Housing Needs Study of the Northern Neck of Virginia
Prepared by czbLLC in partnership with Virginia Tech
March 2009: FINAL REPORT

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Introduction
The Northern Neck of Virginia is an area comprised of four rural coastal counties between the Potomac and Rappahannock Rivers, Highway 301 and the Chesapeake Bay: Lancaster, Northumberland, Richmond, and Westmoreland.

Population growth overall is and has been essentially flat for some time, growing by 5,200 people from 1990-2000 (11.2%), and slowing from 2000-2008.

	Census	Census	ESRI	Change Since 2000	HH Size	HHs Lost/ Gained Since 2000	Annual Gain/Loss HHs Since 2000	Monthly
	1990	2000	2007					
Lancaster	10,896	11,586	11,532	-54	2.23	-24	-3	-0
Northumbe	10,524	12,030	12,897	867	2.24	387	55	5
Richmond	7,273	8,809	9,171	362	2.40	151	22	2
Westmorela	15,480	16,718	17,252	534	2.43	220	31	3
	44,173	49,143	50,852	1,709				
Rate		11.25%	3.48%					

Nevertheless, the Northern Neck is an area in significant transition.

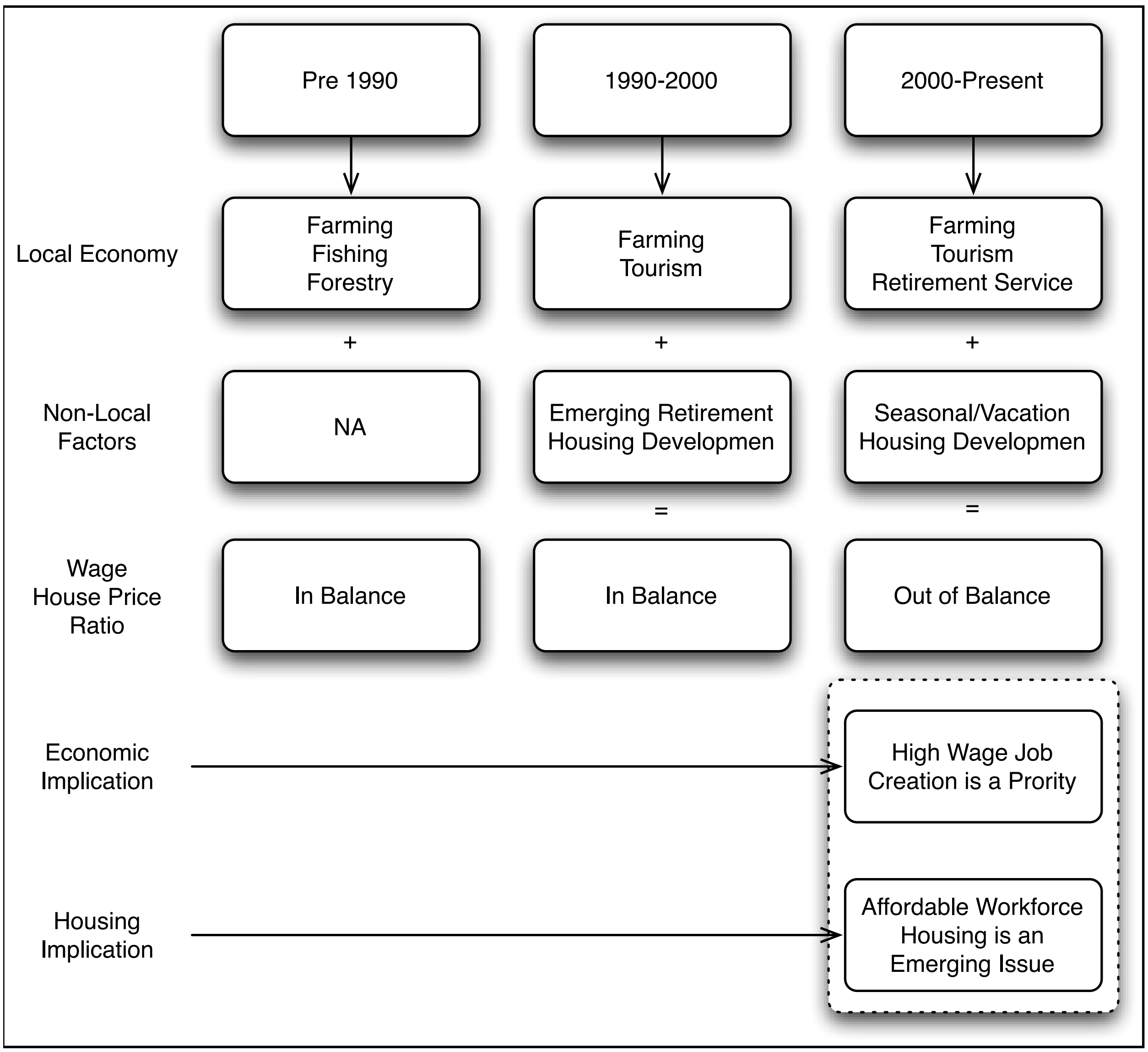
The four counties are all in the process of moving from an extraction-based and agricultural economy (forestry, fishing, and farming) to one that is more service-oriented. In response to tourism, an influx of retirees, over-fishing, and growth in demand for waterfront property by seasonal (second home) home buyers from equity-rich Northern Virginia and other external markets, land in many cases has become increasingly valuable for it's residential development potential.

As this has led to speculation, rising land values, and increasing housing costs, the nature of these shifts and their repercussions have important housing and policy implications, namely that housing costs have risen and continue to rise faster than local wages, leaving the local workforce challenged to secure housing in the open market it can afford.

	2000	2008
Ratio of House Value to Income	2.75	4.26
Source: ESRI and Multiple Listing Service		

A good indicator of housing affordability in an overall sense is the ratio of median incomes (what each household earns annually) to median house values (what homes are selling for). A conventionally financed home purchase typically generates an income to value ratio of 2.5-3.2, depending on a variety of other factors (such as interest rates). In 2000 the overall Northern Neck housing market was priced such that incomes were within this range. By 2008 this ratio had widened significantly, as incomes has grown by approximately 24% while home values during the same time had almost doubled.

The central motif of the transformation of the Northern Neck, especially in the period from 1990 to present, is the driving force of external markets - where incomes and home values are much higher than in the Northern Neck - to shape housing demand. This demand has come principally in three forms. Demand for housing from non-local retirees locating to the Northern Neck. Demand from seasonal buyers purchasing second homes. And demand from commuters. These are mixing with locally-generated demand from workers employed in Northern Neck businesses and agencies, and are creating two very different outcomes: long time residents struggle to find housing they can afford, while new arrivals and seasonal buyers leverage external wages and equity to acquire higher end primary and second homes.



An Influx of Retirees: A retiree from Midlothian, Virginia is buying a coastal home in Lees Cove near White Stone for $2M, raising the value of land (and thus housing) nearby. Meanwhile an ICU Registered Nurse at Rappahannock General Hospital with a $52,000 salary - and home buying power of $145,000 - is not able to find a home she can afford to buy in Lancaster County, near her place of work, so she commutes to Gloucester County. As the retiree moves into Lancaster, housing values change. As the nurse puts down roots elsewhere, her employer must contend with recruiting challenges precipitated by changing wage-housing price ratios. Both she and the retired banker from the Richmond area who moved to White Stone will sometimes pick up groceries at the Tri-Star, where cashiers are paid between $9-$11/hr, and the head of the meat department in 2008 earned $47,500. At $10/hr a Tri-Star cashier who is a single mother with one child will be able to afford $520/month for an apartment if she rents, and a $58,000 home for sale if she buys. To find a place she can afford within the Northern Neck, she will likely commute to Kilmarnock from Warsaw or some other place in Richmond County, where housing is considerably less expensive, unless she has access to property (closer to work) that's been in her family over time.

Commuters Seeking Affordable Housing and Quality of Life: Additionally, some parts of the Northern Neck are experiencing housing demand from non-local households seeking housing more affordable than their place of employment; in effect they can buy more house in the Northern Neck than near where they work. And others who work in the Northern Neck travel to homes elsewhere, especially young workers.

A veteran employee in the US Department of Homeland Security's Washington, DC office commutes by vanpool two hours each way to and from Montross. She earns $90,000, 200% of the Westmoreland County median. Along her daily commute, her vanpool will stop in Colonial Beach to pick up others who commute to Washington, DC, and she will be on the road with commuters that work at the Naval Surface Weapons Center in Dahlgreen who earn $75,000 a year, but who cannot find homes for sale in King George's County that they can afford, and who have instead found housing opportunities inland along Rt 205. New teachers in Richmond County meanwhile, earning $36-38,000 tend to rent in Tappahannock (Essex County) until they buy. After five years, many who stay will have remained single, and will have approximately $112,000 in home buying power. If married they will be able to find a home they can afford to buy in Richmond County.

Second Home Buyers from Strong Equity-Rich Markets: Further, strong housing markets in Northern Virginia have propelled demand for vacation homes by residents able to extract home equity there into buying power on the Northern Neck. For these households, as is the case for a high percentage of retirees from outside the area, demand is for waterfront property, so Richmond County has experienced less pressure than the rest of the Northern Neck, and no part of the Northern Neck has experienced quite so much of this activity as waterfront properties in Northumberland County on the coastal side of Rt 360.

Near Ophelia at Jetty's Reach, a family from Fairfax, Virginia has bought a second home for $900,000, driving up the value of waterfront property in Northumberland County. They will make purchases at the True Value hardware (Lilian Home Center) in Burgess, where staff wages range from $20,000 - $40,000 and where a long time employee there, married to a long time employee at Omega Protein in Reedville, together earn $56,000. In Northumberland County, waterfront homes during the period 2005-2008 averaged $559,000, more than three times what this local two-income family can afford. Upper income local residents and seasonal buyers in Northumberland County will own waterfront homes. Moderate income families will live inland where home sales from 2005-2008 averaged approximately $166,000.

Though in-migrating retirees, second home buyers, and commuters come from up and down the eastern seaboard, the overwhelming majority come mainly from powerful Northern Virginia and Washington, DC markets, or the Richmond, Virginia area.

In nearly all cases, home equity and incomes from these external markets exceeds - in some instances substantially - local values and wages. This influx of high purchasing power (equity from sale or refinance of primary residence in strong housing markets during 1990-2005, combined with comparatively high incomes) has resulted in housing prices across the Northern Neck far outpacing the capacity of local wages to keep pace. Workers at the Wal-Mart in Kilmarnock at $7.10/hr often commute to Middlesex, Matthews, Essex, and Richmond counties to secure affordable housing, just as workers at the cashier at the Dollar Store in Warsaw ($7.77/hr) do.

This is not a consequence confined to the service retail segment of the economy, either. Historyland Nursery in Warsaw employs roughly 90 (unskilled) workers (H2A and local) at peak at an average of $8.85/hr, which is enough for $460/month in rent. Medical Lab Technicians at Rappahanock Hospital earn $41,000 a year. Employees at the Northern Neck Electric Cooperative earn excellent wages. But overall, incoming wages from im-migrating households so far outpace local earnings that the housing market proves complex for many to navigate affordably.

The net of these forces is a housing market comprised of numerous two-sided stories (waterfront versus non waterfront, as one example, or local versus non-local) that require attention both at the county level and across the Northern Neck as one region, for two truths emerge from the housing data.

First, the whole of the Northern Neck is affected by its low-wage economy (compared to external markets) and attractive coastal geography in ways that make it hard for local workers to compete for housing. Local workers therefore, with less options, tend to live inland (non-waterfront), in older homes (often needing upgrades), in mobile homes, or outside the Northern Neck where more affordable options may exist.

Second, the effects of the many factors shaping the housing markets across the Northern Neck are felt in each county somewhat differently. Less waterfrontage in Richmond means less pressure from wealthy retirees. Greater distance from external markets and geographic isolation for Northumberland and Lancaster mean more retirees and seasonal buyers. Proximity to Rt 301 and the 95 corridor mean more two-income households in Westmoreland and Richmond counties earn wages in southern Maryland, and the Fredericksburg, and Richmond areas.

What will be needed are policy and program responses both regional and county specific in nature. Some responses will need to be commonly applied across the region, such as an effort to upgrade existing homes regardless of location, while others will need to be more fine grained in nature, such as a specific housing development in a specific market in response to market highly local market conditions.

Many Submarkets
Altogether, for housing policy purposes, the many inputs shaping housing trends across the four counties are best described as a *dual, symbiotic community of people who on one hand commute or retire to (or live part-time in) the Northern Neck, and those who work there (or who are lifelong residents who have retired), on the other*.

	"Been Here"	"Come Here"
Primary Origination	Internal	External
Who	Lifelong residents	Commuters, Retirees, 2nd Home Owners
Wages	Low to Moderate	High
HH Income	Low to Moderate	High
Ability to Pay for Housing	Low to Moderate	High

The net of the this dual housing market is that the house purchasing power of local households - derived from local wages - is far less than the house purchasing power of non local households (come here's). A store manager at the Dollar General (Warsaw, Montross, Kilmarnock, Colonial Beach) will earn $10.66/hr working in Montross and be able to afford 8.7% of the housing in Westmoreland County (about 577 of the 5,786 occupied housing units in the county).

Local Employee and Wages				**Purchasing Power**	**Est. Pct. Housing in County Affordable**
Histology Technician	Rappahannock Hospital	Lancaster	$48,000	$134,400	26.50%
Cashier	Lilian Hardware	Northumberl	$27,040	$75,712	13.90%
Deli Counter	Tri Star	Lancaster	$25,480	$71,344	11.50%
Irvington Attorney	Name withheld	Lancaster	$175,000	$490,000	79.60%
School Administrator	Rappahannock High Schoo	Richmond	$37,180	$104,104	19.70%
Agricultural Worker	Ingleside Winery	Westmorelar	$16,640	$46,592	4.90%
Loan Officer	Bank of Lancaster Montro	Westmorelar	$55,000	$154,000	33.80%
Field Engineer	Northern Neck Electric	Richmond	$52,485	$146,000	32.00%

Non-Local Employee						
GS 15 Federal Governmen	Commuter		Westmorelar	$90,000	$252,000	64.10%
2 Income Fairfax, VA Hous	Second Home Buyer		Northumberl	$375,000	$1,050,000	96.40%
Retired Richmond Banker	Retiree		Lancaster		$2,000,000	100.00%
Source: ESRI, Conversations with Local Employers						

The economy that in-migrating households depend on is largely service based, creating a demand for low- and moderate-wage sevice sector jobs that substitute low wages at Wal-Mart for low wages in fishing and farming.

In turn, the growth of these low-, but not high-wage jobs, is a contributing factor in the loss of young households (aged 25-44). In effect, the Northern Neck is trading younger households (leaving for better paying jobs) for older ones (arriving to retire), wealthier ones (arriving to buy second homes), or commuters (arriving from high housing cost areas to obtain affordable housing).

The good news is that high income households bring an average of $17,000 each in higher annual incomes than the households that depart, resulting in demand for retail and construction. The bad news is that the income differential that can be good for jobs also translates into high housing prices for which local wages are not sufficient.

In	Out	Implication
Older HHs (retirees 55+ and second home purchasers 45+) mainly from affluent Northern Virginia, Washington, DC and DC-Maryland suburbs, and the Richmond, Va area	Young Families (25-44)	Dependence on low-cost goods and services delivered by low-wage businesses, plus emerging tax base issues with respect to schools and infrastructure.
Households with higher educational attainment, higher income earning capacity but not dependent on local wages for income		
Service Economy (Wal-Mart, Rappahanock General Hospital) mixed with New Agriculture (Ingleside Winery) and Tourism, plus increasing presence of small businesses and self employed.	Extraction Economy (Forestry, Fish Processing, Corn and Soybean Farming)	Shift in land value where housing development makes good financial sense.
High home purchasing power	Moderate to low home purchasing power	Dual housing market: one for locals and one for in movers

Of course these are meta trends generally true across the Northern Neck. On closer examination, Northumberland has grown while Lancaster has not. Warsaw and Colonial Beach have grown while Irvington and Kilmarnock have not. Between these finer grained truths is a larger issue: the state of Virginia has grown while the Northern Neck has not, in population and income, creating the powerful differential that results in Come Here's being more economically valuable to the Northern Neck than Been Here's, the consequence of which is that the local population of workers are the households that have been and will continue to struggle to compete for housing they can afford.

	Median HH Income (2008)	Average Sale Price (2005-2008)	Ratio	Maximum Affordable	Affordability Gap
Lancaster	$41,886	$462,990	11.05	$117,281	$345,709
Northumberland	$47,713	$392,600	8.23	$133,596	$259,003
Westmoreland	$44,591	$280,292	6.29	$124,855	$155,437
Richmond	$42,224	$223,438	5.29	$118,227	$105,211
Source: Multiple Listing Service and ESRI					

These factors create, in effect, two housing markets, the one that local residents utilizing local wages can compete for, and the one that retirees, seasonal buyers, and commuters using non-local wages compete for. These two markets largely (but not exclusively) split out as waterfront property and non-waterfront property, where sales values diverge significantly.

		Lancaster	Northumberland	Westmoreland	Richmond
Value Waterfront (05-08)	Non-Local	$718,091	$559,068	$476,103	$436,943
Value Non-Waterfront (05-08)	Local	$226,330	$166,771	$204,765	$198,221
Median Income (ESRI)		$41,886	$47,713	$44,591	$42,224
Ratio Income - Non Waterfront		5.40	3.50	4.59	4.69
Maximum Affordable		$117,281	$133,596	$124,855	$118,227
Gap to Non-Waterfront		$109,049	$33,174	$79,910	$79,994
Source: Multiple Listing Service					

For a family with incomes generated locally, which have risen across the Northern Neck by 24.4% from 2000-2008, the housing market overall becomes very difficult to penetrate in ways not evident in 2008. This problem becomes especially pronounced in some counties where jobs/HH ratios are extremely low for local residents (for example, local workers in Northumberland County have .59 jobs/HH).

	2000	2008	Change
Median Income Northern Neck	$35,629	$44,332	24.43%
Median Value Northern Neck	$97,968	$188,943	92.86%
Ratio	2.75	4.26	
Purchasing Power	$99,761	$124,130	
Affordability Gap	$1,793	-$64,813	
Additional Income Needed	NA	$23,147	
Source: Census Bureau and ESRI			

In 2000 median incomes (blending local and non-local) were sufficient to compete for median-valued housing with room to spare. By 2008, non-local demand had so impacted values that previous affordability was completely erased. The policy implications are clearly economic development in nature.

As the Northern Neck falls further behind the rest of Virginia in wage levels, external demand will continue to exploit the housing market, obtaining good retirement and second home options. As the Northern Neck continues to age in comparison to the rest of Virginia (median age projected by ESRI for 2008 will be 48.6), the market will default to serving the housing demands of older households more than to those of working younger families. For low and moderate wage workers, housing options will become scarcer in direct proportion to the degree to which Northern Virginia and other external markets remain healthy and strong or recover from current housing and credit challenges.

