believes public investments, such as the addition of sidewalks and curbside plantings, may help spur redevelopment efforts. Planners may be able to work with the NCDOT to increase sidewalks along the bypassed route, and this would address part of the resident's infrastructure concerns.

Most other economic development methods fall outside of the local planner's capabilities, and the majority of the city leader's survey respondents felt that Havelock should consider hiring an economic developer as the city grows. This is indeed what the City has done after the city leader's survey distribution phase. This research will attempt to make suggestions, based off study findings, for the economic developer to consider. The majority of respondents felt the economic developer should be aligned with the local planning department, and for this reason the developer should actively take part in the proposed corridor and growth management planning suggested above. Further, Eppig and Brachman (2014) note that commercial revitalization should be connected to neighborhood and city plans, as well as economic

development goals. As the community tends to prioritize redevelopment of the commercial corridor, the economic developer should attempt to work with businesses and developers to identify grants and funding opportunities aimed at redevelopment. In terms of what types of businesses to attract to the Main Street corridor, most city leader's survey respondents would like to see new industries attracted to all of Havelock. Similarly, residents would like to see new, local serving, commercial industries. Such industries tend to blend well into mixed-use designs. The opinion survey results found that respondents have no preference toward the size of businesses which choose to locate within Havelock, so economic development efforts should not be limited toward "bigger is better" biases.

While job creation was least commented upon in response to the opinion survey, job creation is an important part of economic growth. Table 4.4 demonstrated that manufacturing is weak in Havelock, but that Craven County has a higher overall concentration of work force within manufacturing, as compared to the nation. Havelock may be able to attract manufacturing to the City by capitalizing on the county's excess labor force, as well as increased accessibility due to the bypass. Weisbrod and Beckwith (1992) also found that manufacturing firms are among those which are more likely to see direct benefits from infrastructure improvements. Havelock's comprehensive plan notes that new industries may potentially locate along Belltown Road, parallel to Main Street, and inside corporate limits. Marketing this area for new industries will limit conflicts of expanding growth to the ETJ.

In regards to other industries, both city and county employment are underrepresented in professional management, information, and financial sectors, each of which tend to offer higher wages. The economic developer should try to assess why these sectors are underrepresented in the region, and what can be done to attract such employment. One possibility, is that the military

base provides financial services to military and civilian employees' alike, reducing local competition for financial services. It is important for the economic developer to learn how the base influences local employment sectors to better understand industry gaps. In terms of the industries residents' desire, primarily local serving commercial industries, Havelock has an overrepresentation of employment in this sector. This may be used as an advantage for attracting more desirable commercial development to the area, as there is already a trained work force in place. Additionally, any commercial employment lost due to the bypass could potentially be transitioned to these new opportunities.

The alternate plans for addressing economic impacts due to the Havelock bypass found during the research include taking no action, focusing growth along the bypass interchange, and redeveloping the bypassed route. This leads to the research question of *on what basis should one alternate be chosen over another*. Based on opinions expressed during the city leader's survey and the Havelock community summit, local preferences and capacities indicate focusing economic development along the bypassed route is the best alternative. City officials and business stakeholders who responded to the city leader's survey indicate that cost of extending services to the bypass interchange would exceed the benefits, and allowing for growth here may interfere with MCAS Cherry Point operations. Residents surveyed during the community summit indicate that they are more interested in local serving, small scale development which can easily be accomplished along the bypassed route. Additionally, the Havelock 2030 Comprehensive Plan has taken these community interest into account, and offers a starting point for such development. These goals should be carried further by creating a corridor plan, which also implements growth management practices, to divert growth away from the bypass route and transition the original route to a "Main Street" concept that utilizes mixed-use practices and infill

development. While job creation is beneficial, research findings show that it is not a top priority for Havelock and should not obscure other plans. Also, chapter 4 finds that employment growth rates tend to be low for this region, so the creation of jobs should not be seen as an overwhelming solution to growth. Longlands reminds us that while economic growth tends to be a dominate objective in local planning, it does little to address place-based challenges, and may undermine a localities ability to improve residents quality of life (Longlands, 2013, pg. 894). For this reason, Havelock should consider an economic development approach focused on urban and infrastructure redevelopment and attracting local serving attractions, which may help spur economic growth and new industries in the long run.

#### *Research Limitations*

There are limitations associated with this research. One limitation is not knowing how much pass through traffic stops within Havelock in total, which is difficult to calculate as this is not something businesses track. Having a better estimate of how much business serves through traffic on the original route would allow for better insights on the economic impacts of a bypass. Another limitation was the lack of insight from Cherry Point officials and personnel. Most of the assumed impacts from the bypass to the base comes from the opinion of officials outside of the base and secondary data. Additionally, enlisted personnel and family members who live on base, but frequent amenities within Havelock, may have different development preferences for Havelock than the residents who were at the community summit. Future research should attempt to gain these perspectives to offer a comparison to those presented in this research.

## References

- ATKINS North America. (2013, August). US 17 Economic impact study.
- Ball, M. & Nanda, A. (2014). Does infrastructure investment stimulate building supply? The case of the English regions. *Regional Studies*, 48(3), 425-438.
- Bernard, H. & Ryan, G. (2003, February). Field methods. *Techniques to Identify Themes* 15(1), 85-109. Newbury Park: Sage.
- Bernard, H. & Ryan, G. (2010). *Analyzing qualitative data: Systematic approaches*. Newbury Park: Sage.
- Boarnet, M. (1997). Highways and economic productivity: Interpreting recent evidence. *Journal of Planning Literature*, 11(4), 476-486.
- Boothroyd, P. & Davis, H.C. (1993). Community economic development: Three approaches. *Journal of Planning Education and Research*, 12(3), 230-240.
- Bureau of Labor Statistics Location Quotient Calculator*. (n.d.) Retrieved February 28, 2016, from [http://data.bls.gov/location\\_quotient/](http://data.bls.gov/location_quotient/)
- Cambridge Systematics. (2014, March 7). U.S. 70 Corridor economic assessment.
- City of Havelock. (n.d.) Havelock, NC Welcome. Retrieved August 31, 2015, from <http://www.havelocknc.us>
- Collins, M. & Weisbrod, G. (2000) *Economic Impact of Freeway Bypass Routes in Medium Sized Cities*. Excerpt from Economic impact of I-73 alignments on Roanoke.
- Eastern Carolina Council. (2002). Eastern Carolina Joint Land Use Study (ECJLUS). Retrieved September 7, 2015, from <http://www.eccog.org/wpcontent/uploads/2013/10/ECJLUSFINALREPORT1.pdf>
- Eppig, M & Brachman, L. (2014). Redeveloping commercial vacant properties in legacy cities: A guidebook to linking property reuse and economic revitalization. Retrieved May 3, 2016, from <http://www.gmfus.org/publications/redeveloping-commercial-vacant-properties-legacy-cities>
- Evans, P. & Karras, G. (1994). Are government activities productive? Evidence from a panel of U.S. states. *The Review of Economics and Statistics* LXXVI, (1), 1-11.
- Gkrita, K, Sina, K., Labi, S., & Mannering, F. (2008). Influence of highway construction projects on economic development: An empirical assessment. *Annals of Regional Science*, 42, 545-563.



- Handy, S., Kubly, S., & Oden, M. (2002). Economic impacts of highway relief routes on small communities: Case studies from Texas. *Transportation Research Record*, 1792, 20-28.
- Havelock Chamber of Commerce. (2015). Havelock area guide & membership directory 2015.
- HDR. (2007). Economic Profile: City of Havelock and Craven County, North Carolina.
- Jiwattanakulpaisarn, P., Noland, R., Graham, D., & Polak, J. (2009). Highway infrastructure investment and county employment growth: A dynamic panel regression analysis. *Journal of Regional Science*, 49(2), 263-286.
- Kitchen, T. (2003). Planning responses to major structural change: Some experiences from British cities. *Planning Practice & Research*, 18(2-3), 123-141.
- Kleckley, J. (2011, March 2). U.S. Highway 70 in eastern North Carolina: Improvement impact on local economies and inter-modal transportation.
- Kuehn J.A. & West, J.G. (1971). Highways and regional development. *Growth and Change*, 2, 23-28.
- Longlands, S. (2013). Growing nowhere: Privileging economic growth in planning policy. *Local Economy*, 28(7), 894-905.
- Malizia, E. (1986). Economic development in smaller cities and rural areas. *Journal of the American Planning Association*, 52(4), 489-499.
- Marine Corps Air Station Cherry Point. (2016, March). 2015 Economic impact. Retrieved September 2, 2016, from <http://www.cherrypoint.marines.mil/Portals/86/Docs/Economic/EIBFY15.pdf?ver=2016-03-30-130851-947>
- Markusen, A. (2004). Targeting occupations in regional and community economic development. *Journal of the American Planning Association*, 70(3), 253-268.
- Morgan, J. (2009). *Economic Development Handbook*. 3<sup>rd</sup> ed. UNC School of Government.
- North Carolina Bureau of Commerce Labor and Economic Analysis Division. (2015, September). North Carolina's July County and area employment figures released. Retrieved February 28, 2016, from [http://www.ncesc1.com/pmi/rates/PressReleases/County/NR\\_July2015CountyRateRelease\\_M.pdf](http://www.ncesc1.com/pmi/rates/PressReleases/County/NR_July2015CountyRateRelease_M.pdf)
- North Carolina Department of Commerce. (n.d.) Local Area Unemployment Statistics. Retrieved March 1, 2014, from <http://d4.nccommerce.com/LausSelection.aspx>
- North Carolina Department of Commerce. (n.d.) Quarterly census of employment and wages, largest employers. Retrieved March 1, 2014, from <http://d4.nccommerce.com/QCEWLargestEmployers.aspx>