Contours of the Northern Neck Housing Market

Being both a rural peninsula separated from surrounding markets by major waterways, and a coastal community of waterfront property, plus being both distant from and near the major markets of Washington, DC and Richmond, the housing market of the Northern Neck is, in actuality, a series of several, intermixed two-sided markets. In effect, it is true that there are *Northern Neck-wide* <u>generalities</u>, and limits to those general rules of thumb. For example, waterfront property is more valuable across the Northern Neck than non-waterfront property. And Northumberland (58%) has more waterfront property as a percentage of sales than the other three Northern Neck counties. But the highest waterfront values are in Lancaster. The mixing of numerous "truths", in our view, generates several ways to understand the Northern Neck as a region. Examples of the various markets we identified:

1. Local-non
2. Black-white
3. Waterfront-non
4. Coastal-non
5. Far from I-95, close
6. Rappahannock orientation - Potomac
7. Retiree-non
8. HHs w income < $50,000 - above

These two-side markets come together to generate a large number of permutations. Chief among them is that waterfront property is far more expensive than property with no water frontage. **The net of these permutations largely boils down to a single housing market with two sides: the market for homes desired and bought by and sold to locals, and the market for homes desired and bought by and sold to non-locals.**

As wages and household incomes for non-locals are far higher than for local residents and households, the purchasing power for non-residents is far higher. As the appetite for homes by non-residents is aimed at coastal property first and waterfront property second, these properties have higher market values. The market values of waterfront property reflect the purchasing power of the owners of waterfront property. With some exceptions for highly paid full time residents or long time residents able to obtain property before recent price escalation, the waterfront is where seasonal buyers locate. The implication is that there are, in reality, two challenges facing the Northern Neck with respect to housing. The first is a housing affordability challenge for locals (especially residents with incomes below 80% of median in Lancaster and Northumberland counties where a high percentage of sales are on high value waterfrontage). The second is an economic development challenge given the low wages that predominate across the Northern Neck. The bottom line is if you live on the Northern Neck and your household derives its wages through employment on the Northern Neck, you lack the earning power to compete for housing which has been driven up in price by buyers (retirees, second home owners, and speculators) largely fueled by non-local wages and home equity.

	LANCASTER	NORTHUMBERLAND	RICHMOND	WESTMORELAND	Average NN	Total NN	Year/Date/Source
POPULATION 2000	11,587	12,260	8,789	16,693		49,329	Census Population Estimates
POPULATION 2001	11,417	12,326	8,872	16,587		49,202	Census Population Estimates
POPULATION 2002	11,431	12,595	8,930	16,620		49,576	Census Population Estimates
POPULATION 2003	11,507	12,738	8,994	16,825		50,064	Census Population Estimates
POPULATION 2004	11,472	12,740	9,059	16,782		50,053	Census Population Estimates
POPULATION 2005	11,470	12,806	9,035	16,892		50,203	Census Population Estimates
POPULATION 2006	11,506	12,809	9,125	16,982		50,422	Census Population Estimates
POPULATION 2007	11,532	12,897	9,171	17,252		50,852	Census Population Estimates
POPULATION CHANGE 2000-2007	-55	637	382	559		1,523	CZB
% POPULATION CHANGE 2000-2007	-0.5%	5.2%	4.3%	3.3%		3.1%	CZB
RACE/ETHNICITY							
Black	29%	27%	33%	32%		30%	2000 Census
Non-Hispanic White	69%	72%	63%	64%		67%	2000 Census
Hispanic	1%	0%	3%	3%		2%	2000 Census
POVERTY RATE	12.5%	12.3%	15.4%	14.7%		13.7%	2000 Census
AVERAGE WAGE	$28,977	$27,456	$26,349	$21,905		$26,510	2006 County Business Patterns
MEDIAN HH INCOME	$33,239	$38,129	$33,026	$35,797	$35,048		2000 Census
JOBS	3,720	2,131	1,811	2,398		10,060	2000 County Business Patterns
JOBS/HH	0.74	0.39	0.62	0.35		0.50	2000 Census/2000 County Business Patterns
HHs	5,004	5,470	2,937	6,846		20,257	2000 Census
HH Size	2.23	2.24	2.40	2.43		2.32	2000 Census
JOBS	4,341	2,577	1,778	2,792		11,488	2006 County Business Patterns
JOBS/HH (Estimate)	0.87	0.45	0.58	0.40		0.55	CZB/2006 County Business Patterns
HHs (Estimate)	4,989	5,755	3,058	7,065		20,872	CZB
House Value Average	$189,413	$161,535	$108,872	$118,384		$148,180	2000 Census
House Value Median	$131,600	$129,100	$86,700	$95,300	$110,675		2000 Census
Ratio HH Income - House Value (Median)	3.96	3.39	2.63	2.66	3.16		2000 Census
Average Sale Price	$462,990	$392,600	$223,438	$280,292	$339,830		MLS (2005-2008)
Value Waterfront	$718,091	$559,068	$436,943	$476,103		$591,493	MLS (2005-2008)/CZB
Value Non-Waterfront	$226,330	$166,771	$198,221	$204,765		$199,415	MLS (2005-2008)/CZB
South of Route 3						$344,973	MLS (2005-2008)/CZB
North of Route 3						$375,458	MLS (2005-2008)/CZB
Interior						$232,189	MLS (2005-2008)/CZB
Coastal						$384,537	MLS (2005-2008)/CZB
Value Town Locales						$369,621	MLS (2005-2008)/CZB
Value Rural Locales						$346,621	MLS (2005-2008)/CZB
% Homes Pre 1939	16%	16%	15%	13%		15%	2000 Census
% Homes Post 1990	18%	26%	19%	17%		20%	2000 Census
Avg Permit - Single-family Unit	$189,372	$159,959	$205,678	$198,190		$185,522	2007 Building Permits (Census)
Avg Permit - All Units	$187,330	$159,959	$205,678	$198,190		$185,162	2007 Building Permits (Census)
Low Portion of Households with Retirement Income	$322,078	$222,849	$233,205	$250,258		$251,556	MLS (2005-2008)/CZB
High Portion of Households with Retirement Incom	$495,172	$426,059	$223,357	$333,336		$431,747	MLS (2005-2008)/CZB
# Units Owner Occupied	4,152	4,783	2,268	5,425		16,628	2000 Census
# Units Renter Occupied	852	687	669	1,421		3,629	2000 Census
# Units Seasonal	1,052	1,877	288	1,693		4,910	2000 Census
Total	6,056	7,347	3,225	8,539			
Pct Seasonal	17.37%	25.55%	8.93%	19.83%			
# Minus Seasonal	5,004	5,470	2,937	6,846		20,257	

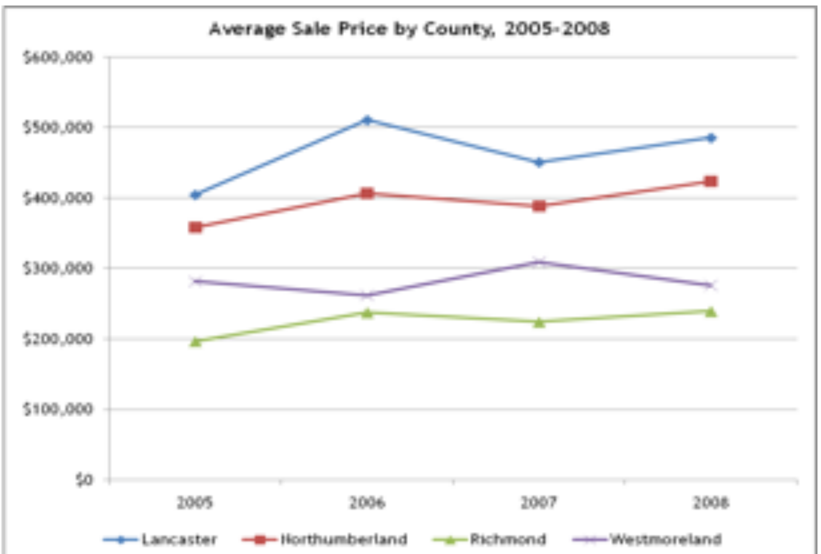
The above table illustrates some of the contours of the various kinds of submarkets that range across the Northern Neck. Different sources are used at different times; in the above chart the most reliable source for the comparison was used.

Census and MLS data indicate that certain attributes are driving/defining the Northern Neck housing market. These include location (proximity to external markets; water frontage), area demographics and socioeconomic characteristics.

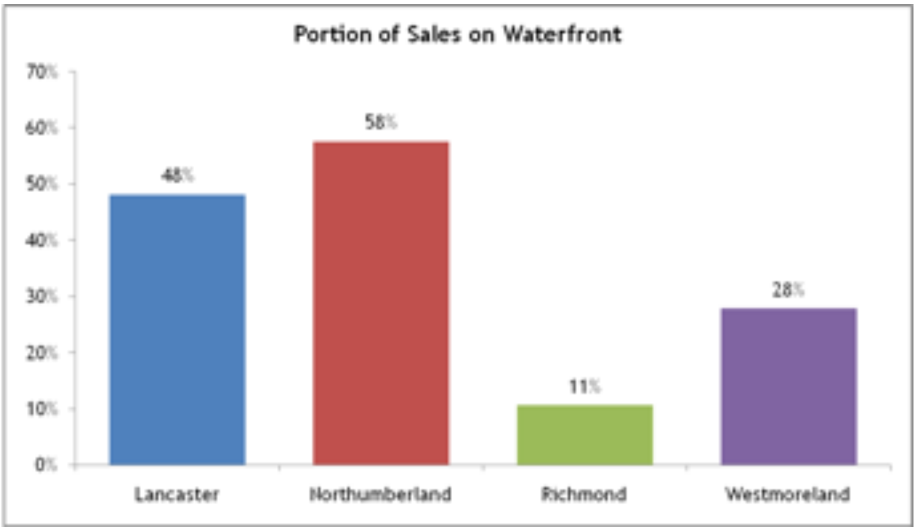
The average sale price of properties sold between May 2005 and early November 2008 differed by County. Over the entire period, prices were highest in Lancaster and Northumberland Counties ($462,990 and $392,600, respectively) and substantially lower in Richmond and Westmoreland Counties ($223,438 and $280,292, respectively).

Location	Average Sale Price
Lancaster	$462,990
Northumberland	$392,600
Richmond	$223,438
Westmoreland	$280,292

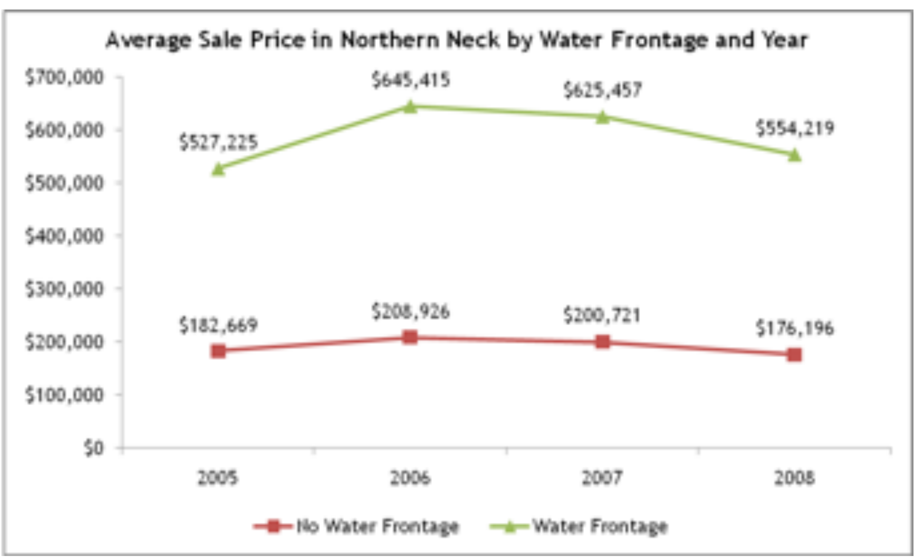
Over the entire time period, the average sale price varied most in Lancaster County (rising more than $100,000 between 2005 and 2006) and varied least in Richmond County (increasing by just $40,000 between 2005 and 2008).



These discrepancies are likely driven by the portion of for-sale properties with water frontage: In Northumberland County, over half (58%) of sales were waterfront properties, and this was the case with nearly half (48%) of all Lancaster County sales. In contrast, just one in four (28%) Westmoreland County sales and one in ten (11%) Richmond County sales had water frontage.



Between 2005 and 2008, the price of waterfront property was typically three times that of non-waterfront property. And between 2005 and 2006, the average price of waterfront sales increased 22% while the average price of properties not along water rose by just 14%; over the entire period (comparing 2008 to 2005 figures), waterfront properties increased 5% in value while non-waterfront properties' average sale price actually decreased by 4%.



Other influences <u>critical</u> to understanding the Northern Neck:

Places with well-below-average percentages of African-American residents (less than 10%) had an average sale price over $500,000; places with above average percentages of African-American residents (more than one-third) had an average sale price of $276,323.

Cluster Score	% African-American			# of Sales	Average Sale Price
2	3.3%	to	9.9%	231	$516,937
3	10.2%	to	24.0%	417	$334,540
4-5	32.5%	to	65.5%	311	$276,323

Places with below-average percentages of households earning less than $50,000 in 1999 (50% to 62% of all households) had an average sale price $468,942; places with above average percentages of households earning less than $50,000 (66% to 76%) had an average sale price of just $277,935.

Cluster Score	% of Households with Incomes < $50,000			# of Sales	Average Sale Price
2-3	50.6%	to	61.8%	410	$468,942
4-5	65.7%	to	76.2%	549	$277,935

Places with below-average percentages of households receiving retirement income (14% to 26%) had an average sale price of just $250,000; places with above-average percentages of households receiving retirement income (27% to 40%) had an average sale price of roughly $430,000.

Cluster Score	% of Households with Retirement Income			# of Sales	Average Sale Price
2-3	13.7%	to	26.3%	384	$251,556
4-5	27.3%	to	39.5%	575	$431,747

Crosstabbing multiple influences: The presence of African-American residents was only correlated with sale prices in Lancaster and Northumberland Counties; the presence of moderate-income households and households with retirement income appeared correlated with sale prices area-wide.

In Lancaster and Northumberland Counties (combined), the average sale price in places with well-below-average percentages of African-American residents is nearly double that in places with above-average percentages of African-American residents. In Richmond and Westmoreland Counties (combined), the average sale price is nearly identical in places with above- and below-average percentages of African-American residents.

Location	Cluster Score (Summary)	% African-American			# of Sales	Average Sale Price
Lancaster-Northumberland	2	3.3%	to	9.9%	231	$516,937
Lancaster-Northumberland	3	10.2%	to	16.9%	234	$399,552
Lancaster-Northumberland	4-5	32.5%	to	65.5%	141	$262,259
Richmond-Westmoreland	3	17.6%	to	24.0%	183	$251,411
Richmond-Westmoreland	4-5	32.5%	to	51.3%	170	$287,988

The average sale price in places with above-average percentages of households with incomes below $50,000 was just 63% of that in places with below-average percentages of households with incomes below $50,000 in Lancaster and Northumberland Counties (combined) and 69% of that in places with below-average percentages of households with incomes below $50,000 in Richmond and Westmoreland Counties (combined).

Location	Cluster Score (Summary)	% of Households with Incomes < $50,000			# of Sales	Average Sale Price
Lancaster-Northumberland	2-3	50.6%	to	60.8%	403	$470,389
Lancaster-Northumberland	4-5	67.3%	to	76.1%	203	$297,139
Richmond-Westmoreland	2-3	61.8%	to	61.8%	7	$385,600
Richmond-Westmoreland	4-5	65.7%	to	76.2%	346	$266,667

The average sale price in places with below-average percentages of households with retirement income was just 57% of that in places with below-average percentages of households with retirement income in Lancaster and Northumberland Counties (combined) and 76% of that in places with below-average percentages of households with retirement income in Richmond and Westmoreland Counties (combined).

Location	Cluster Score (Summary)	% of Households with Retirement Income	# of Sales	Average Sale Price
Lancaster-Northumberland	2-3	18.1% to 26.3%	141	$262,259
Lancaster-Northumberland	4-5	31.0% to 39.5%	465	$457,866
Richmond-Westmoreland	2-3	13.7% to 26.1%	243	$245,345
Richmond-Westmoreland	4-5	27.3% to 28.6%	110	$321,338

While the average sale price varied by more than $100,000 for waterfront properties in places with well-below versus above-average percentages of African-American residents ($697,641 vs. $542,636), the average sale price differed by just $33,000 for sales without water frontage; though this may not be a pure racial discount at play.

Water Frontage	Cluster Score (Black)	% African-American	# of Sales	Average Sale Price
No	2	3.3% to 9.9%	86	$212,261
	3	10.2% to 24.0%	246	$205,388
	4-5	32.5% to 65.5%	226	$179,061
Yes	2	3.3% to 9.9%	145	$697,641
	3	10.2% to 24.0%	170	$521,120
	4-5	32.5% to 65.5%	83	$542,636

While the average sale price varied by more than $130,000 for waterfront properties in places with below versus above-average moderate-income households ($640,884 vs. $506,548), the average sale price differed by just $16,000 for sales without water frontage.

Water Frontage	Cluster Score (Income)	% of Households with Incomes < $50,000	# of Sales	Average Sale Price
No	2-3	50.6% to 61.8%	162	$207,285
	4-5	65.7% to 76.2%	396	$191,080
Yes	2-3	50.6% to 61.8%	247	$640,884
	4-5	65.7% to 76.2%	151	$506,548

While the average sale price varied by more than $100,000 for waterfront properties in places with below versus above-average portions of retirees ($607,330 vs. $506,893), the average sale price was nearly identical for sales without water frontage.

Water Frontage	Cluster Score (Retirement)	% of Households with Retirement Income	# of Sales	Average Sale Price
No	2-3	13.7% to 26.3%	315	$195,625
	4-5	27.3% to 39.5%	243	$195,991
Yes	2-3	18.1% to 26.3%	69	$506,893
	4-5	27.3% to 39.5%	329	$607,330

The average sale price was highest in places with an above-average percentage of retirees (where at least roughly one-third of households received retirement income) and a well-below-average percentage of African-American residents. The next highest average sale price was in places with an above-average percentage of retirees and below-average percentage of African American residents. Sales in places with an above-average percentages of households receiving retirement income and African Households averaged higher prices than those in places with below-average percentages of retirees (regardless of their African-American population).

Cluster Score (Retirement)	% of Households with Retirement Income	Cluster Score (Black)	% African-American	# of Sales	Average Sale Price
2-3	19.3% to 25.9%	3	18.6% to 24.0%	171	$253,379
2-3	13.7% to 26.3%	4-5	32.5% to 65.5%	213	$250,092
4-5	31.4% to 39.5%	2	3.3% to 9.9%	231	$516,937
4-5	27.3% to 39.0%	3	10.2% to 17.6%	246	$390,957
4-5	28.6% to 28.6%	4-5	47.8% to 47.8%	98	$333,336

The average sale price was highest in places with an above-average percentage of retirees (where at least roughly one-third of households received retirement income) and a below-average percentage of moderate-income households. The next highest average sale price was in places with a below-average percentage of retirees and below-average percentage of moderate-income households. Sales in places with a below-average percentages of households receiving retirement income and above-average percentage of moderate-income households averaged the lowest prices.

Cluster Score (Retirement)	% of Households with Retirement Income	Cluster Score (Income)	% of Households with Incomes < $50,000	# of Sales	Average Sale Price
2-3	19.5% to 19.5%	2-3	61.8% to 61.8%	7	$385,600
2-3	13.7% to 26.3%	4-5	65.7% to 76.1%	377	$249,067
4-5	31.0% to 39.5%	2-3	50.6% to 60.8%	403	$470,389
4-5	27.3% to 31.8%	4-5	67.2% to 76.2%	172	$341,209

The data clearly establish that Northern Neck housing markets are not just distinguishable by such two sided stories as waterfront-non waterfront, and interior coastal (place-based distinctions), but that race is a powerful element in these distinctions as well.