- North Carolina Department of Transportation, Division of Highways. May, 2011. Draft environmental impact statement: U.S. 70, Havelock bypass, STIP number R-1015.
- North Carolina Department of Transportation, Division of Highways. (2014). High Profile projects and studies. Retrieved February 18, 2014, from [www.ncdot.gov/projects/projectsstudies/?Region=\\* & Counties=\\*](http://www.ncdot.gov/projects/projectsstudies/?Region=* & Counties=*)
- North Carolina Department of Transportation, Division of Highways. October, 2015. Final environmental impact statement: U.S. 70, Havelock bypass, STIP number R-1015.
- OpenStreetMap. (2014, January 1). Retrieved March 22, 2015, from <http://www.openstreetmap.org/relation/179751#map=13/34.9068/-76.9120>.
- Otto, D. & Anderson, C. (1995). The economic impact of rural bypasses: Iowa and Minnesota case studies, final report. Midwest Transportation Center, Ames, Iowa.
- Porter, D. (2008). *Managing Growth in America's Communities*. 2<sup>nd</sup> ed. Washington D.C.: Island Press.
- Rephann, T. & Isserman, A. (1994). New highways as economic development tools: An evaluation using quasi-experimental matching methods. *Regional Science & Urban Economics*, 24, 723-751.
- Rogers, C. & Marshment, R. (2000). Measuring highway bypass impacts on small town business districts. *RURDS*, 12(3), 250-265.
- Sabol, S.A. (1996). Effect of highway bypasses on rural communities and small urban areas. *Research Results Digest No. 210*. National Cooperative Highway Program, Washington, DC.
- Srinivasan, S. & Kockelman, K.M. (2002). The impacts of bypasses on small- and medium-sized communities: An econometric analysis. *Journal of Transportation and Statistics*, 5(1), 60-69.
- Sweet, M. (2013). Traffic congestion's economic impacts: Evidence from US metropolitan regions. *Urban Studies*, 51(10), 2088-2110.
- System Metrics Group. (2006, May). California bypass study: The economic impacts of bypasses: Volume: Planning reference.
- Urban Resource Group. (2009, June 15). The City of Havelock 2030 comprehensive plan.
- U.S. Census Bureau, 2009-2013 5-Year American Community Survey, Table DP03. Retrieved February 17, 2015, from <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

- Wachs, M. (2011). Transportation, jobs, and economic growth. *Access*, 38(spring), 8-14.
- Weisbrod, G. & Beckwith, J. (1992). Measuring economic development benefits for highway decision-making: The Wisconsin case. *Transportation Quarterly*, 46 (January), 57-79.
- Wilson, D. (2015, February 5). Cherry Point Lobbyist: BRAC Still Not a Sure Thing. *Havelock News*, Retrieved February 17, 2015, from <http://www.havenews.com/news/military/cherry-point-lobbyist-brac-still-not-a-sure-thing-1.434225>
- Wilson, D. (2016, May 26). Grad Student doing study on proposed bypass. *The Sun Journal*.
- Wubneh, M. (2004). Forging ahead and lagging behind: An analysis of convergence and development in North Carolina. *Carolina Planning*, 29(2), 3-26.
- Wubneh, M. (2008). US Highway 17 and its impact on the economy of eastern North Carolina.
- Yeh, D., Gannon, M., & Leong, D. (1998). The economic impacts of highway bypasses on communities, Technical Report SPR-0092-45-93. Wisconsin Department of Transportation, Economic Planning and Development, Madison, Wisconsin.