The data also show that while certain generalities hold true across several sprectra, they are not universally true. For example Lancaster has the highest property values and fastest rate of gain in values from 2003-2005. And these in turn drive Lancaster's net income gains. One storyline is that Lancaster is doing well. This would not be untrue. But another is that Lancaster, while creating jobs, is creating service-sector jobs (of which a large number are under-the-table jobs for people with limited skills who are paid to take care of an increasingly older retiree population) which do not pay wages sufficient to to acquire housing in the county. As long as housing remains comparatively affordable in Richmond, Lancaster can continue to rely on service sector wages to facilitate its retirement housing trends. In the short run this is not an unworkable strategy. Over time, it places Lancaster County at a potential competitive disadvantage if higher wages don't materialize.

Market	Description	High	Med-High	Med-Low	Low	Notes
Social	Socio Economic Strength	Northumberland	Lancaster	Westmoreland	Richmond	Overall the counties have 1/6 to 1/7 HHs that are poor. By 2007 Richmond County had poverty rates of 17-18% Across the NN poverty rates were 25% higher than the state's.
Housing	Housing Market Strength	Lancaster	Northumberland	Westmoreland	Richmond	Overall product scarcity and cost relative to what consumers have wanted create a strong market in 3/4 of the NN
Wealth	Wealth Gap	Lancaster	Northumberland	Westmoreland	Richmond	Local HHs dependent on local wages are struggling to afford housing that has risen in value by virtue of external demand (retirees and seasonal buyers)
Construction	New Construction Demand	Northumberland	Lancaster	Westmoreland	Richmond	Permitting closer to the Chesapeake remains indicative of power of location on NN
Waterfront	Waterfront Value	Lancaster	Northumberland	Westmoreland	Richmond	The Chesapeake remains the valuable marketable commodity moreso than riverfront
Inland	Inland Value	Lancaster	Westmoreland	Richmond	Northumberland	Northumberland has little capacity to attract weekenders except on waterfront basis; Lancaster is attracting retirees whether on waterfront or not
Cost Gap	Affordability Problem	Lancaster	Northumberland	Westmoreland	Richmond	Retirees driving the housing market
Population	Population Growth	Northumberland	Richmond	Westmoreland	Lancaster	Retirement destination coupled with growing demand for services to support retirement population
In-Movers	Positive Net In-Migration Income	Lancaster	Northumberland	Richmond	Westmoreland	Lancaster and Northumberland are trading low income HHs for high incomes HHs at far greater levels than Westmoreland and Richmond; most coming from out of state.
Seasonals	Seasonal Percentage	Northumberland	Westmoreland	Lancaster	Richmond	Weekenders from DC go to Westmoreland and Northumberland, while retirees go to Lancaster firs and Northumberland Second
Wealthy	Wealthy Retiree	Lancaster	Northumberland	Westmoreland	Richmond	Chesapeake counties have the greatest attraction for strong HHs
Nonwealthy	Non-Wealthy Retiree	Lancaster	Westmoreland	Richmond	Northumberland	Neither Lancaster nor Westmoreland is a destination for blue collar retirees from outside the area, owing to cost, as Northumberland is. Yet even in Northumberland, non WF property is unattractive to moderate income/weath retirees.
Income	HH Income	Westmoreland	Northumberland	Lancaster	Richmond	Ratifies Lancaster as destination for passive income retirees, and Westmoreland and Northumberland as accessible by commuters and seasonal residents with access to NoVa/DC wages
Wages	Per Capita Income	Lancaster	Northumberland	Westmoreland	Richmond	This illustrates that small HH size in Lancaster and Northumberland (owing to retirees) is qiute different than Westmoreland and Richmond where more residents have 2+ jobs/HH
Employment	Jobs	Lancaster	Westmoreland	Northumberland	Richmond	Lancaster is where people come to work. But workers do not live in Lancaster; they tend to live in Richmond and Northumberland.
New	Creative Class	Northumberland	Westmoreland	Lancaster	Richmond	Influence of NoVa/DC Market
Old	Extraction Economy	Westmoreland	Northumberland	Lancaster	Richmond	Forestry and Fishing as local wage base
Support	Service Economc	Lancaster	Northumberland	Westmoreland	Richmond	Big Box and small town retail
Public	Government Employment	Richmond	Westmoreland	Northumberland	Lancaster	Possible engine for higher wages

Overall, the dominant storyline is the strong combined value of Lancaster and Northumberland as coastal destinations, combined with the dual storylines of local versus nonlocal housing demand and purchasing power and waterfront versus non-waterfront property.

Demand Analysis
Housing Supply Characteristics

Housing Stock

The Census Bureau estimates a total housing stock in the Northern Neck in 2007 of 30,759 units, an increase of 3,406 units since the year 2000. This equates to nearly 490 units per year, a significant jump from the 304 units per year added between 1990 and 2000. Given the cyclical nature of housing construction and the current recession, the housing supply is not expected to increase significantly before 2010.

Housing Supply, 1990-2007			
	1990	2000	2007
Northern Neck	24,316	27,353	30,759
Lancaster	5,918	6,498	7,207
Northumberland	6,841	8,057	9,273
Richmond Co	3,179	3,512	3,770
Westmoreland	8,378	9,286	10,509
Source: Census Bureau			

The housing stock overwhelmingly consists of single-family homes, which account for 80% to 88% of total units. Mobile homes are the next largest type of housing (between 9% and 13%). There were only 537 multi-family housing units recorded in the 2000 Census in the Northern Neck, with the largest supply in Westmoreland (229 units) and then Richmond County (137 units).

Units in Structure, 2000					
	Single-family	2-4 units	5+ units	Mobile Home	Other
Northern Neck	85.8%	1.8%	1.3%	10.8%	0.3%
Lancaster	87.7%	1.6%	1.6%	8.9%	0.2%
Northumberland	86.8%	0.7%	0.4%	11.7%	0.4%
Richmond Co.	80.3%	4.1%	2.3%	12.8%	0.5%
Westmoreland	85.7%	2.1%	1.4%	10.7%	0.2%
Source: Census Bureau					

In 2000, over one-fourth (25.9%) of the total housing stock in the Northern Neck was classified as vacant, most of which (about 24% of the total) would have been seasonal and second homes. This proportion of seasonal and second homes to the total housing stock was stable between 1990 and 2000. The 2007 ACS data indicates that the proportion of seasonal and second homes has not changed since 2000.

About one-in-five units counted in the 2000 Census was built between 1990 and 2000 and 23% were built before 1950. The remaining stock was fairly evenly distributed across the intervening decades with some bias toward units built during the 1970s and 1980s.

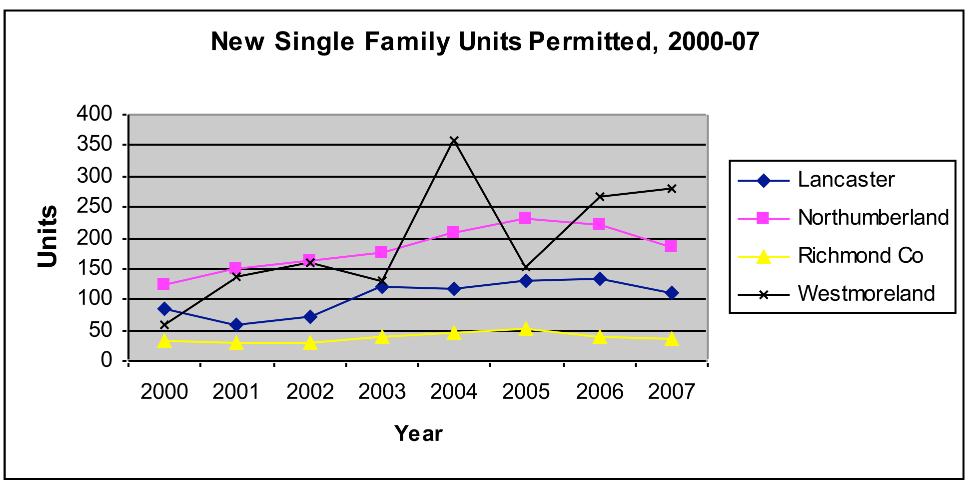
The percent of the stock that was vacant in 2000 did not appear to be associated with the age of the structure. However, vacant units in the newer housing stock more likely could be second homes, while more of the older units could be vacant due to the condition of the unit.

Building Permits for New Residential Units

There were 4,254 new residential units issued building permits in the Northern Neck from 2000 through 2007. This would represent a 15% increase in the total housing stock without any losses or conversions of units to non-residential use. Until the recent housing market crash, housing production was on par to add about one-fifth of the overall stock as units built during the decade. Multi-family production is sporadic from year to year and only adds a few units periodically.

New Residential Units Permitted, 2000-07			
	Single-family	Multi-family	Total
Lancaster	824	44	868
Northumberland	1458	0	1458
Richmond Co	304	25	329
Westmoreland	1543	56	1599
Northern Neck	4129	125	4254

Northumberland and Westmoreland had the most single-family housing construction from 2000 through 2007. Housing construction spiked in 2004 due to 358 units in Westmoreland, but the general pattern was for a cyclical peak in 2005-2006. Housing construction slowed in 2007. Subsequently the housing market has gone into a deep recession nationally, with very few units produced in 2008.



Vacancy Rates

The available evidence indicates that aside from the large number of seasonal and second homes in the area, the housing market has been very tight with relatively few vacant units to be found. In general, vacancy rates below 5%, or even somewhat higher for rental units, indicate that housing is relatively scarce relative to demand. The vacancy rate in the Northern Neck (excluding seasonal vacant and other vacant units that not for sale or for rent) was around 2% for owner units and 3-7% for renter units in 2000. Although the most recent vacancy rate data for these localities is from the 2000 Census, the 2007 ACS data for the larger PUMA area indicates that the owner rate was probably steady until then and the renter rate likely declined. The recent housing market crash, credit crisis and economic recession have added a lot of uncertainty to the housing market, but there are not data to measure the impact on local vacancies.

Vacancy Rates, 2000		
	Renter	Owner
Lancaster	6.7%	1.8%
Northumberland	3.0%	2.7%
Richmond Co	3.2%	1.4%
Westmoreland	4.1%	3.2%
PUMA 2000	5.2%	2.0%
PUMA 2007	4.6%	2.3%

Source: US Census 2000 and 2000 and 2007 PUMS

Housing Values and Rents

Housing Units by Value 2008

	Lancaster	Northumberland	Richmond	Westmoreland	Region
< $10,000	1.0%	1.2%	1.1%	2.0%	1.4%
$10K – 14,999K	0.9%	1.0%	0.6%	1.0%	0.9%
$15K - $19,999	0.5%	0.4%	0.5%	0.9%	0.6%
$20K - $24,999	0.8%	0.8%	0.6%	0.3%	0.6%
$25K - $29,999	0.6%	0.7%	0.6%	0.2%	0.5%
$30K - $34,999	0.6%	0.4%	0.7%	0.9%	0.7%
$35K - $39,999	0.5%	0.4%	0.8%	1.0%	0.7%
$40K - $49,999	1.3%	1.2%	1.2%	1.1%	1.2%
$50K - $59,999	3.0%	1.9%	1.9%	1.3%	2.0%
$60K - $69,999	2.3%	1.8%	2.6%	1.4%	1.9%
$70K - $79,999	2.4%	1.6%	1.2%	1.3%	1.6%
$80K - $89,999	3.2%	2.6%	2.8%	1.7%	2.5%
$90K - $99,999	2.6%	2.5%	3.2%	1.6%	2.3%
$100K - $124,999	6.8%	8.1%	10.0%	8.4%	8.1%
$125K - $149,999	7.3%	9.5%	9.9%	10.6%	9.4%
$150K - $174,999	10.0%	7.3%	13.9%	13.7%	10.9%
$175K - $199,999	5.5%	6.8%	11.6%	11.4%	8.6%
$200K - $249,999	6.6%	7.1%	9.5%	13.3%	9.3%
$250K - $299,999	8.1%	8.7%	7.5%	7.8%	8.1%
$300K - $399,999	9.1%	9.8%	10.0%	10.1%	9.8%
$400K - $499,999	6.4%	8.8%	3.6%	3.7%	5.9%
$500K - $749,999	10.0%	12.1%	3.4%	4.6%	8.0%
$750K - $999,999	5.0%	2.5%	1.9%	1.1%	2.6%
$1,000,000+	5.4%	2.9%	0.9%	0.7%	2.5%
Median Value	$204,948	$213,997	$172,121	$181,061	$188,943

Source: ESRI Business Analyst

Just 34 percent of homes in the region are affordable for a median family income. The prices in Northumberland and Lancaster Counties are likely elevated due to the premium paid for waterfront homesites. Westmoreland has some of this influence; however, it also has a higher percentage of mobile homes and multi family homes than do Lancaster and Westmoreland. Richmond has the least waterfront, smallest population, and least growth (which is reflected in its housing prices).

HUD Fair Market Rent FY 2009

	Lancaster	Northumberland	Richmond	Westmoreland	Region Avg.
Efficiency	$448	$448	$448	$453	$449.25
1 Bdr	$551	$551	$551	$552	$551.25
2 Bdr	$671	$671	$671	$697	$677.50
3 Bdr	$825	$817	$817	$956	$853.75
4 Bdr	$888	$888	$888	$985	$912.25

Source: US Department of Housing and Urban Development

Another indicator of housing affordability is the percentage of income spent on housing. Typically, no more than 30 percent of gross income should be spent on housing. Those over 30 percent are considered cost burdened. <u>Given these rental averages, most households can afford the average rent in the region.</u> Single income families, or single individuals may struggle though. Unfortunately, the most recent data available is 2000 Census. Given the rising cost of housing (92.9% 2000-2008 ESRI) compared to income (24.4% ESRI), even more families have become cost burdened.

Monthly Owner Costs as Percentage of Household Income (1999 Data)

	Lancaster	Northumberland	Richmond	Westmoreland
< 15%	41.8%	48.7%	43.9%	43.3%
15% - 19%	15.1%	12.9%	16.7%	14.2%
20% - 24%	11.4%	8.5%	9.1%	10.7%
25% - 29%	7.7%	5.7%	10.2%	5.8%
Cost Burdened				
30% - 34%	6.0%	5.2%	3.3%	6.4%
> 35%	16.9%	18.5%	13.2%	17.7%
Not Computed	1.1%	0.5%	3.6%	1.7%

Monthly Rent as Percentage of Household Income (1999 Data)

	Lancaster	Northumberland	Richmond	Westmoreland
< 15%	19.6%	24.8%	13.9%	23.9%
15% - 19%	9.4%	12.9%	15.9%	9.8%
20% - 24%	10.3%	7.1%	11.6%	10.1%
25% - 29%	10.4%	5.0%	4.2%	5.9%
Cost Burdened				
30% - 34%	5.7%	4.6%	7.5%	5.5%
> 35%	17.6%	17.5%	17.6%	26.0%
Not Computed	27.1%	28.1%	29.3%	18.9%

Source: 2000 US Census

Income and Poverty

Median incomes in the Northern Neck were significantly below those for the state as a whole as reported in the 2000 Census (for 1999 incomes). Household and family median incomes were highest in Northumberland ($38,100 to $49,000), with the medians elsewhere from $33,000 to $36,000 for households and from $41,000 to 43,000 for families. (The household median includes persons living alone, roommates and unmarried couples without children.)

Median Incomes in 1999		
	Household	Family
Lancaster	$33,239	$42,957
Northumberland	$38,129	$49,047
Richmond Co	$33,026	$42,143
Westmoreland	$35,797	$41,357
Virginia	$46,677	$54,169
Source: US Census 2000		

More recent estimates of household incomes for 2007 produced by the Census Bureau are much higher, possibly indicating that the income impacts of migration have boosted median incomes. These estimates identify Westmoreland with the highest median, followed by Northumberland; our qualitative research confirms this, given the frequency of vanpool and ride share commuters from Westmoreland, and second home purchases north of Rt 360 and Rt 202 in Northumberland. Richmond County remains well below their levels.

Median Household Income, 2000 and 2007		
	2000	2007
Lancaster	$35,113	$42,392
Northumberland	$37,562	$45,085
Richmond Co	$33,188	$40,196
Westmoreland	$35,725	$47,823
Virginia	$46,789	$59,575

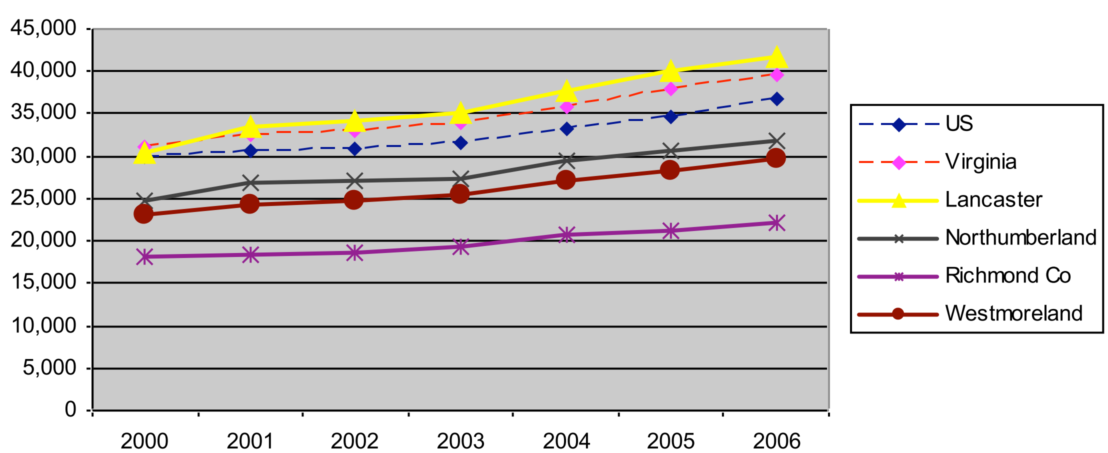
Source: Census Bureau, SAIP estimates

The per capita income estimates of the Bureau of Economic Analysis (BEA) suggested significantly higher incomes particularly in Lancaster. Based on the BEA's most recent estimates, Lancaster County not only had the highest per capita income at $39,540 in 2006 within the Northern Neck, it is the only area with a per capita income higher than either the state or national averages (see table below).

Between 2000 and 2006, per capita income in Lancaster increased by 37.3%, significantly greater than the 23.1% and 27.2% increases posted by the nation and state. Although incomes in Northumberland and Westmoreland increased slightly faster than the state average, they had per capita incomes in 2006 ($31,914 and $29,673) about a quarter lower than Lancaster's level. Richmond County fell further behind the rest of the Northern Neck and the state, although its pace of income growth was almost on par with the nation.

Per Capita Incomes, 2000-2006			
	2000	2006	% Chg
US	29,847	36,744	23.1%
Virginia	31,083	39,540	27.2%
Lancaster	30,377	41,695	37.3%
Northumberland	24,641	31,914	29.5%
Richmond Co	18,084	22,224	22.9%
Westmoreland	23,126	29,673	28.3%
Source: Bureau of Economic Analysis			

Figure x: Per Capita Income, 2000-2006



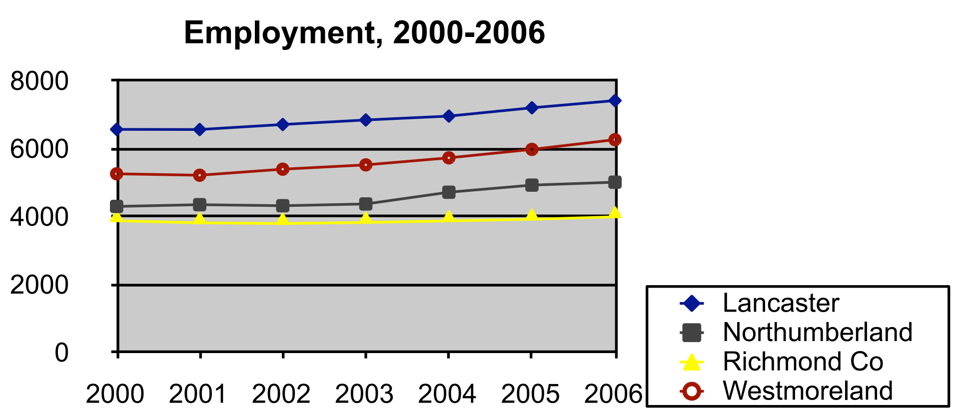
Despite increases in incomes overall and the higher incomes of in-migrants, poverty is both high and persistent in the area.