## Appendices

### *Appendix A: City Leader's Survey*

#### City of Havelock Bypass and Economic Study

You are being invited to participate in a research study titled "A Case Study of the Role of Planners in Preparing for Local Economic Success in Havelock North Carolina" being conducted by Nola Roberts, a graduate student at East Carolina University in the Geography department. The goal is to survey 20 individuals in the City of Havelock with local planning, governing or business experience. The survey will take approximately 10 minutes to complete. It is intended that this information will assist us to better understand how officials may be able to plan for the economic ramifications due to highway bypass construction. The survey is anonymous, so please do not write your name. Your participation in the research is voluntary. You may choose not to answer any or all questions, and you may stop at any time. There is no penalty for not taking part in this research study. Please call Nola Roberts (Principal Investigator) at (224)538-8785, or Mulatu Wubneh (Study Supervisor) at (252)328-1272 for any research related questions or the Office of Research Integrity & Compliance (ORIC) at 252-744-2914 for questions about your rights as a research participant.

Q1 I give my consent to participate in the following survey and understand that my participation is voluntary.

- Yes (1)
- No (2)

Q2 Do you think Havelock is economically competitive compared to other nearby cities along U.S. 70 (excluding Triangle area)?

- Yes (1)
- No (2)

Q3 Do you think Havelock is economically competitive compared to other North Carolina cities east of Interstate 95?

- Yes (1)
- No (2)

Q4 How significant do you think U.S. 70 is to the economic success of MCAS Cherry Point?

- Very significant (1)
- Somewhat significant (2)
- Not significant (3)

Q5 How significant do you think U.S. 70 is to the economic success of other industries which are located within Havelock?

- Very significant (1)
- Somewhat significant (2)
- Not significant (3)

Q6 Do you think that businesses along U.S. 70/ Main Street primarily serve?

- Locals (1)
- Thru traffic (i.e. tourist, commuters) (2)
- Both (3)

Q7 Do you think that Havelock has an unusually high amount of vacant store fronts along U.S. 70?

- Yes (1)
- No (2)

Q8 Do you think Havelock currently has a diverse industry mix?

- Yes (1)
- No (2)

Q9 Do you think that Havelock currently offers a range of employment opportunities?

- Yes (1)
- No (2)

Q10 Overall, do you think the current state of the economy in the City of Havelock is?

- Growing (1)
- Stagnate (2)
- Declining (3)

Q11 In your opinion, do you think that the City of Havelock has made adequate economic development efforts?

- Yes (1)
- No (2)

Q12 Please rank the importance of U.S. 70 to the City of Havelock by indicating 1, to the most important factor, 2 to the second most important factor, through 6, the least important factor.

- \_\_\_\_\_ Connection to commercial and local activities (i.e. schools)
- \_\_\_\_\_ Connection to interstate systems such as I-95 and other major highways
- \_\_\_\_\_ Connection to the Morehead City Port
- \_\_\_\_\_ Connection to MCAS Cherry Point
- \_\_\_\_\_ Connection for jobs including transportation industries
- \_\_\_\_\_ Use as a hurricane evacuation route

Q13 Do you believe that the construction of the U.S. 70 Bypass is necessary to Havelock's future economic growth?

- Yes (1)
- No (2)

Q14 Please rank the primary benefits an improved U.S. 70 Corridor will create for the City of Havelock by indicating 1, to the most important benefit, 2 to the second most important benefit, through 5, the least important benefit.

- \_\_\_\_\_ Increased safety
- \_\_\_\_\_ Reduced travel times
- \_\_\_\_\_ Increased industrial activity
- \_\_\_\_\_ Increased military activity
- \_\_\_\_\_ Increased commercial activities (including tourism and shopping)

Q15 In your opinion, does the City of Havelock have a clear and defined plan for potential development around the U.S. 70 Bypass?

- Yes (1)
- No (2)

Q16 Do you think the bypass will have an overall positive economic effect on Havelock?

- Yes (1)
- No (2)

Answer If: No Is Selected for Q16

Q17 Why do you think the bypass would not have a positive effect?

Q18 Do you think the loss of thru-traffic will have a lasting negative impact on the commercial/retail sector?

- Yes (1)
- No (2)

Q19 Do you think the bypass may spur development which is incompatible with Havelock's development goals?

- Yes (1)
- No (2)

Q20 What are your reasons?

Q21 In your opinion, has the City taken into consideration both positive and negative economic outcomes of bypass construction in relation to future development goals?

- Yes (1)
- No (2)

Q22 In your opinion, is it unnecessary to plan for economic growth as a result of the U.S. 70 Bypass, as it will attract investment on its own?

- Yes (1)
- No (2)

Q23 Do you think improved connection along the U.S. 70 Corridor has the potential to allow existing industries to expand, as travel times to larger markets are reduced?

- Yes (1)
- No (2)

Q24 Do you think allowing the City to expand the Extraterritorial Jurisdiction (ETJ) Boundary toward the U.S. 70 Bypass is necessary to the well-being of MCAS Cherry Point and existing industry in Havelock?

- Yes (1)
- No (2)

Q25 Do you think the benefits of extending the ETJ are small compared to the cost of extending services to this area?

- Yes (1)
- No (2)

Q26 Do you think that future growth, in the near term, should primarily be focused closer to the Lake Road bypass interchange, or along Main Street?

- Lake Road interchange (1)
- Main Street (2)

Q27 Why?

Q28 Which of the following approaches to economic growth is best suited for the City of Havelock?

- Expand existing industry in Havelock (1)
- New industries/ companies from outside (2)
- Encourage new start-ups by residents (3)

Q29 In your opinion, which of the following types of business do you prefer to have the greatest impact on the future economic growth and diversification of the city?

- Small business (1)
- Large business (2)
- No preference (3)

Q30 Would you say quality of life gains, such as improved schools and medical facilities, typically follow job creation and economic growth, or do they attract economic growth?

- Follow (1)
- Attract (2)

Q31 Do you agree that economic development planning should be a shared goal and responsibility of all City departments, as opposed to one assigned department?

- Yes (1)
- No (2)



Q32 Do you agree that as Havelock grows it would be best to establish an economic development department?

- Yes (1)
- No (2)

Answer If: Yes Is Selected for Q32

Q33 Do you agree that any future economic development departments will best be housed under the planning department in order to align with land use goals which protect MCAS Cherry Point?

- Yes (1)
- No (2)

Answer If: Yes Is Selected for Q33

Q34 Can you think of other reasons why it should be housed under the planning department?

Q35 Do you agree that future economic development goals can best be realized through regional partnerships with Craven County or consulting firms?

- Yes (1)
- No (2)

Q36 How long have you worked for or served the City of Havelock?

Q37 Do you currently reside in the City of Havelock?

- Yes (1)
- No (2)

Q38 What is your gender?

- Male (1)
- Female (2)
- Prefer not to answer (3)

Q39 What is the highest grade of school or degree you have completed?

- Graduated high school (1)
- Associates degree (2)
- Bachelor's degree (3)
- Master's degree (4)
- Doctorates degree (5)
- Prefer not to answer (6)

Q40 Within which age range do you fall?

- 20-29 (1)
- 30-39 (2)
- 40-49 (3)
- 50-59 (4)
- 60+ (5)

**Appendix B: City Leader's Survey Responses (excluding rank order and demographics)**

**Q2 - Do you think Havelock is economically competitive compared to other nearby cities along U.S. 70 (excluding the Triangle area?)**

Answer	%	Count
Yes	33.33%	6
No	66.67%	12
Total	100%	18

**Q3 - Do you think Havelock is economically competitive compared to other North Carolina cities east of Interstate 95?**

Answer	%	Count
Yes	27.78%	5
No	72.22%	13
Total	100%	18

**Q4 - How significant do you think U.S. 70 is to the economic success of MCAS Cherry Point?**

Answer	%	Count
Very significant	83.33%	15
Somewhat significant	16.67%	3
Not significant	0.00%	0
Total	100%	18

**Q5 - How significant do you think U.S. 70 is to the economic success of other industries which are located within Havelock?**

Answer	%	Count
Very significant	83.33%	15
Somewhat significant	16.67%	3
Not significant	0.00%	0
Total	100%	18

**Q6 - Do you think that businesses along U.S. 70/ Main Street primarily serve?**

Answer	%	Count
Locals	55.56%	10
Thru traffic (i.e. tourist, commuters)	0.00%	0
Both	44.44%	8
Total	100%	18