Poverty rates exceed the state average by 2.5 to 8.8 percentage points. Poverty is particularly high in Richmond County, with nearly 18% of the population below the poverty level in 2007. Poverty is even higher among children, with one-in-five to one-in-four children under 18 years in poverty in each locality.

Percent of Persons Below Poverty 2000 and 2007		
	2000	2007
Lancaster	12.9%	12.9%
Northumberland	11.8%	13.6%
Richmond Co	15.7%	17.7%
Westmoreland	13.4%	12.4%
Virginia	8.9%	9.9%
Source: Census Bureau, SAIP estimates		

Employment

Employment in the Northern Neck has increased on par with the state as a whole from 2000 to 2006, but Richmond County lagged behind the other three counties. Lancaster has the highest employment by place of work (7,409 in 2006), followed by Westmoreland (6,258) and Northumberland (5,006). Lancaster also has the lowest population per job ratio at 1.6, while Northumberland and Westmoreland have 2.7 people per every job in those counties and Richmond County has 2.3 people per job. This indicates that residents in Lancaster are less likely to need to commute out of the county to find employment than residents in the other three counties, but given high housing costs, the most likely to have to commute to Richmond or Middlesex counties to secure affordable housing.



Relative to Virginia as a whole, employment in the Northern Neck is lower in wage and salary jobs and over concentrated in proprietors' employment.

(For the concentration index on the following page, values greater than 1 indicate a higher concentration of employment relative to the state while values below 1 indicate a lower concentration of employment.)

An over-concentration in proprietors' employment indicates that employment in the area is dominated by small businesses and the self-employed. Although this is particularly the case for farm proprietors, it also involves non-farm proprietors. Reflective of the fishing and agricultural history of the area, farm, forestry and fishing employment are over-represented in the area relative to the state.

In addition to overall underrepresentation of wage and salary employment, underrepresented employment sectors include wholesale trade, information services, finance and insurance, and federal and state government (except for state government employment in Richmond County). Except for Lancaster, local government is over-represented, but not sufficiently so to make up for the underrepresentation of state and federal government employment.

Concentation Index	Lancaster	Northumberland	Richmond Co	Westmoreland	Northern Neck
Wage and salary employment	0.861	0.767	0.928	0.784	0.831
Proprietors employment	1.649	2.092	1.339	2.011	1.792
Farm proprietors employment	1.092	2.741	4.266	2.700	2.459
Nonfarm proprietors employment	1.682	2.054	1.167	1.970	1.753
Farm employment	1.019	2.541	4.831	4.161	2.893
Nonfarm employment	1.000	0.982	0.954	0.962	0.977
Private employment	1.120	1.062	0.866	0.995	1.028
Forestry, fishing, etc	6.657	11.400	5.039	11.540	8.769
Construction	1.467	2.074	1.180	1.420	1.538
Manufacturing	0.397	1.924	0.808	1.635	1.149
Wholesale trade	0.534	0.842	1.077	0.369	0.652
Retail trade	1.126	1.002	0.784	0.983	0.999
Information	0.657	0.445	1.838	0.167	0.683
Finance and insurance	1.265	0.694	0.764	0.738	0.905
Real estate, rental and leasing	1.980	1.825	0.579	1.482	1.562
Government and gov enterprises	0.446	0.614	1.360	0.814	0.746
Federal, civilian	0.170	0.183	0.244	0.288	0.218
Military	0.153	0.256	0.224	0.271	0.221
State and local	0.627	0.865	2.073	1.153	1.079
State government	0.216	0.157	3.974	0.361	0.904
Local government	0.808	1.178	1.232	1.503	1.156

This snapshot of the local economy indicates that outside of farming, fishing and manufacturing (all declining sources of employment), the economy is heavily dependent on local markets (e.g. retail, construction, and real estate) rather than regional or national markets. In effect, the Northern Neck in many ways is a closed system. The area's natural environment remains its best economic asset. However, over concentrations of employment in declining sectors will likely result in slower job growth in the area as these sectors contract. And while growth in proprietors' employment has been strong, these jobs often provide lower incomes than wage and salary employment, except in the case of professionals who consult.

Population Growth and Migration
Population Change, 1990-2007
Between 1990 and 2000, the population of the Northern Neck increased by approximately 5,200 people. Much of this increase was in the institutionalized population due to opening of the correctional facility in Richmond County and to increases in nursing home populations in Lancaster, Richmond and Westmoreland Counties. The total institutionalized population in the Northern Neck in the year 2000 was 2,290, an increase of 1,674 since 1990. Thus the growth in the institutionalized population accounted for one-third of the area's population growth. The non-institutionalized population increased by a modest 8% over the decade (or 0.8% annually).

Population growth has been even slower since 2000. The US Bureau of the Census and University of Virginia's Weldon Cooper Center estimate the population of the Northern Neck for 2007 at 50,852 or 50,959 people (respectively), including 2,514 living in institutions. Thus the annual rate of growth for the non-institutionalized population has decreased by half to 0.4%, an extremely modest amount of growth.

Migration
Net migration (people moving in minus people moving out of a specified geographic area) during the 2000-2007 period has continued but also at a slower pace than the 1990-2000 period. Migration estimates are available from three separate sources: the Census Bureau, the Weldon Cooper Center, and the Internal Revenue Service. The latter only reflects the movement of tax filers, which probably excludes most of the institutionalized population. The available information from all three sources consistently indicates a slower rate of net migration into the Northern Neck for 2000 to 2007 compared with 1990 to 2000, with the reduction ranging from 20% to 30%. However, the pattern is not consistent across the Northern Neck.

All three sources indicate a slowing in annual net migration into Lancaster since 2000, but differ in degree. The Weldon Cooper Center (WCC) estimates a small decrease of 5%, while the Census Bureau (CB) and the IRS data indicate a decrease of 25%. The WCC indicates an <u>increase</u> of 10% in the annual rate of net migration into Northumberland, while the CB and IRS point to decreases of 13% to 15%.

All three sources agree that the rate of net migration into Richmond County has slowed considerably, ranging from -50% (WCC and CB) to -80% (IRS). The institutionalized population in Richmond County likely accounted for most of that area's net in-migration during 1990 to 2000. Adjusting for that impact, the residual net-migration into Richmond County was a modest annual rate of 31 people, which the IRS migration data suggests has been stable since 2000.

The three sources disagree on the pattern of net migration into Westmoreland County. The WCC suggests the annual rate of net in-migration has decreased from 85 people per year to 51 people per year. The CB and IRS data point to an increase in net in-migration to about 120 people per year.

The IRS data file provides additional data on the previous location of movers and their incomes (Adjusted Gross Income reported for taxes). Based on the IRS data, the Northern Neck gained nearly 3,000 people from 1999 to 2007 (exemptions generally reflect number of people) in 1,500 households (using returns as the proxy measure). Most of this net in-migration was from outside of Virginia (42% moved from within Virginia). The Northern Neck gained on average $16,848 in gross income with each net in-migrant (i.e. the incomes of in-migrants exceeded those of out-migrants by this amount), with a gross gain of nearly $237 million.

Cumulative Net Migration, 1999-2007						
	Returns	Exemp-tions	% Virginia	Av AGI In	Av AGI Out	Gross AGI Gain
Northern Neck	1,485	3,027	42.1%	$54,426	$37,577	$236,785,731
Lancaster	423	900	49.2%	$78,158	$42,645	$104,691,948
Northumberland	498	1,037	46.8%	$62,305	$40,178	$78,557,012
Richmond Co	55	243	54.7%	$36,096	$30,247	$11,180,746
Westmoreland	509	847	26.8%	$42,280	$36,361	$42,356,025
Source: IRS migration files						

Net in-migration disproportionately favored Lancaster, Northumberland and Westmoreland Counties.

Lancaster and Northumberland not only gained the largest number of people, they gained even more in terms of gross incomes due to migration. The average tax filer moving into Northumberland and Lancaster had gross incomes from $22,100 to $35,500 higher than the average out-migrant, producing gross gains of $104.7 million and $78.6 million respectively.

A major difference distinguishing migration into the Northern Neck was the difference in the income of in-migrants to each area. The average adjusted gross income for in-migrants to Lancaster was $36,000 higher than for in-migrants to Westmoreland and $42,000 higher than in-migrants to Richmond County. But out-migrants from Westmoreland and Richmond Counties had adjusted gross incomes only $6,000 and $12,000 below the out-mover AGI in Lancaster. As a result of the differences between in-mover incomes, migration produced substantially lower gains in gross incomes in Westmoreland and Richmond Counties than in Lancaster and Northumberland as reported above. Over time this may result in Richmond County being the Northern Neck's de facto affordable housing policy.

The majority of net in-migration to Lancaster and Northumberland came from out of state (however, no out-of-state locality exceeded the IRS threshold of a minimum of 10 returns to be identified). Only Fairfax County had a significant net in-flow to either area between 1999 and 2007, accounting for over 25% of the total net in-migration into Northumberland and over 16% into Lancaster. The only other significant flow was from Westmoreland to Northumberland, accounting for 7% of Northumberland's net in-migration. Tax filers moving from Westmoreland to Northumberland had significantly higher average AGIs ($46,428) than those going in the opposite direction ($26,761).

Our conclusion is that Westmoreland is attracting population from nearby counties in the Washington, DC metropolitan area, apparently in search of more affordable housing. From 1999 to 2007, the major counties with net in-migration to Westmoreland were (in order of migration size) Fairfax, Charles (MD), Stafford, Prince William, and Prince George (MD).

Richmond County had the smallest amount of net in-migration, plus in-migrant AGI ($36,096) was only slightly higher than the AGI of out-migrants ($30, 247). As a result, Richmond only gained $11.2 million in net AGI due to migration from 1999 to 2007. In-migrants to Richmond County from Westmoreland, Northumberland and Lancaster had average AGIs ($32,411, $25,447 and $29,500 respectively) even lower than in-migrants from elsewhere, a further indication that Richmond County helps meet the affordable housing needs not just of the Northern Neck, but possibly of Essex County as well.

Population Projections

The Virginia Employment Commission (VEC) produces the only detailed population projections by age for counties in Virginia (these are considered the official population projections for the state).

Although the VEC does not provide a migration component for its population projections, it is possible to evaluate the VEC's migration assumptions by analyzing changes in population cohorts across ten-year projection periods. The only changes affecting cohorts already alive in the base period (2000) are deaths and migration. For example, the population aged 55 to 64 in Lancaster County in 2010 had to have survived from the population in Lancaster County aged 45 to 54 in 2000 or have moved into Lancaster County between 2000 and 2010. Death rates in the US are fairly stable and remain low through age 55 and increase slowly into the seventies, when mortality starts to have a greater effect. In the aggregate, deaths for any age cohort can be projected with a good degree of accuracy.

Migration, however, is much more difficult to project. Without some significant economic shock or natural disaster, we can anticipate migration to generally follow patterns established over recent years.

Given the importance of understanding migration trends, we conducted a detailed analysis of age cohorts in each of the four counties using the 1990 and 2000 Censuses, the 2005 Weldon Cooper Center population estimates, and the 2010 and 2020 VEC population projections.

This analysis calculated survivor rates for consistent age cohorts spanning 1990-2000 based on the decennial censuses (table follows immediately below), 2000-2005 using the Weldon Cooper Center estimates for 2005 and extrapolated to 2000-2010 (2005 WC Est), and 2000-2010 and 2010-2020 VEC projections.
The survivor rate is the ratio of the population in the ending age category (e.g. 35-44) to the population in the next younger age category ten years before (e.g. 24-34). Changes in survivor rates for the same end-period age category (as shown in Table x) reflect differences in the net-migration assumed for this age group. (Death rates should be very stable and would have only minor impacts on changes between periods.)[1]

For the most part, the survival rates (and hence net migration) implied by the Weldon Cooper Center population estimates are consistent with the trends established between 1990 and 2000 for Lancaster, Northumberland and Westmoreland Counties. Since Richmond County is heavily impacted by its institutionalized population, it is discussed later.

In general, the more recent data suggests stabilization toward survivor rates of 1 (i.e. reductions in net migration). However, the WC estimates indicate some potentially important shifts.

For example, for 35-44 year olds in Lancaster, the WC estimates indicate a shift from net in-migration (of about +20% or more) to net out-migration (greater than -10%), as well as a substantial slowing of the net in-migration of 45-54 year olds.

For Northumberland, the WC estimates indicate a significant increase in net out-migration of 25-34 year olds from a modest loss between 1990 and 2000 to a massive decline of 40% or more. The WC estimates also indicate a significant drop in net in-migration among 35-44 year olds in Northumberland.

The WC estimates also point to an increase in net out-migration from Westmoreland County for adults under age 35, and an end to net in-migration for those aged 35 to 54.

[1] It should be noted that using the CB or IRS data to measure recent migration trends would produce lower projections for Lancaster and Northumberland, but higher projections for Westmoreland.

Survivor Rate Analysis						
	Census	2005 WC Est	VEC Projection		Alternate Projection	
Lancaster	**90-00**	**00-05ten**	**00-10**	**2010-20**	**00-10**	**2010-20**
15-24	0.769	0.787	1.049	1.117	0.775	0.831
25-34	0.813	0.747	1.270	1.124	0.791	0.843
35-44	1.184	0.872	1.306	1.102	1.080	1.060
45-54	1.212	1.043	1.060	1.016	1.156	1.117
55-64	1.434	1.410	0.963	0.989	1.426	1.319
65-74	1.070	1.062	0.885	0.917	1.067	1.051
75+	0.590	0.550	0.501	0.490	0.577	0.577
Northumberland	**90-00**	**00-05ten**	**00-10**	**2010-20**	**00-10**	**2010-20**
15-24	0.828	0.812	1.157	1.173	0.820	0.865
25-34	0.997	0.590	1.312	1.179	0.793	0.845
35-44	1.212	1.082	1.269	1.173	1.147	1.110
45-54	1.343	1.191	1.065	1.079	1.267	1.200
55-64	1.816	1.912	1.100	1.088	1.864	1.648
65-74	1.195	1.266	1.035	1.116	1.231	1.173
75+	0.522	0.486	0.558	0.552	0.504	0.504
Richmond County	**90-00**	**00-05ten**	**00-10**	**2010-20**	**00-10**	**2010-20**
15-24	1.054	1.183	1.201	1.294	0.870	0.903
25-34	1.458	1.065	1.381	1.305	0.830	0.873
35-44	1.488	1.002	1.209	1.161	1.030	1.023
45-54	1.255	1.189	0.862	0.888	1.110	1.083
55-64	1.147	0.945	0.864	0.919	1.046	1.035
65-74	0.979	1.069	0.884	0.894	1.024	1.018
75+	0.569	0.836	0.579	0.530	0.570	0.570
Westmoreland	**90-00**	**00-05ten**	**00-10**	**2010-20**	**00-10**	**2010-20**
15-24	0.876	0.746	0.995	1.014	0.833	0.874
25-34	0.906	0.760	1.132	1.054	0.858	0.893
35-44	1.101	0.956	1.108	1.093	1.053	1.040
45-54	1.200	1.026	1.070	1.078	1.142	1.107
55-64	1.293	1.336	1.044	1.053	1.308	1.231
65-74	0.992	0.920	0.858	0.864	0.968	0.976
75+	0.474	0.517	0.474	0.479	0.477	0.477

The survivor rates for the VEC projections imply significant departures from the 1990-2000 and 2000-2005 trends.

The VEC projections indicate a *reversal of net out-migration among younger cohorts (under 35) in Lancaster, Northumberland and Westmoreland Counties*; whereas the 1990 and 2000 Censuses and more recent population estimates indicate that each area looses significant proportions of its younger population due to net out-migration.

The VEC projections also imply a reversal in migration among 55 to 64 year olds from net in-migration to net out-migration. For 64 to 74 year olds, the VEC projections indicate a shift from net in-migration to out-migration or an acceleration of net out-migration. Again, these reversals are inconsistent with both the 1990 to 2000 pattern and the most recent population estimates.

Demand projections using VEC unadjusted population projections for the four counties of the Northern Neck reflect very different assumptions about net migration affecting population growth. These assumptions directly affect the projection of total housing demand and demand within market segments. For example, younger adults more likely to want apartments and townhouses, or older adults more likely to want single-family detached housing.

Two separate projections of demand were prepared.

One set was based on the VEC population projections without any adjustments. This projection assumes a shift in population toward younger adults (particularly those under 35) and away from older adults (55+). The alternative projection assumes that the 1990 to 2005 migration patterns for younger and older adults will continue through 2010. From 2010 to 2020, the alternative projection assumes a stabilization of the 2000-2010 migration patterns.

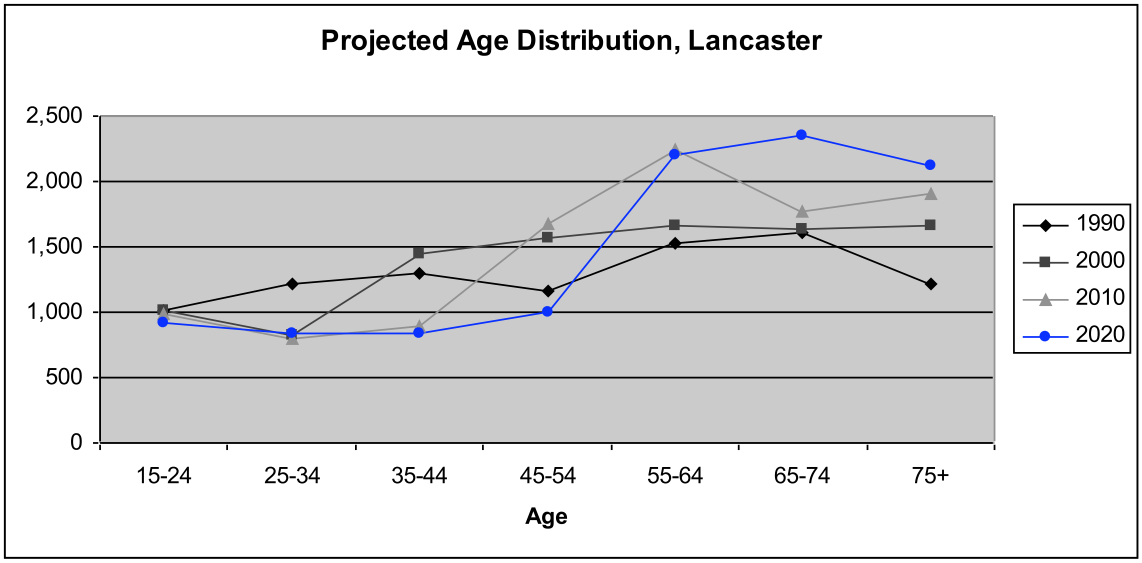
We developed alternative population projections for Lancaster, Northumberland and Westmoreland (shown below) using an average of the Census (1990-2000) and Weldon Cooper (2000-2005) survival rates for the 2000-2010 period, and reducing this rate toward stability (1) by 75% for 2010-2020.

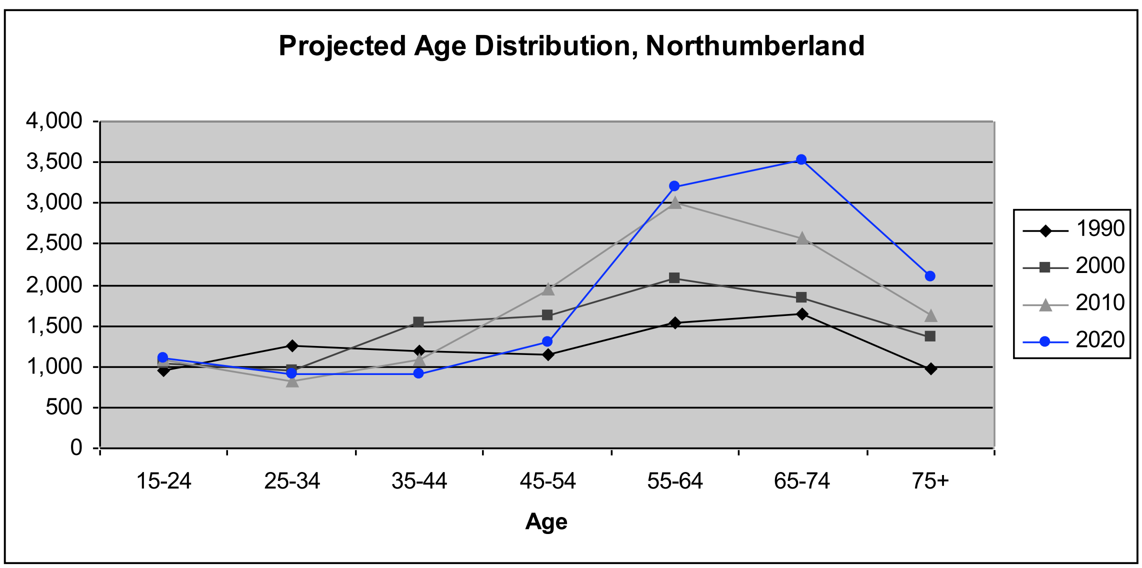
This alternative places more weight on the longer-term (but more distant) pattern established over 1990 to 2000 than the shorter but more recent 2000-2005 trend, and then conservatively adjusts these rates over the next decade (the rates for the 75+ population are held constant).

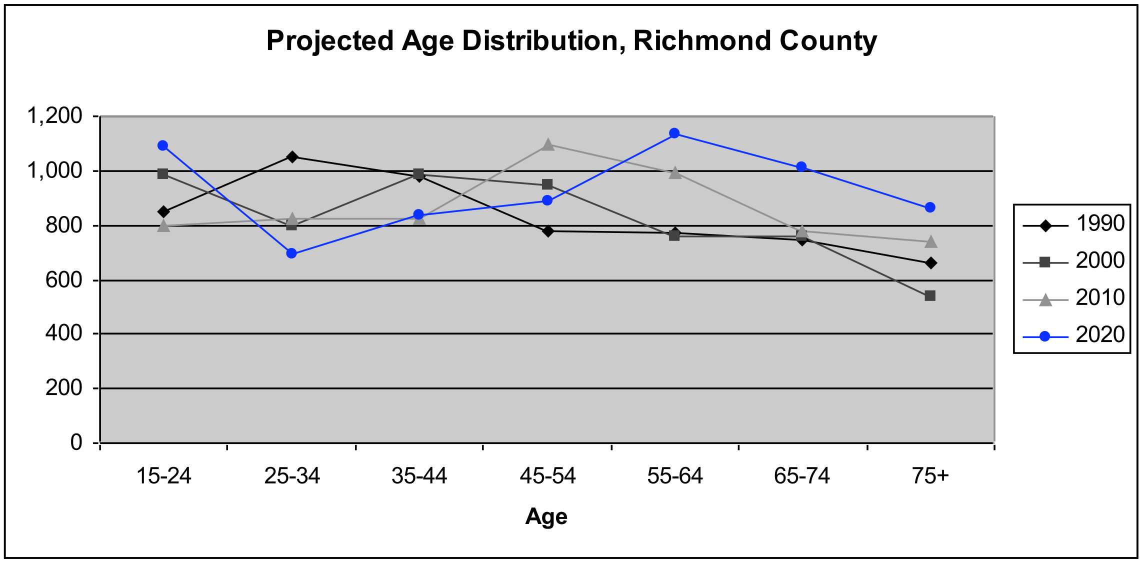
The survival rates for Richmond County estimated from the decennial censuses are distorted by the influx of people housed in correction facilities. As a result, Richmond County displays a pattern of net in-migration for several age groups impacted by correctional facilities. It is impossible to extract the group quarters population from each age cohort in all of the data series available. Both the Weldon Cooper and the VEC survival rates appear to be affected by the institutionalized population in Richmond County and are thus unreliable for analyzing housing demand. Consequently, the alternative projection used in this analysis is based on survival rates that assume net out-migration for younger ages, minor net in-migration for ages 35-44, 55-64 and 65-74, and slightly higher net in-migration for the 45 to 54 age group.

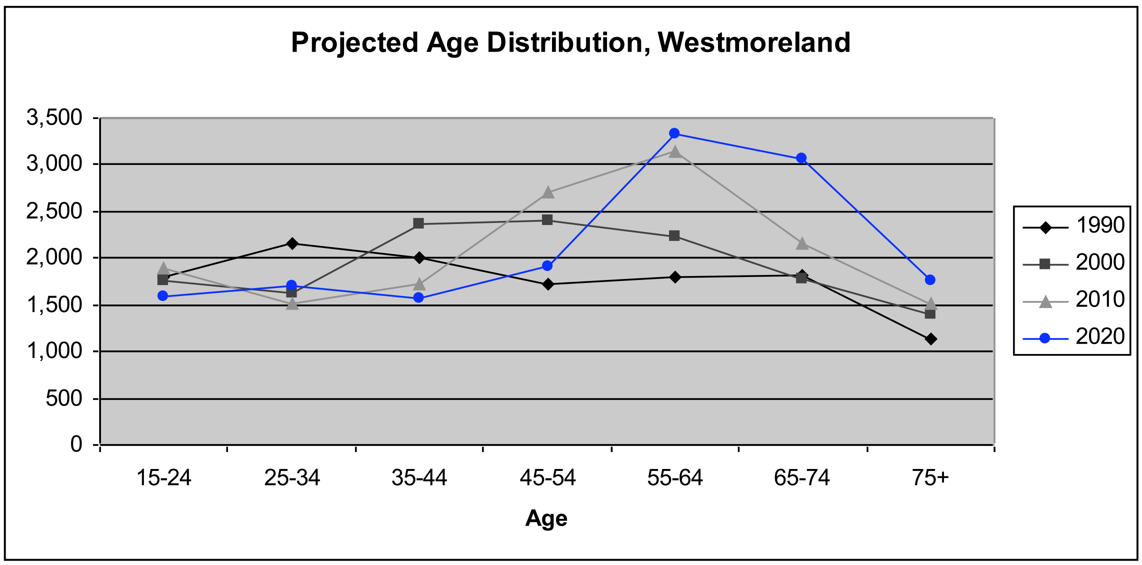
As shown in the following age distribution charts for Lancaster, Northumberland and Westmoreland, the adult population becomes increasingly more skewed toward an older population. *There are two factors affecting this skew over time: the assumption* *that younger adult populations continue to migrate out of the area while older adults migrate in, and a cohort effect that further reduces the size of the younger population available to "survive" into the next age group.*

By 2020 the under-55 age groups will be at or near 30-year low points and the 55 and older age groups will be at record high points. While the same pattern holds for Richmond County, the age distribution of the non-institutionalized population is more evenly distributed during each time period.






Projected Age Distribution, Richmond County
1,200
1,000
800
600
400
200
0
15-24
25-34
35-44
45-54
55-64
65-74
75+
Age
1990
2000
2010
2020


Projected Age Distribution, Westmoreland
3,500
3,000
2,500
2,000
1,500
1,000
500
0
15-24
25-34
35-44
45-54
55-64
65-74
75+
Age
1990
2000
2010
2020

Housing Demand Projections
Housing Demand Assumptions
Virginia Tech's Housing Demand Model (VCHR) projects demand based on population projections by detailed age group, household formation rates, and incomes. The housing demand projections reflect the detailed analysis of migration trends presented above. The demand projection is for households identifying the Northern Neck as their primary residence and excludes demand for second homes, vacation homes or retirement homes when the primary residence is elsewhere.

Only the population aged 15 and older is considered in the projection of housing demand. Household formation (the percent of householders—or "heads of households"—within a given population age group) is very low between the ages of 15 to 19 but increases with age. Age also influences the type of household formed across the life-cycle. While younger adults are more likely to live alone or with unrelated individuals (including unmarried couples without children), middle-age adults are more likely to live in families, and those over age 75 are more likely to be living alone due to the death of a spouse.

The number of households is by definition equal to the number of occupied housing units. Total housing units equals occupied units plus vacant units. A 'normal' vacancy rate of approximately 5% is often used to estimate the total number of housing units demanded for a given number of households.

Households are identified by the age of the householder, the type of household, and income, as these three factors heavily influence the tenure (owner, renter occupancy) and type (single-family detached, townhouses, multi-family apartments, etc.) of housing in demand. Seven age categories are used in the model: 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, and 75+. The housing demand projections presented here use the alternative population projection for each of these age groups developed for this project.

There are three types of households: married-couple families, other families (i.e. no spouse present), and unrelated individuals (singles, unmarried couples without children, roommates). Any household with related individuals (e.g. parent and child) is considered a family household. Although household patterns can be very complex, most households defined as "other families" are single parents with children and most "unrelated individual" households are single individuals living alone. Household formation rates are calibrated for each county based on Census 2000 data.

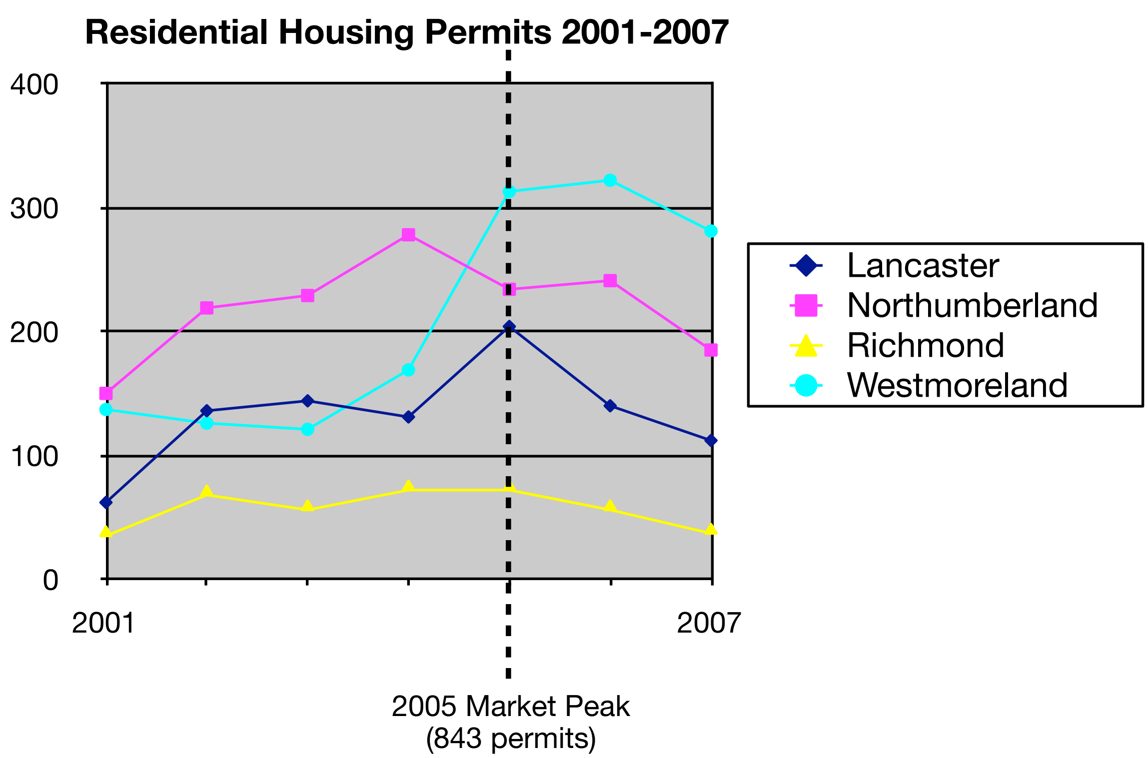
The model estimates the income distribution for each age and household type category (e.g. 25-34 year old married-couple households) from Census 2000 data files for each county and Public Use Microdata Area (PUMA). The model also estimates tenure (owner, renter) for each age, household type and income category. The model uses the most recent American Communities Survey data for the county or PUMA to update the income and tenure distributions.

Housing Demand Projection

We project a modest increase of 11.6% in housing demand in the Northern Neck over 2000 to 2010 adding 2,340 households followed by a smaller increase of 6.1% (1,390 households) from 2010 to 2020. Assuming a vacancy rate of 5% and a loss rate of 1%, this converts to approximately 2,750 new dwelling units needed between 2000 and 2010 and 1,800 between 2010 and 2020. (Given the number of mobile homes and modest cottage houses in the Northern Neck, the rate of replacement and loss could be higher than 1%.)

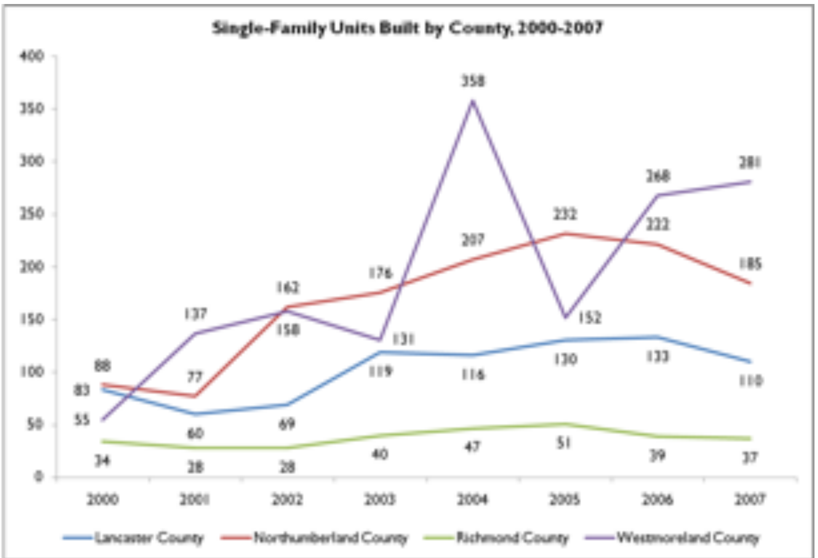
The Census Bureau estimates a total of 30,759 housing units in the Northern Neck for July 1, 2007 (including seasonal units and second homes). ESRI projects this number to be 30,351.

This corresponds to the number of building permits issued for new residential units from 2000 to 2007 adjusted for differences in periods covered and losses through demolition or other causes.

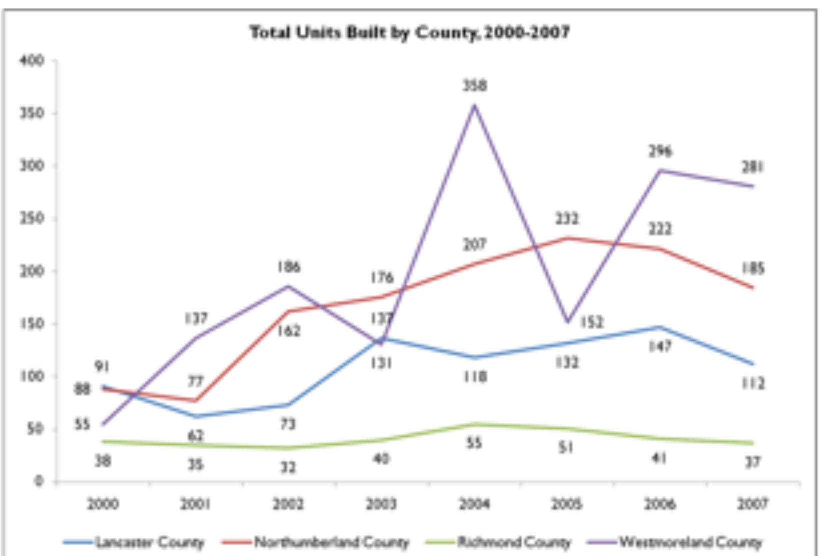


Source: Northern Neck Planning District Commission and Other Sources[2]

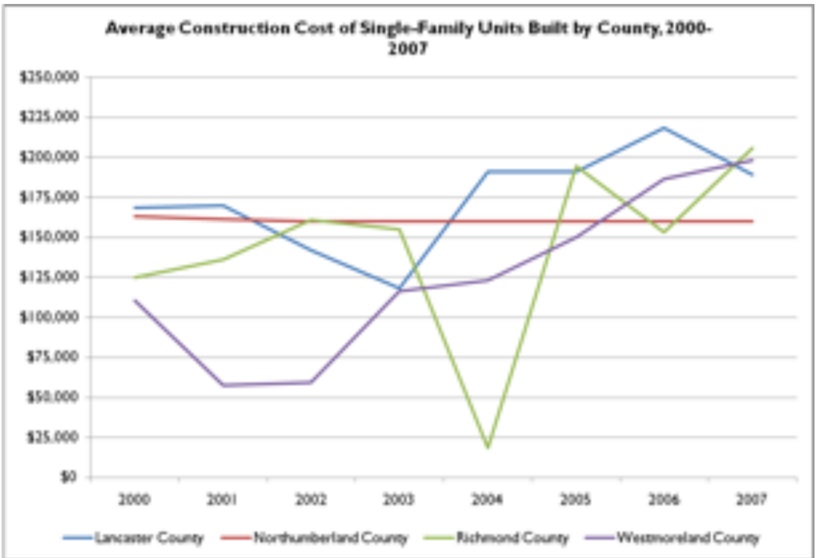
[2] Note: Data is from the Census (http://censtats.census.gov/bldg/bldgprmt.shtml). Numbers reflect reported figures in all cases except when building permit data was not reported to the Census: 2005 for Lancaster County; 2002 and 2004-2007 for Northumberland County. Missing figures are replaced by the Census' "Estimates with Imputation."



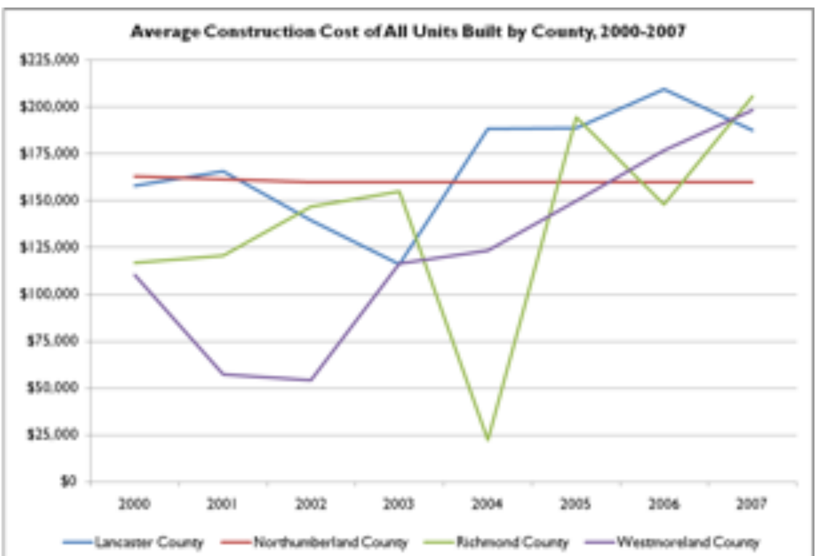
The most building permits were pulled for single-family units in Westmoreland and Northumberland Counties. Construction appears to be declining in most counties; only Westmoreland saw more permits pulled for single-family units in 2007 than in 2006.