**Q7 - Do you think that Havelock has an unusually high amount of vacant store fronts along U.S. 70?**

Answer	%	Count
Yes	66.67%	12
No	33.33%	6
Total	100%	18

**Q8 - Do you think Havelock currently has a diverse industry mix?**

Answer	%	Count
Yes	16.67%	3
No	83.33%	15
Total	100%	18

**Q9 - Do you think that Havelock currently offers a range of employment opportunities?**

Answer	%	Count
Yes	16.67%	3
No	83.33%	15
Total	100%	18

**Q10 - Overall, do you think the current state of the economy in the City of Havelock is?**

Answer	%	Count
Growing	16.67%	3
Stagnate	61.11%	11
Declining	22.22%	4
Total	100%	18

**Q11 - In your opinion, do you think that the City of Havelock has made adequate economic development efforts?**

Answer	%	Count
Yes	33.33%	6
No	66.67%	12
Total	100%	18

**Q13 - Do you believe that the construction of the U.S. 70 Bypass is necessary to Havelock's future economic growth?**

Answer	%	Count
Yes	55.56%	10
No	44.44%	8
Total	100%	18

**Q15 - In your opinion, does the City of Havelock have a clear and defined plan for potential development around the U.S. 70 Bypass?**

Answer	%	Count
Yes	23.53%	4
No	76.47%	13
Total	100%	17

**Q16 - Do you think the bypass will have an overall positive economic effect on Havelock?**

Answer	%	Count
Yes	61.11%	11
No	38.89%	7
Total	100%	18

**Q17 - Why do you think the bypass would not have a positive effect?**

Because all the traffic will be bypass, so all of the tourist won't be able to see what Havelock has to offer.

Reduction in travelers resulting in less exposure to Havelock businesses and leading to more vacant buildings and increased business closures.

Military cutbacks are hurting the economy and a bypass will hurt what little that is left.

Havelock does not have a clearly stated plan. for recruiting industry or development

Somewhat

**Q18 - Do you think the loss of thru-traffic will have a lasting negative impact on the commercial/retail sector?**

Answer	%	Count
Yes	61.11%	11
No	38.89%	7
Total	100%	18

**Q19 - Do you think the bypass may spur development which is incompatible with Havelock's development goals?**

Answer	%	Count
Yes	27.78%	5
No	72.22%	13
Total	100%	18

**Q20 - What are your reasons?**

Development in the bypass area is the opportunity for growth and increased tax base. Development would first need City services so it would be annexed and zoned. Development goals can be guided by the zoning.

The by-pass will extend the economic impact of both through-travelers and will make is safer and more convenient for local traffic to access local businesses.

There are no announced development plans accompanying the bypass. Travelers will simply continue past us to their destinations east of Havelock

Traffic pass through will decrease, causing safe movement

National forest will not bring much commercial property to sale.

Again what is incompatible as Havelock has no plan and is anti growth and development

Not enough job opportunities. No incentives for industry to operate in the Havelock area.

When a bypass is completed - development will follow - Havelock does not have the resources (water/sewer) capacity to provide the service at this time

**Q21 - In your opinion, has the City taken into consideration both positive and negative economic outcomes of bypass construction in relation to future development goals?**

Answer	%	Count
Yes	62.50%	10
No	37.50%	6
Total	100%	16

**Q22 - In your opinion, is it unnecessary to plan for economic growth as a result of the U.S. 70 Bypass, as it will attract investment on its own?**

Answer	%	Count
Yes	0.00%	0
No	100.00%	16
Total	100%	16

**Q23 - Do you think improved connection along the U.S. 70 Corridor has the potential to allow existing industries to expand, as travel times to larger markets are reduced?**

Answer	%	Count
Yes	87.50%	14
No	12.50%	2
Total	100%	16

**Q24 - Do you think allowing the City to expand the Extraterritorial Jurisdiction (ETJ) Boundary toward the U.S. 70 Bypass is necessary to the well-being of MCAS Cherry Point and existing industry in Havelock?**

Answer	%	Count
Yes	81.25%	13
No	18.75%	3
Total	100%	16

**Q25 - Do you think the benefits of extending the ETJ are small compared to the cost of extending services to this area?**

Answer	%	Count
Yes	56.25%	9
No	43.75%	7
Total	100%	16

**Q26 - Do you think that future growth, in the near term, should primarily be focused closer to the Lake Road bypass interchange, or along Main Street?**

Answer	%	Count
Lake Road interchange	47.06%	8
Main Street	52.94%	9
Total	100%	17

### Q27 - Why?

The more planning upfront, the better for the future growth of the Lake Road area.