Since construction was so heavily weighted to single-family units (permits were only pulled for 133 multi-family units between 2000 and 2007; these represented just 3% of all units permitted over this time period), trends in the number of building permits pulled for all units followed a similar pattern.



While the average construction cost of a single-family unit varied widely between counties in 2000, costs were roughly $200,000 per single-family unit in most Northern Neck counties by 2007 (except for Northumberland, for which data was not available).



Again, since construction was so heavily weighted to single-family units, trends in the average construction cost for all units followed a similar pattern.

Comparing the cumulative number of new dwelling units authorized by building permits from 2000 through 2007 to the projected increase in housing demand provides another "reality check" of the demand projections. The table below provides the projected increase in demand for each county and the number of units authorized adjusted for vacancies and second homes.

In Lancaster and Westmoreland, the 2000 Census reported an overall vacancy rate (including second homes) for units built between 1990 and 1999 of approximately 25% (on par with our estimated proportion of second homes in these areas). The vacancy rate in Northumberland for newer units was substantially higher (41%), indicating that more of its construction in the 1990s was possibly for the second home market. The rate in Richmond County was substantially lower (8%), indicating that most new construction in this area was occupied by year-round residents. The number of authorized new units was adjusted for a 25% second home market share and normal vacancies except in Richmond County, where only a 5% vacancy adjustment was made. Preliminary projections from ESRI suggest a Northern Neck vacancy rate of 26.9 % in 2008.

		Total Households		Age 45-74	
	Adj BP	Inc Demand	BP/HH	Inc Demand	BP/HH
Lancaster	651	278	2.34	445	1.46
Northumberland	1094	1058	1.03	1140	0.96
Richmond Co	313	351	0.89	271	1.15
Westmoreland	1199	653	1.84	948	1.27
NN Total	3256	2340	1.39	2804	1.16

The ratio of building permits to increased demand by all households indicates that significantly more units were added in the Northern Neck (specifically Lancaster and Westmoreland) between 2000 and 2007 than would be needed to meet projected demand. However, the change in aggregate demand could be misleading due to imbalance in migration patterns between younger and older households. The increase in demand was higher in the 45 to 74 age category, where net in-migration continued into the current decade. The ratio of new construction (adjusted for second homes) to increased demand in the 45 to 74 age category indicates that demand in this age category would have accounted for much more of the overall number of units produced. The level of new residential construction in Northumberland and Richmond Counties roughly corresponds to the level of projected demand in the 45 to 75 age category.

The imbalance of new supply and projected increased demand in Lancaster and Westmoreland indicates that either the resident household demand projections are too low for these areas or more of the new housing stock added since 2000 was vacant (i.e. second homes or excess supply). Since the number of authorized units was already reduced by 25% for second homes in all but Richmond County, the potential number of second homes (or excess stock) could be as much as 40-50% of recent new construction in Lancaster and Westmoreland Counties.

Housing Demand, Age of Householder and Household Type

The housing demand trends in the Northern Neck are clearly divided by age, with the demarcation at age 45 in the 2000-2010 period and shifting up to age 55 in the next decade. The demand trends are heavily influenced by the net out-migration of younger adults and the net in-migration of older adults, plus the life-cycle impact among the population aging in place. The combination of these trends will result in a progressively older population and the driving force in the local housing market will be the impact of aging in place among the 55-64 and 65-74 cohorts of 2010 into the 65-74 and 75+ age categories of 2020. Even if the rates of net in-migration among the 55 to 74 population do not abate as assumed, the impact of aging and the shrinkage of housing demand by younger households will be profound.

The impact of the householder's age on the type of household formed is complex. For the youngest and the oldest householders, the most likely household type is a single person living alone. But at the opposite ends of the household life-cycle, the formation of single-person households is for very different reasons. At a young age, persons live alone because they have just established their independence and generally postpone forming a family until they get more established. Most householders aged 75+ transitioned from family households earlier in their adult lives to singles living alone due to the loss of a spouse (and children having established their own households).

We project that most of the net change in housing demand in the Northern Neck will be associated with married-couples (particularly ages 55+) and older single individuals, with the latter constituting a majority of the increase in households in the next decade. Lancaster County will be particularly affected by the impact of aging on household types, as we project that the increase in older singles living alone will dominate the county's household demographics from 2010 to 2020. Single-parent families are projected to increase only slightly or decline in number depending on the county. Although these changes will dramatically impact the area, the demographic trends suggest that net increases in housing demand will be largely among households with greater economic resources. Married-couple retirees and empty-nesters in the 55 to 74 age group often have higher incomes and wealth than younger counterparts. Although elderly persons living alone have lower incomes, they often have significant accumulated savings and assets.

Projected Change in Households by Age					
	2000-10				
Age	Northern Neck	Lancaster	Northumberland	Richmond Co	Westmoreland
15 to 24	-11	-2	6	-15	15
25 to 34	-62	-14	-57	9	-52
35 to 44	-593	-288	-225	-80	-341
45 to 54	306	58	158	90	159
55 to 64	1,014	296	551	167	536
65 to 74	536	91	431	14	253
75+	496	137	195	165	84
	2010-20				
Age	Northern Neck	Lancaster	Northumberland	Richmond Co	Westmoreland
15 to 24	16	-7	2	22	-33
25 to 34	6	17	43	-54	78
35 to 44	-111	-26	-93	8	-80
45 to 54	-826	-396	-304	-126	-428
55 to 64	198	-19	117	101	107
65 to 74	1,081	367	572	141	599
75+	613	127	381	105	168

	Projected Change in Household Types				
Household Type	Northern Neck	Lancaster	Northumberland	Richmond Co	Westmoreland
	2000-10 Numerical Change				
Married Couples	1,255	122	622	173	338
Other Families	99	-22	70	28	23
Individuals	986	178	366	151	292
	2000-10 Percent Change				
Married Couples	53.6%	44.0%	58.8%	49.2%	51.7%
Other Families	4.2%	-8.0%	6.6%	7.9%	3.5%
Individuals	42.1%	64.0%	34.6%	42.8%	44.7%
	2010-20 Numerical Change				
Married Couples	646	14	373	70	189
Other Families	0	-47	59	17	-29
Individuals	741	95	286	110	250
	2010-20 Percent Change				
Married Couples	46.6%	22.3%	52.0%	35.4%	46.1%
Other Families	0.0%	-75.7%	8.3%	8.7%	-7.1%
Individuals	53.4%	153.4%	39.8%	55.9%	61.0%

Housing Demand and Income

Income is one of the most important determinants of housing demand, influencing the type and amount of housing consumed. At lower incomes housing demand is oriented more to rental housing (multi-family apartments and older, modest single family homes) and mobile homes. As incomes increase, households prefer single-family detached housing. Although incomes decline at retirement and beyond, housing consumption of elderly households reflects pre-retirement incomes, with most elderly households owning single-family detached homes. Although most of the elderly are homeowners, increased frailty and the restrictions of fixed incomes prompt a slight shift back toward renter housing, particularly beyond age 75. Also, each succeeding cohort entering their senior years has had higher incomes than older cohorts, making extrapolations from data for a single time period difficult.

Incomes typically increase with age as workers gain experience and seniority, and then decrease after retirement. Incomes are higher for married-couple families as dual-income households have become more commonplace. Household type and age are more important factors than location within the Northern Neck in determining incomes. Although there is some variation from county to county in median incomes for the same age and household type category, the major difference between counties in the age and household type composition of their households.

As shown in the table below for 1999 (based on the 2000 Census), married couple families with householders between the ages of 35 and 65 typically had median incomes ranging from $50,000 to $60,000. Married-couples in the 25 to 34 age category had median incomes around $40,000, while median incomes for younger married couple were about $10,000 lower.

Incomes for families without a spouse present are significantly lower than married-couples of the same age and generally range from the mid-teens to high $20,000s. Families without a spouse present have relatively small gains in median incomes across their working years. Incomes of single persons and other non-family households are more similar to single-parent households, with medians in the low to mid-$20,000s for householders under 65 and in the mid-teens for householders 65 and over.

Median Incomes by Age and Household Type, 2000				
	Lancaster	Northumberland	Richmond Co	Westmoreland
Married-couples				
15 to 24 years	$33,359	$24,375	$27,857	$28,250
25 to 34 years	$38,162	$41,667	$43,036	$40,921
35 to 44 years	$51,620	$53,354	$55,463	$50,326
45 to 54 years	$54,519	$54,107	$60,521	$59,457
55 to 64 years	$57,-61,000	$56,-66,000	$47,-60,000	$46,-55,000
65 to 74 years	$51,389	$58,000	$37,206	$39,625
75 and older	$41,964	$42,400	$28,750	$29,617
Other Families				
15 to 24 years	$7,188	$15,139	$5,625	$12,250
25 to 34 years	$15,682	$6,635	$16,696	$15,109
35 to 44 years	$21,875	$15,417	$18,125	$23,194
45 to 54 years	$22,955	$29,861	$42,679	$29,853
55 to 64 years	$14,-23,000	$19,-28,000	$11,-24,000	$12,-34,000
65 to 74 years	$20,469	$11,250	$30,833	$42,917
75 and older	$42,679	$36,375	$16,875	$28,438
Non-families				
<65 years	$25,445	$21,659	$18,887	$27,526
65 and older	$16,427	$14,214	$13,409	$16,060
Source: Census 2000				

The impact of household type, age and income on housing demand is shown in the next table, which provides estimated home ownership rates for the Northern Neck in 2000. For married-couple families, ownership rates hit 90% and higher starting at age 35-54 with incomes of $35,000 and over and for all ages over 55 regardless of income. Single-parent families and other families without a spouse present only reach this level of ownership at higher incomes and generally have ownership rates from 10 to 20 percentage points lower than their married-couple counterparts

Ownership Rates, Northern Neck, 2000						
	<$25,000	$25,-34,999	$35,-49,999	$50,-74,999	$75,-99,999	$100,000+
	Married Couples					
<35	57.8%	54.8%	69.2%	73.7%	81.3%	83.7%
35-54	78.2%	75.9%	90.4%	89.4%	94.3%	90.3%
55-64	91.2%	90.6%	94.0%	93.3%	99.1%	94.6%
65-74	95.4%	91.7%	96.7%	95.4%	99.5%	96.8%
75+	93.5%	90.2%	94.1%	93.7%	99.5%	93.4%
	Other Families					
<35	38.8%	42.5%	50.2%	57.1%	93.6%	89.2%
35-54	57.1%	58.2%	73.2%	75.0%	85.6%	87.1%
55-64	80.6%	80.0%	84.5%	89.5%	95.1%	93.8%
65-74	77.0%	75.1%	92.9%	94.3%	98.9%	96.9%
75+	88.4%	85.6%	80.6%	93.2%	92.8%	92.1%
	Non-Families					
<64	61.6%	68.5%	71.5%	79.1%	91.9%	89.0%
65+	78.2%	91.6%	95.4%	95.0%	99.3%	95.2%

Projected Workforce Housing Demand

In total, we project an increased demand between 2010 and 2020 of 1,400 owner-occupied units and only 19 renter-occupied units, excluding seasonal units and second homes. This is a modest amount of housing and most of it will be readily produced in the market without any public intervention. Any new workforce housing will have to compare favorably in design, amenities, quality, location and price in order to compete with the existing housing supply of older, small single-family homes.

The next table suggests that a workforce housing program could be targeted toward (in 1999 dollars):

- young (under 35) married-couples and single parents with incomes below $75,000
- married-couples aged 35-54 with incomes below $35,000
- single parents aged 35-54 with incomes below $75,000, and
- non-elderly singles with incomes below $50,000.

Our projections of housing demand for the year 2020 for the Northern Neck are presented in the next set of tables (total demand) (projected change in demand). The householders under 35 will be entering the housing market for the first time and represent new demand for units, but only a small increase in aggregate demand. Young single-parent families with incomes below $25,000 are a particularly sizeable category of housing demand for this segment.

The 35-54 age category is projected to shrink due to migration and cohort effects.

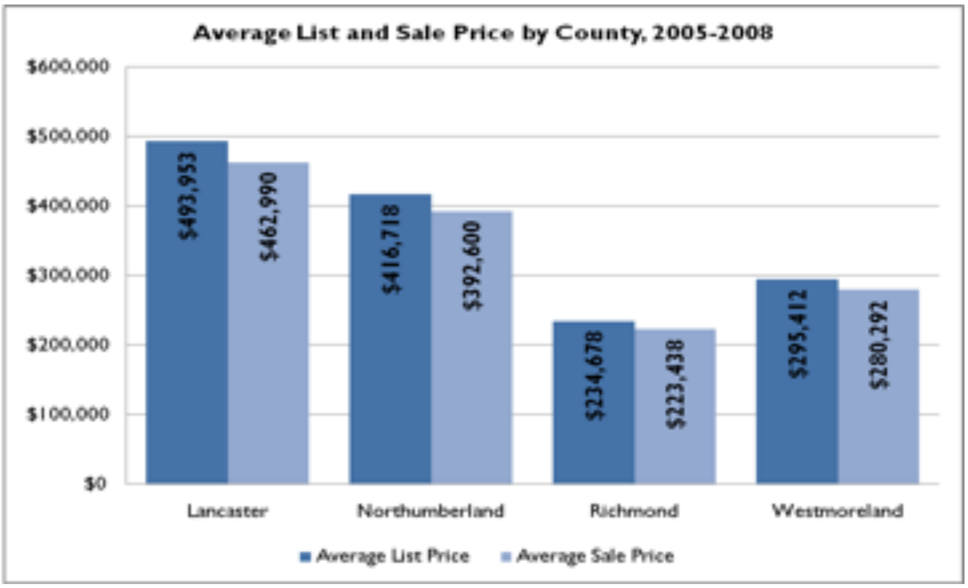
The 55-64 year old category includes a component of workforce housing demand and is projected to increase slightly over the decade. The largest projected gains will be in demand in the 65 and older category across all incomes. Demand for senior life-style housing will remain strong. However, much of the projected gain reflects a cohort increase related to aging in place rather than demand for new units. The Northern Neck will experience increased demand for elderly housing services to maintain independent living as well as housing quality, particularly for those with limited incomes and assets.

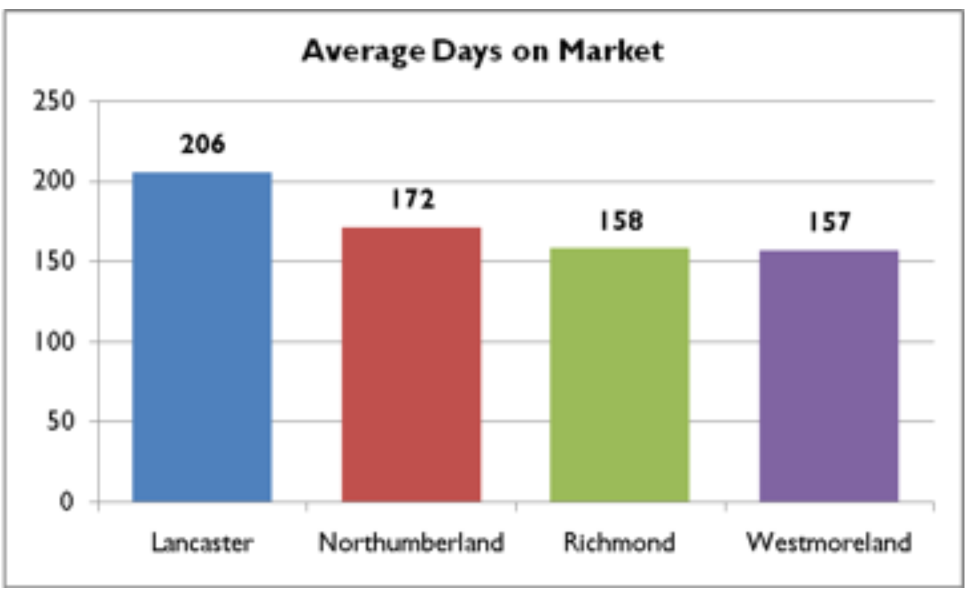
Projected Housing Demand for Northern Neck, 2020						
	<$25,000	$25,-34,999	$35,-49,999	$50,-74,999	$75,-99,999	$100,000+
	Married Couples					
<35	189	164	299	259	86	56
35-54	443	235	557	894	407	342
55-64	583	430	590	835	429	641
65-74	695	416	675	939	493	413
75+	483	231	260	379	134	223
	Other Families					
<35	447	73	65	22	6	7
35-54	372	225	216	93	25	26
55-64	191	85	126	80	18	24
65-74	185	80	87	68	22	26
75+	186	47	93	103	54	58
	Non-Families					
<64	1,803	654	401	314	101	133
65+	3,205	617	341	278	103	147

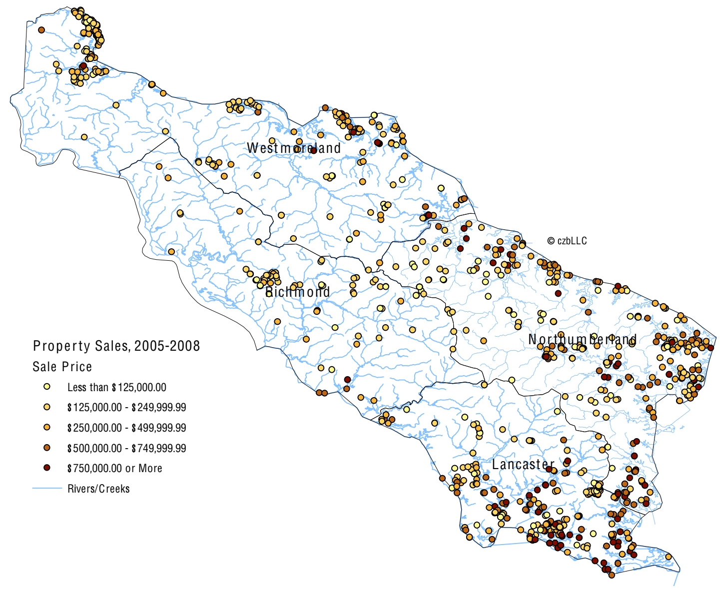
Projected Change in Housing Demand for Northern Neck, 2020						
	<$25,000	$25,-34,999	$35,-49,999	$50,-74,999	$75,-99,999	$100,000+
	Married Couples					
<35	6	6	10	11	5	2
35-54	-133	-63	-157	-250	-115	-115
55-64	30	17	37	48	24	28
65-74	188	112	183	252	132	111
75+	73	38	43	64	22	38
	Other Families					
<35	7	2	2	0	0	0
35-54	-86	-52	-67	-28	-9	-10
55-64	10	5	8	5	1	1
65-74	49	21	23	18	6	7
75+	28	7	14	17	8	9
	Non-Families					
<64	-130	-52	-29	-25	-8	-12
65+	680	130	72	60	22	32

Sales Analysis

County	# of Sales	Average List Price	Average Sale Price	Average Days on Market	Sale Date Range
Lancaster	480	$493,953	$462,990	206	06-May-05 to 31-Oct-08
Northumberland	608	$416,718	$392,600	172	03-May-05 to 03-Nov-08
Richmond	142	$234,678	$223,438	158	06-May-05 to 17-Oct-08
Westmoreland	485	$295,412	$280,292	157	03-May-05 to 30-Oct-08

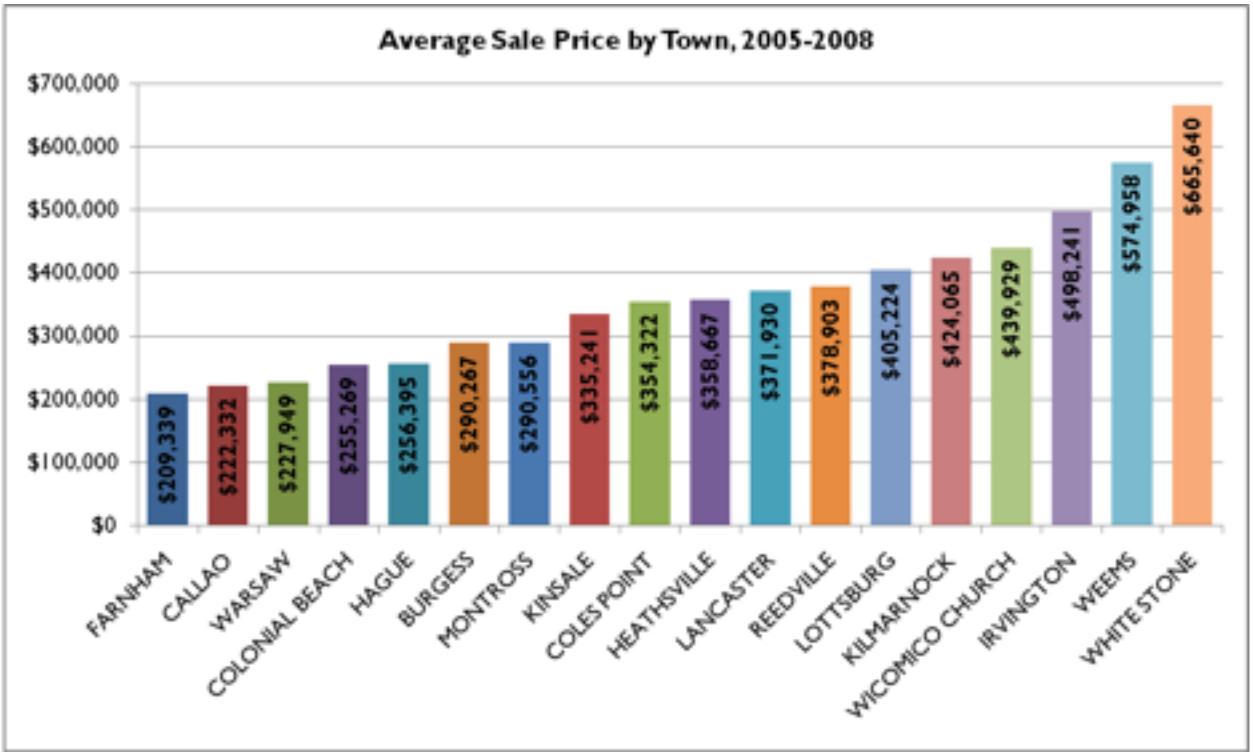


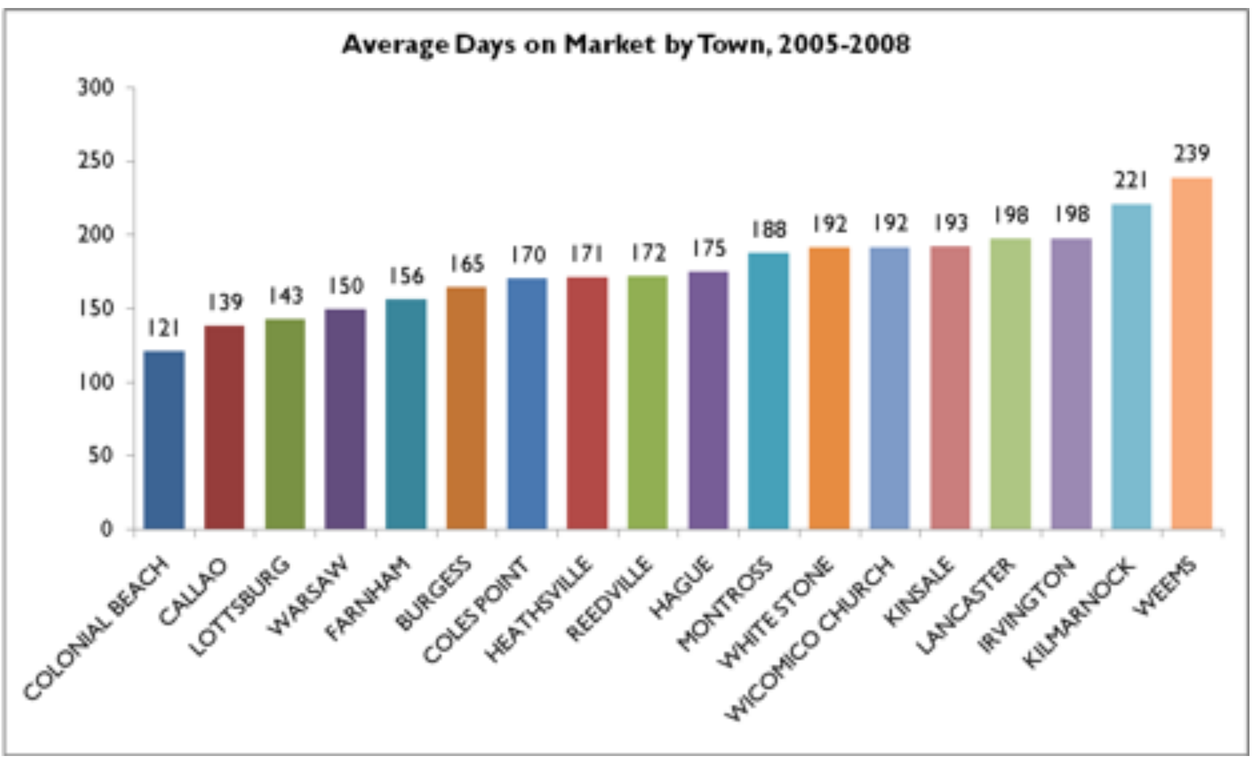




Details by town (as reported by the MLS) for places with at least 20 sales between 2005 and 2008:

Town	# of Sales	Average List Price	Average Sale Price	Average Days on Market	Sale Date Range
BURGESS	42	$306,940	$290,267	165	10-May-05 to 31-Oct-08
CALLAO	49	$236,610	$222,332	139	28-Jul-05 to 30-Sep-08
COLES POINT	23	$376,757	$354,322	170	18-Jul-05 to 17-Oct-08
COLONIAL BEACH	203	$267,360	$255,269	121	03-May-05 to 30-Oct-08
FARNHAM	39	$221,072	$209,339	156	06-May-05 to 01-Aug-08
HAGUE	34	$276,504	$256,395	175	09-May-05 to 16-Oct-08
HEATHSVILLE	195	$378,566	$358,667	171	03-May-05 to 03-Nov-08
IRVINGTON	67	$525,878	$498,241	198	31-May-05 to 23-Sep-08
KILMARNOCK	140	$451,059	$424,065	221	09-May-05 to 31-Oct-08
KINSALE	37	$355,508	$335,241	193	06-May-05 to 10-Oct-08
LANCASTER	94	$396,037	$371,930	198	24-Jun-05 to 31-Oct-08
LOTTSBURG	62	$431,672	$405,224	143	06-May-05 to 10-Oct-08
MONTROSS	167	$305,422	$290,556	188	03-May-05 to 29-Sep-08
REEDVILLE	133	$405,782	$378,903	172	26-May-05 to 31-Oct-08
WARSAW	91	$238,003	$227,949	150	11-May-05 to 15-Oct-08
WEEMS	71	$626,263	$574,958	239	11-May-05 to 14-Oct-08
WHITE STONE	99	$708,781	$665,640	192	06-May-05 to 31-Oct-08
WICOMICO CHURCH	35	$469,636	$439,929	192	17-May-05 to 03-Nov-08


Average Sale Price by Town, 2005-2008
$700,000
$600,000
$500,000
$400,000
$300,000
$200,000
$100,000
$0
$209,339
$222,332
$227,949
$255,269
$256,395
$290,267
$290,556
$335,241
$354,322
$358,667
$371,930
$378,903
$405,224
$424,065
$439,929
$498,241
$574,958
$665,640
FARNHAM
CALLAO
WARSAW
COLONIAL BEACH
HAGUE
BURGESS
MONTROSS
KINSALE
COLES POINT
HEATHSVILLE
LANCASTER
REEDVILLE
LOTTSBURG
KILMARNOCK
WICOMICO CHURCH
IRVINGTON
WEEMS
WHITE STONE


Average Days on Market by Town, 2005-2008
300
250
200
150
100
50
0
121
139
143
150
156
165
170
171
172
175
188
192
192
193
198
198
221
239
COLONIAL BEACH
CALLAO
LOTTSBURG
WARSAW
FARNHAM
BURGESS
COLES POINT
HEATHSVILLE
REEDVILLE
HAGUE
MONTROSS
WHITE STONE
WICOMICO CHURCH
KINSALE
LANCASTER
IRVINGTON
KILMARNOCK
WEEMS

According to these results, Northern Neck municipalities fall into the following general categories:

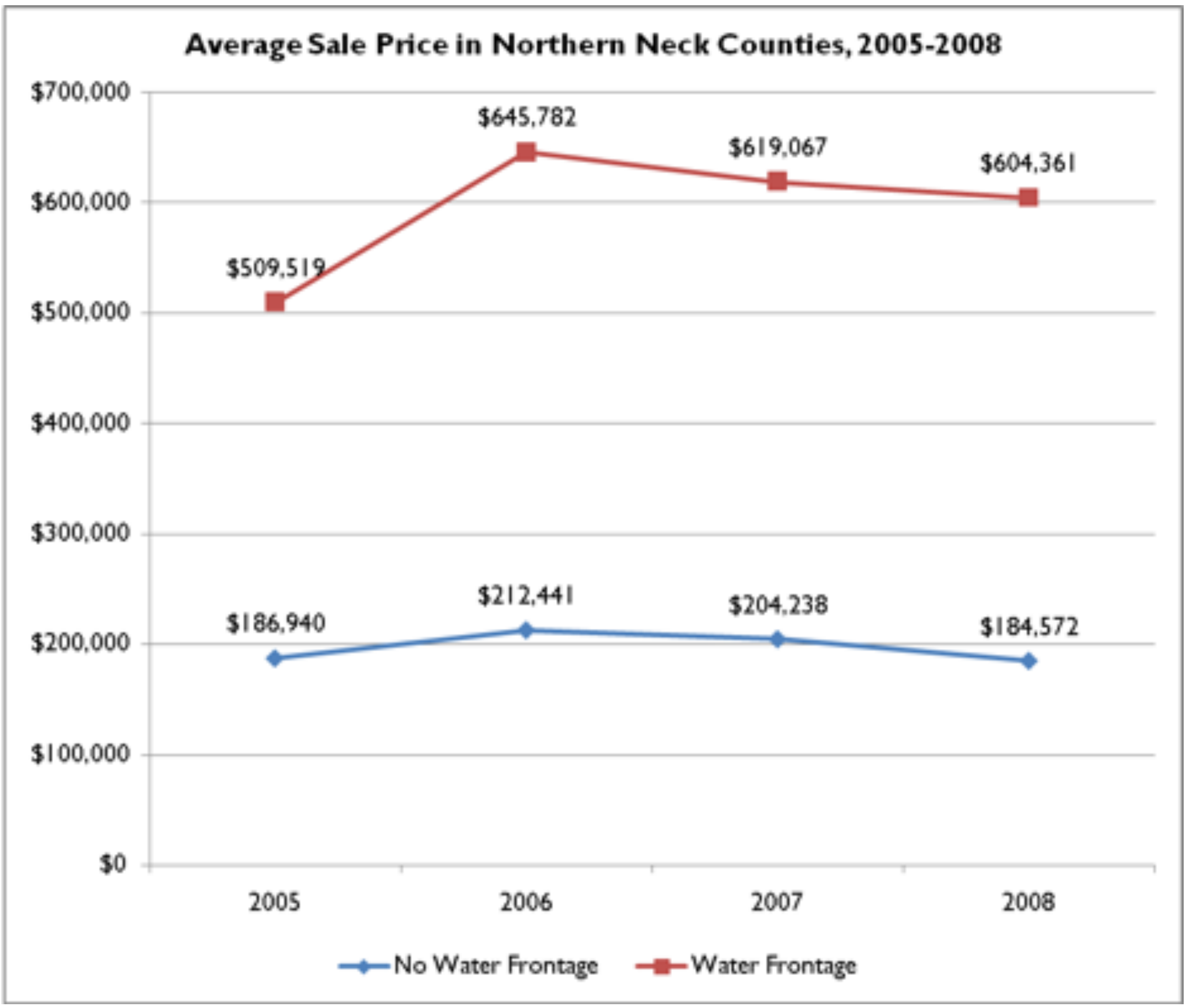
Town	Summary
BURGESS	Low Sale Price and High Days-on-Market
HAGUE	
MONTROSS	
CALLAO	Low Sale Price and Low Days-on-Market
COLONIAL BEACH	
FARNHAM	
WARSAW	
COLES POINT	Moderate Sale Price and Moderate Days-on-Market
HEATHSVILLE	
KINSALE	
IRVINGTON	High Sale Price and High Days-on-Market
KILMARNOCK	
LANCASTER	
WEEMS	
WHITE STONE	
WICOMICO CHURCH	
LOTTSBURG	High Sale Price and Low Days-on-Market
REEDVILLE	

When you combine these MLS Summary Categories with the "Average Rank" categories from the survey results, Northern Neck municipalities fall into the following groups:

City	Average Rank Category (Surveys)	Demand Category	Combined
IRVINGTON	1	2	2
KILMARNOCK	1	2	2
WEEMS	1	2	2
LOTTSBURG	2	1	2
HEATHSVILLE	1	3	2
WICOMICO CHURCH		2	2
LANCASTER	3	2	3
WHITE STONE	3	2	3
REEDVILLE	4	1	3
BURGESS	1	5	3
FARNHAM	2	4	3
KINSALE	3	3	3
COLES POINT		3	3
MONTROSS	2	5	4
WARSAW	4	4	4
MOUNT HOLLY	4		4
CALLAO	5	4	5
COLONIAL BEACH	5	4	5
HAGUE	5	5	5

Note: 1 = Best, 5 = Worst

Sold Year	Average Sale Price	
	No Water Frontage	Water Frontage
2005	$186,940	$509,519
2006	$212,441	$645,782
2007	$204,238	$619,067
2008	$184,572	$604,361
All Years	$199,415	$591,493



Needs Analysis
Demographics

Population Change 1990 - 2008

	1990	2000	2008	% Change 2000 - 2008
Lancaster	10,896	11,567	12,030	0.5%
Irvington	647	673	673	0.0%
Kilmarnock	1,212	1,244	1,240	(-0.3%)
White Stone	325	358	358	0.0%
Northumberland	10,524	12,030	13,749	14.3%
Richmond	7,273	8,809	9,458	7.3%
Warsaw	1,184	1,375	1,484	7.9%
Westmoreland	15,480	16,718	17,674	5.7%
Colonial Beach	3,206	3,228	3,453	7.0%
Montross	347	315	312	(-1.0%)
Northern Neck	44,173	49,353	52,911	7.2%
Virginia	6,187,358	7,078,515	7,899,205	11.6%

Source: US Census, ESRI Business Analyst

While the State of Virginia has seen significant growth, particularly in the northern area of the Washington D.C. suburbs, this region is growing more slowly. Northumberland is the exception, with a growth rate from 2000 to 2008 that was faster than the state. The annual growth rate from 1990 – 2000 was 1.12 percent while the rate from 2000 – 2008 was even lower at 0.9 percent. Part of this may be due to the lack of major transportation infrastructure connecting the peninsula to the rest of the state. The region is currently developing a Regional Transportation Plan to identify and address critical transportation needs (Northern Neck Planning District Commission). The changing economy is also contributing as agricultural and fishing jobs are lost. There are fewer opportunities for young people to find well paying jobs in the region so they are forced to leave.

The growth is driven by retirees from Northern Virginia and other areas. This is reflected in the fact that those over 65 has grown from 22 percent of the population in 2000 to 24 percent in 2008. The State has grown from 11.2 percent to 11.9 percent. A growing retiree population can create challenges in a formerly rural region due to the growing demand for services (Public Safety, Medical, and others) as well as potential conflicts with existing agricultural uses.

Population by Age

	L % 2000	L % 2008	N % 2000	N % 2008	R % 2000	R % 2008	W % 2000	W % 2008	Area % 2000	Area % 2008	△
0 – 4	4.2%	4.1%	4.3%	4.3%	4.1%	4.1%	5.2%	5.2%	4.5%	4.5%	0.0%
5 – 9	5.1%	4.2%	5.1%	4.4%	4.8%	4.0%	6.3%	5.2%	5.5%	4.5%	(-1.0%)
10 – 14	6.0%	4.5%	5.7%	4.6%	5.6%	4.2%	7.3%	5.6%	6.3%	4.9%	(-1.4%)
15 –19	5.6%	4.7%	5.2%	4.5%	5.9%	4.8%	6.3%	5.8%	5.8%	5.0%	(-0.8%)
20 – 24	3.1%	3.9%	3.1%	3.6%	6.0%	6.5%	4.2%	4.7%	4.0%	4.6%	0.6%
25 – 34	7.2%	7.4%	7.7%	7.4%	14.1%	15.1%	9.8%	9.7%	9.4%	9.6%	0.2%
35 – 44	12.5%	9.3%	12.5%	10.0%	17.8%	15.6%	14.2%	11.8%	14.0%	11.4%	(-2.6%)
45 – 54	13.6%	14.8%	13.1%	14.9%	14.0%	15.3%	14.4%	16.1%	13.8%	15.3%	1.5%
55 – 64	14.4%	18.0%	17.0%	17.8%	10.1%	12.2%	13.4%	15.9%	13.9%	16.2%	2.3%
65 – 74	14.1%	14.0%	15.0%	16.3%	8.6%	8.6%	10.6%	11.2%	12.2%	12.7%	0.5%
75 – 84	10.5%	10.1%	8.8%	9.1%	6.2%	6.2%	6.5%	6.5%	7.9%	7.9%	0.0%
85+	3.9%	4.9%	2.3%	3.2%	2.9%	3.4%	1.9%	2.4%	2.6%	3.4%	0.8%
Median Age	49.8	53.1	50.1	52.6	40.4	42.2	42.8	46.3	45.4	48.6	3.2

Source: 2000 US Census, ESRI Business Analyst

Westmoreland and Richmond Counties have a younger population than the region as a whole, with Richmond County being significantly younger (this may be in part driven by the large correctional institute located there). This may reflect their location closer to employment centers of the state capitol, Richmond, and the northern Virginia suburbs.

The aging population is reflected in school enrollments for the four county school districts. Northumberland County is the only county with overall enrollment growth. The other three counties all saw declines. This is another sign of the aging population and the shift in the regions from working families to retirees. A dropping enrollment can create a challenge for school districts because residents who do not have children in the system may not support tax increases, bond issues, etc. to fund needed improvements and services in the school districts.