Actually I think that both the redevelopment and branding of Main St. and development at the Lake Rd. interchange will be essential for the economic well-being of the city.

because all of the family business concentrate in this street

Accessibility for travelers

The ETJ will only have planning and zoning services unless those areas request to be annexed.

Development of lake Rd will create new work and this will move into the city as we grow.

Lake road will never handle the traffic needed to help Havelock. Most traffic will go to either end of bypass not lake road. Should have been Sunset dr to allow a straight shot to hi way 101 thru miller blvd I'm Havelock. The main problem with Lake rd. is rail road at a bad angle to Lake rd. intersection. Havelock has best plan available to fix this intersection.

There will be less traffic once the bypass is completed, no reason to developed main street as there will be limited opportunities

People can stop within the city.

Although very limited space in both areas, I think there is room for more growth along Main Street. May be in the form of redevelopment of old buildings.

Must get existing "house" in order

It can be development much better than what we have on Main Street

### Q28 - Which of the following approaches to economic growth is best suited for the City of Havelock?

Answer	%	Count
Expand existing industry in Havelock	0.00%	0
New industries/ companies from outside	88.24%	15
Encourage new start-ups by residents	11.76%	2
Total	100%	17

### Q29 - In your opinion, which of the following types of business do you prefer to have the greatest impact on the future economic growth and diversification of the city?

Answer	%	Count
Small business	23.53%	4
Large business	23.53%	4
No preference	52.94%	9
Total	100%	17



**Q30 - Would you say quality of life gains, such as improved schools and medical facilities, typically follow job creation and economic growth, or do they attract economic growth?**

Answer	%	Count
Follow	64.71%	11
Attract	35.29%	6
Total	100%	17

**Q31 - Do you agree that economic development planning should be a shared goal and responsibility of all City departments, as opposed to one assigned department?**

Answer	%	Count
Yes	100.00%	17
No	0.00%	0
Total	100%	17

**Q32 - Do you agree that as Havelock grows it would be best to establish an economic development department?**

Answer	%	Count
Yes	82.35%	14
No	17.65%	3
Total	100%	17

**Q33 - Do you agree that any future economic development departments will best be housed under the planning department in order to align with land use goals which protect MCAS Cherry Point?**

Answer	%	Count
Yes	85.71%	12
No	14.29%	2
Total	100%	14

**Q34 - Can you think of other reasons why it should be housed under the planning department?**

Because it could also be responsible for community development efforts.

Planning and zoning are in the planning department. ED. falls into that arena.

no

none

The Planning Department would have a better understanding of what it takes to keep MCAS viable in the area. Don't want to see Havelock turn into a Ghost Town.

**Q35 - Do you agree that future economic development goals can best be realized through regional partnerships with Craven County or consulting firms?**

Answer	%	Count
Yes	70.59%	12
No	29.41%	5
Total	100%	17

*Appendix C: Institutional Review Board (IRB) Approval Letter*



EAST CAROLINA UNIVERSITY  
University & Medical Center Institutional Review Board Office  
4N-70 Brody Medical Sciences Building· Mail Stop 682  
600 Moye Boulevard · Greenville, NC 27834  
Office 252-744-2914 · Fax 252-744-2284 · [www.ecu.edu/irb](http://www.ecu.edu/irb)

**Notification of Initial Approval: Expedited**

From: Social/Behavioral IRB  
To: [Nola Roberts](#)  
CC: [Mulatu Wubneh](#)  
Date: 3/21/2016  
Re: [UMCIRB 15-001785](#)  
A Case Study of the Role of Planners in Preparing for Local Economic Success in Havelock North Carolina

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 3/18/2016 to 3/17/2017. The research study is eligible for review under expedited category # 5, 7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

Name	Description
City official questions	Surveys and Questionnaires
Structured Survey.docx	Interview/Focus Group Scripts/Questions
SurveyCL.doc	Consent Forms
The Role of Planners in Preparing for Local Economic Success: A Case Study of Havelock, North Carolina	Study Protocol or Grant Application

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

*Appendix D: Havelock Community Summit Survey*



**Community Visioning Questions**

The purpose of the summit is to provide an opportunity for city residents, business owners and other stakeholders to participate in planning for Havelock’s future. Your input will help the Board of Commissioners and Staff develop a more comprehensive vision for Havelock’s future.

Please answer some or all of the questions below:

1. Do you live in Havelock? Yes/No If yes, how many years have you lived here? \_\_\_\_
2. Do you work in Havelock? Yes/No If yes, how many years have you worked here? \_\_\_\_
3. What do you value most about Havelock?
  
4. If you could improve one thing in Havelock, what would it be?
  
5. What issue/project would you like to see the City prioritize for the future?
  
6. Below are some of the priorities from our last community summit. Please rank these in order of importance to you *(with 1 being the most important; and 5 being the least important)*:
  - a. Maintain Havelock’s unique small town character \_\_\_\_\_
  - b. Increase economic development and growth \_\_\_\_\_
  - c. Additional recreational opportunities \_\_\_\_\_
  - d. Transportation access/road improvements \_\_\_\_\_
  - e. Community image improvements \_\_\_\_\_

Additional Comments:

# Grad student doing study on proposed U.S. 70 bypass

By Drew C. Wilson

drew.wilson@haventimes.com

An East Carolina University graduate student has undertaken a survey of opinions about the economic impact of the proposed U.S. 70 bypass around Havelock.

Nola Roberts, who is working for her master's degree in geography with a concentration in urban planning, sent out questionnaires to local planners, government officials and business owners to gauge how people think the bypass would affect Havelock.

The research work is called "A Case Study of the Role of Planners in Preparing for Local Economic Success in Havelock North Carolina."

The \$221 million, four-lane freeway is scheduled to be built beginning next year, with completion set for 2020 or 2021. Eighty percent of the cost is in federal dollars while 20 percent is from the state.

The 10-mile bypass would run from just west of Havelock near the old Havelock Building Supply and Hickman Hill recycling site south of the city and rejoin existing U.S. 70 just east of the city. One midway interchange is to be built at Lake Road.

The bypass, which first appeared in state road plans during the 1970s, is expected to ease traffic congestion in Havelock, while creating a quicker route for commerce to access the N.C. Port in Morehead City, but it could also reduce the number of potential customers for Havelock businesses.

Roberts, who earned her undergraduate degree at UNC-Wilmington, had a summer internship last year with the city's planning department. In the course of the internship,

she thought the U.S. 70 bypass around Havelock would make a good research project.

"I'm a planning major so I'm interested in the bypass from a planner's perspective and the economic outcomes and the decision-making process in the town and local views and attitudes towards economic planning in regards to the bypass," said Roberts. "When I was looking over research, it didn't seem like there was a whole lot of research done on bypasses, especially on infrastructure investment about bypasses in particular. I think also that Havelock offers an interesting research area because they have a lot of things to keep in mind. I know the base is there, so they plan with that in mind. How is that outcome different for military communities?"

She is hoping to get responses to the 34-question, multiple-choice questionnaire from more than 20 officials and business people.

Roberts asks about Havelock's economic competitiveness, about the city's employment opportunities, future economic growth and future traffic flow. She also asks about the city's planning for changes as a result of the bypass, the effect it would have on city businesses and possible expansion of the city's extrajurisdictional jurisdiction.

"It's trying to assess local opinions and local decision-making processes. Eventually I want to tie it into my overall research," said Roberts. "This is just a small part of the research. They put out the U.S. 70 Corridor Economic Assessment in regards to the bypass and I want to take that kind of information and scale it down to the Havelock level. They discuss the entire 70 corridor area, so it's not specific to Havelock. So I'm trying to un-

derstand more specifically how it affects Havelock."

Bruce Fortin, director of the Havelock Chamber of Commerce, received one of the surveys, and he's interested in the results when they become available.

"That is our strategic outlook to engage in looking at the impacts of the bypass," said Fortin.

Danny Walsh, a Havelock commissioner, city business owner and a Highway 70 Corridor Commission senior member, got the survey and has sent it back already. Walsh said whether the bypass would be good or bad for the area is a complex question.

"As a business owner, first and foremost, I would rather not have a bypass, because I think it would take away some from the business in Havelock, not so much me as some of the other places, like gas stations and grocery stores, but they employ people that buy cars from me and buy insurance and buy gas and buy tires, so I think that will hurt us some," Walsh said. "The advantage is, for the area, in the long term, is that if the port expands and we have a four-lane highway here, as they hope to have an interstate quality highway, more businesses will be attracted to come here and build their businesses, industries primarily."

"Transportation is the most important thing to them because that's a cost to moving their products someplace. Moving products overseas out of a port that is about to be expanded will be better for the region, so personally, I would rather not have the bypass. Professionally as a commissioner and as a longtime transportation person, I think that in the long run, the area will benefit from it."