	L 2000	**L 2007**	△	**N 2006**	**N 2007**	△	**R 2006**	**R 2007**	△	**W 2006**	**W 2007**	△
K	107	96	(-11)	101	96	(-5)	87	107	20	127	126	(-1)
1	91	109	18	121	179	58	86	90	4	148	130	(-16)
2	100	95	(-5)	92	137	45	90	78	(-12)	160	139	(-21)
3	118	98	(-20)	104	149	45	98	93	(-5)	163	127	(-36)
4	121	97	(-24)	127	148	21	105	74	(-31)	173	151	(-22)
5	122	87	(-35)	128	145	17	82	91	9	166	122	(-44)
6	121	97	(-24)	108	111	3	105	94	(-11)	153	102	(-51)
7	112	98	(-14)	118	115	(-3)	99	97	(-2)	166	128	(-38)
8	109	94	(-15)	107	112	5	104	88	(-16)	166	126	(-40)
9	159	113	(-46)	149	132	(-17)	123	116	(-7)	177	126	(-50)
10	126	137	11	104	114	10	92	102	10	151	172	21
11	121	118	(-3)	103	96	(-7)	98	92	(-6)	152	136	(-16)
12	99	119	20	113	124	11	84	83	(-1)	134	130	(-4)
Total	1,506	1,358	(-148)	1,475	1,658	183	1,253	1,205	(-48)	2,036	1,715	(-321)

School Enrollment 2000 and 20007
Source: Virginia Department of Education

The educational attainment in the Northern Neck lags the State. This is likely a result of its fishing and agricultural heritage. Inmovers tend to be more educated than those who grew up in the region. For example, in Falls Church, VA, a prototype location from where inmovers migrate to the Northern Neck, 64% of residents have advanced degrees, creating a powerful mismatch the Northern Neck must contend with.

2000 Educational Attainment (Population 25+)

	Lancaster	Northumberland	Richmond	Westmoreland	Region	State
< 9th Grade	10.0%	9.3%	12.0%	13.9%	11.4%	7.2%
Some HS, no Diploma	15.6%	14.7%	28.1%	16.8%	18.0%	11.3%
HS Graduate	27.9%	31.0%	31.2%	33.4%	31.1%	26.0%
Some College	16.7%	18.9%	15.3%	19.9%	18.0%	20.4%
Associate Degree	5.3%	4.4%	3.5%	2.7%	3.9%	5.6%
Bachelors Degree	15.3%	12.7%	7.6%	8.3%	11.0%	17.9%
Masters or Above	9.2%	9.0%	2.4%	5.1%	6.6%	11.6%

Source: 2000 US Census

The Northern Neck is predominantly white, with a larger African American population than the state as a whole. Hispanic is considered an ethnicity rather than a race, so the totals will not add up to 100 percent. This region has a lower Hispanic population than the state.

Race and Ethnicity 2008

	Lancaster	Northumberland	Richmond	Westmoreland	Region	State
White	66.9%	69.3%	61.5%	61.9%	64.9%	69.2%
Black or African American	31.5%	29.0%	35.6%	32.9%	32.1%	20.1%
Am. Indian / Alaska Native	0.1%	0.2%	0.1%	0.3%	0.2%	0.3%
Asian	0.5%	0.3%	0.4%	0.5%	0.4%	4.8%
Hawaiian / Pacific Islander	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%
Other	0.1%	0.5%	1.3%	2.6%	1.2%	2.8%
2 or More Races	0.8%	0.8%	1.0%	1.8%	1.2%	2.7%
Total Hispanic	0.9%	1.4%	3.2%	5.2%	2.9%	6.7%

Source: ESRI Business Analyst

Housing

The number of housing units in the Northern Neck is growing much more quickly than the population would justify. Newcomers are building new homes on the water and in 'greenfield' areas rather than purchasing existing homes in the area.[3]

Regional Housing Tenure Estimate and Projection 2000 - 2013

	2000 #	2000 %	2008 #	2008 %	2013 #	2013 %
Total Units	27,353	100.0%	30,351	100.0%	32,136	100.0%
Occupied Housing Units	20,257	74.1%	22,192	73.1%	23,356	72.7%
Owner Occupied	16,634	60.8%	18,065	59.5%	18,812	58.5%
Renter Occupied	3,623	13.2%	4,127	13.6%	4,544	14.1%
Vacant	7,096	25.9%	8,159	26.9%	8,780	27.3%
For Rent	211	0.8%	252	0.8%	271	0.8%
For Sale Only	374	1.4%	441	1.4%	474	1.4%
Rented / Sold, Not Occupied	182	0.7%	221	0.7%	237	0.7%
Migrant Workers	14	0.1%	32	0.1%	32	0.1%
Seasonal / Occasional Use	4,670	17.4%	5,494	18.1%	5,894	18.3%
Other Vacant	1,555	5.7%	1,797	5.9%	1,931	6.0%

Source: US Census, ESRI Business Analyst, czbLLC

Another area of concern is the lack of available homes for sale or rent. This indicates that potential residents who are not able or willing to build their home may struggle to find appropriate housing in the region. Also, the percentage of 'Other' vacant homes is fairly high, indicating that there may be a not insignificant number of homes that are abandoned.

According to the Northern Neck Planning Development Commission, new home starts decreased significantly from 2005 to 2006 (the latest available data) from 843 to 759. This reflects the very slow growth of the region, but also exacerbates the challenge of home availability. The lack of available homes may also impact economic development as prospective businesses may choose not to locate in the region because employees may struggle to find homes.

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[3] "Greenfield" is meant to depict new construction development that is neither infill nor encumbered by previous development activity; i.e. suburban.

2008 Housing Occupancy
Units by Structure 1990 - 2000

	1990 #	1990 %	2000 #	2000 %	% Change
Total	**24,316**	**100%**	**27,353**	**100%**	**12.5%**
1, Detached	19,970	82.1%	23,122	84.5%	2.4%
1, Attached	318	1.3%	348	1.3%	0.0%
2	177	0.7%	309	1.1%	0.4%
3 or 4	196	0.8%	190	0.7%	(-0.10%)
5 to 9	197	0.8%	141	0.5%	(-0.3%)
10 to 19	46	0.2%	83	0.3%	0.1%
20+	43	0.2%	123	0.4%	0.2%
Mobile Home	3,079	12.7%	2,960	10.8%	(-1.9%)
Other	290	1.2%	77	0.3%	(-0.9%)

Source: US Census

Units by Structure Owner vs. Renter 2000

	Owner #	Owner %	Renter #	Renter %
Total	16,628	100.0%	3,629	100.0%
1, Detached	14,681	88.3%	2,319	63.9%
1, Attached	181	1.1%	96	2.6%
2	29	0.2%	244	6.7%
3 or 4	14	0.1%	170	4.7%
5 to 9	6	0.04%	107	2.9%
10 to 19	35	0.2%	45	1.2%
20+	0	0.0%	46	1.3%
Mobile Home	1,674	10.1%	528	14.5%
Other	8	0.05%	7	0.2%

Source: 2000 US Census

As these tables indicate the vast majority of homes are single family, detached homes. There are very few multi family options, many those looking for lower cost, or short term housing (such as new employees) may struggle to find suitable housing.

HOUSING AGE AND CONDITION

Year Structure Built 2000

	Lancaster	Northumberland	Richmond	Westmoreland
1999 - March 2000	1.8%	4.9%	1.5%	1.0%
1995 – 1998	6.8%	9.7%	7.1%	6.2%
1990 – 1994	9.5%	11.3%	10.0%	9.4%
1980 – 1989	19.5%	15.1%	15.1%	15.5%
1970 – 1979	17.9%	13.8%	18.1%	21.8%
1960 – 1969	11.1%	11.1%	14.4%	12.6%
1940 - 1959	17.0%	18.5%	18.4%	20.3%
< 1939	16.4%	15.5%	15.4%	13.2%

Source: 2000 US Census

Residential Housing Permits 2001 - 2007

	2001	2002	2003	2004	2005	2006	2007
Lancaster	62	136	144	131	204	140	112
Northumberland	150	219	229	278	234	241	185
Richmond	35	68	56	72	72	56	37
Westmoreland	137	126	121	169	313	322	281
Northern Neck	384	549	550	650	843	759	614

Source: Northern Neck Planning District Commission

Year Moved In Occupied Housing Units 2000

	Lancaster	Northumberland	Richmond	Westmoreland
1999 - March 2000	12.0%	14.6%	11.1%	11.7%
1995 – 1998	23.1%	21.1%	21.4%	23.3%
1990 – 1994	17.3%	15.4%	15.4%	18.5%
1980 – 1989	20.7%	18.3%	15.8%	17.4%
1970 – 1979	11.6%	12.8%	16.0%	14.0%
< 1969	15.2%	17.9%	20.4%	15.1%

Source: 2000 US Census

Overcrowding does not seem to be an issue in the Northern Neck. Overcrowding is determined by having more than one occupant per room in the house (not just bedrooms).

Occupants Per Room 2000

	Lancaster	Northumberland	Richmond	Westmoreland
1 or less	98.2%	97.8%	97.8%	97.3%
1.01 – 1.5	1.5%	1.3%	1.4%	1.9%
1.5 or more	0.3%	1.0%	0.8%	0.8%
Total Overcrowded	1.8%	2.3%	2.2%	2.7%

Source: 2000 US Census

A lack of plumbing, kitchen, and telephone facilities also indicates inadequate shelter. Again, this does not seem to be a significant issue facing the region.

Lacking Plumbing, Kitchen, and Phone 2000

	Lancaster	Northumberland	Richmond	Westmoreland
Lacking Plumbing	2.3%	2.9%	2.7%	2.9%
Lacking Kitchen	1.1%	1.6%	1.0%	2.0%
No Telephone	3.4%	3.1%	5.0%	3.1%

Source: 2000 US Census

The lack of phone service may be an indication that many homes are for seasonal use and that many residents may utilize cell phones rather than land lines. The majority of homes are heated by electricity or oil, with a smaller percentage by bottled gas.

HOUSING COSTS

Housing affordability is a growing issue in the Northern Neck. New homes that are being built are not affordable for many current residents and the home value is increasing much faster than the household income. This, coupled with the lack of multifamily housing options, is creating a major imbalance in the housing market for the region. The current economic situation may restore an element of balance if housing prices begin to see a decline.

Median Income and Home Value for Region 2000 - 2008

	2000	2008	% Change
Median Household Income	**$35,629**	**$44,332**	**24.4%**
Median Home Value	**$97,968**	**$188,943**	**92.9%**

Source: ESRI Business Analyst

Housing Units by Value 2008

	Lancaster	Northumberland	Richmond	Westmoreland	Region
< $10,000	1.0%	1.2%	1.1%	2.0%	1.4%
$10K – 14,999K	0.9%	1.0%	0.6%	1.0%	0.9%
$15K - $19,999	0.5%	0.4%	0.5%	0.9%	0.6%
$20K - $24,999	0.8%	0.8%	0.6%	0.3%	0.6%
$25K - $29,999	0.6%	0.7%	0.6%	0.2%	0.5%
$30K - $34,999	0.6%	0.4%	0.7%	0.9%	0.7%
$35K - $39,999	0.5%	0.4%	0.8%	1.0%	0.7%
$40K - $49,999	1.3%	1.2%	1.2%	1.1%	1.2%
$50K - $59,999	3.0%	1.9%	1.9%	1.3%	2.0%
$60K - $69,999	2.3%	1.8%	2.6%	1.4%	1.9%
$70K - $79,999	2.4%	1.6%	1.2%	1.3%	1.6%
$80K - $89,999	3.2%	2.6%	2.8%	1.7%	2.5%
$90K - $99,999	2.6%	2.5%	3.2%	1.6%	2.3%
$100K - $124,999	6.8%	8.1%	10.0%	8.4%	8.1%
$125K - $149,999	7.3%	9.5%	9.9%	10.6%	9.4%
$150K - $174,999	10.0%	7.3%	13.9%	13.7%	10.9%
$175K - $199,999	5.5%	6.8%	11.6%	11.4%	8.6%
$200K - $249,999	6.6%	7.1%	9.5%	13.3%	9.3%
$250K - $299,999	8.1%	8.7%	7.5%	7.8%	8.1%
$300K - $399,999	9.1%	9.8%	10.0%	10.1%	9.8%
$400K - $499,999	6.4%	8.8%	3.6%	3.7%	5.9%
$500K - $749,999	10.0%	12.1%	3.4%	4.6%	8.0%
$750K - $999,999	5.0%	2.5%	1.9%	1.1%	2.6%
$1,000,000+	5.4%	2.9%	0.9%	0.7%	2.5%
Median Value	$204,948	$213,997	$172,121	$181,061	$188,943

Source: ESRI Business Analyst

Based on the homebuyer assumptions discussed above, just 34 percent of homes in the region are affordable for a median family income. The prices in Northumberland and Lancaster Counties are likely elevated due to the premium paid for waterfront homesites. Westmoreland has some of this influence; however, it also has a higher percentage of mobile homes and multi family homes than do Lancaster and Westmoreland. Richmond has the least waterfront, smallest population, and least growth which is reflected in its housing prices.

HUD Fair Market Rent FY 2009

	Lancaster	Northumberland	Richmond	Westmoreland	Region Avg.
Efficiency	$448	$448	$448	$453	$449.25
1 Bdr	$551	$551	$551	$552	$551.25
2 Bdr	$671	$671	$671	$697	$677.50
3 Bdr	$825	$817	$817	$956	$853.75
4 Bdr	$888	$888	$888	$985	$912.25

Source: US Department of Housing and Urban Development

Another indicator of housing affordability is the percentage of income spent on housing. Typically, no more than 30 percent of gross income should be spent on housing. Those over 30 percent are considered cost burdened. Given these rental averages, most households can afford the average rent in the region. Single income families, or single individuals may struggle though. Unfortunately, the most recent data available is 2000 Census. Given the rising cost of housing compared to income, it is likely that even more families have become cost burdened.

Monthly Owner Costs as Percentage of Household Income (1999 Data)

	Lancaster	Northumberland	Richmond	Westmoreland
< 15%	41.8%	48.7%	43.9%	43.3%
15% - 19%	15.1%	12.9%	16.7%	14.2%
20% - 24%	11.4%	8.5%	9.1%	10.7%
25% - 29%	7.7%	5.7%	10.2%	5.8%
		Cost Burdened		
30% - 34%	6.0%	5.2%	3.3%	6.4%
> 35%	16.9%	18.5%	13.2%	17.7%
Not Computed	1.1%	0.5%	3.6%	1.7%

Monthly Rent as Percentage of Household Income (1999 Data)

	Lancaster	Northumberland	Richmond	Westmoreland
< 15%	19.6%	24.8%	13.9%	23.9%
15% - 19%	9.4%	12.9%	15.9%	9.8%
20% - 24%	10.3%	7.1%	11.6%	10.1%
25% - 29%	10.4%	5.0%	4.2%	5.9%
		Cost Burdened		
30% - 34%	5.7%	4.6%	7.5%	5.5%
> 35%	17.6%	17.5%	17.6%	26.0%
Not Computed	27.1%	28.1%	29.3%	18.9%

Source: 2000 US Census

Across the region, approximately 25 percent of owners and renters could be considered cost burdened.   Exceptions are Richmond County, where only 16 percent of owners are cost burdened, and Westmoreland County where over 31 percent of renters are paying cost burdened. These two counties have the lowest median home value in the region.

HOUSEHOLD CHARACTERISTICS

Average Household and Family Size 2000

	Lancaster	Northumberland	Richmond	Westmoreland	Region
Household Size	2.23	2.24	2.40	2.43	2.32
Family Size	2.71	2.7	2.93	2.91	2.81

Source: 2000 US Census

Persons per Occupied Unit 2000

	Lancaster		Northumberland		Richmond		Westmoreland	
	Owner	**Renter**	**Owner**	**Renter**	**Owner**	**Renter**	**Owner**	**Renter**
Total	**5,004**	**852**	**5,470**	**687**	**2,937**	**669**	**6,846**	**1,421**
1 Person	4,152	339	4,783	237	2,268	259	5,425	433
2 Person	1,976	212	2,325	118	840	188	2,240	375
3 Person	460	180	551	149	408	96	763	265
4 Person	374	89	397	111	281	82	565	174
5 Person	184	30	151	56	106	29	302	85
6 Person	40	0	52	5	47	0	129	64
7+ Person	26	2	32	11	15	15	22	25

Source: 2000 US Census

The population of the Northern Neck is aging. If this trend continues it may exacerbate the multi family housing shortage as elderly residents seek to relocate to lower maintenance homes such as condominiums or apartments.

Age of Householder by Tenure 2000

	Lancaster		Northumberland		Richmond		Westmoreland	
	Owner	**Renter**	**Owner**	**Renter**	**Owner**	**Renter**	**Owner**	**Renter**
Total	**5,004**	**852**	**5,470**	**687**	**2,937**	**669**	**6,846**	**1,421**
15 – 24 Yrs	34	56	32	36	37	50	51	162
25 – 34 Yrs	187	178	282	110	175	156	394	338
35 – 44 Yrs	585	166	569	210	380	144	963	298
45 – 54 Yrs	734	135	622	129	465	84	939	228
55 – 59 Yrs	338	34	500	52	220	57	587	124
60 – 64 Yrs	407	33	573	37	204	39	518	46
Age 65+								
65 – 74 Yrs	1,014	110	1,164	17	417	45	1,070	118
75 – 84 Yrs	688	94	827	80	284	65	629	68
85 +	165	46	214	16	86	29	274	39
% 65+	37.3%	29.3%	40.3%	16.4%	26.8%	20.8%	28.8%	15.8%

Source: 2000 US Census

Approximately 40 percent of homeowners in Lancaster and Northumberland Counties are over 65, while over 25 percent are in Richmond and Westmoreland Counties. This may create a challenge as these residents age and may become less able to care for their homes. The lack of multi family housing limits the options for these residents when they choose to move from their homes.

Households with Children 2000

	Lancaster #	%	Northumberland #	%	Richmond #	%	Westmoreland #	%
Total	5,004	100.0%	5,470	100.0%	2,937	100.0%	6,846	100.0%
With Children	1,204	24.1%	1,264	23.1%	888	30.2%	2,041	29.8%
Married Couple	761	15.2%	881	16.1%	613	20.9%	1,247	18.2%
Single Parent	443	8.9%	383	7.0%	275	9.4%	794	11.6%

Source: 2000 US Census

The percentage of families with children has declined since 1990. This reflects the aging of the population and the national trend to smaller families and fewer children. This trend is already affecting school enrollments and will continue to impact the region.

Single Parent Households by Tenure 2000

	Lancaster Owner	Renter	Northumberland Owner	Renter	Richmond Owner	Renter	Westmoreland Owner	Renter
Single Mother	130	150	117	124	85	105	193	224
Single Father	25	12	12	6	48	13	75	28

Source: 2000 US Census

INCOME

Household Income 2008

	Lancaster %	Northumberland %	Richmond %	Westmoreland %	Region %
< $15,000	15.9%	16.1%	18.2%	15.4%	16.1%
$15,000 - $24,999	12.6%	10.6%	13.4%	14.1%	12.7%
$25,000 - $34,999	15.1%	10.7%	11.4%	11.3%	12.1%
$35,000 - $49,999	13.3%	14.2%	14.8%	14.1%	14.0%
$50,000 - $74,999	18.1%	24.8%	23.0%	23.5%	22.5%
$75,000 - $99,999	9.7%	9.9%	9.7%	11.9%	10.5%
$100,000 - $149,999	8.9%	7.7%	7.3%	6.7%	7.6%
$150,000 - $199,999	2.9%	3.3%	1.1%	1.5%	2.3%
> $200,000	3.5%	2.5%	1.2%	1.5%	2.2%
Median Income	$41,886	$47,713	$42,224	$44,591	$44,332

Source: ESRI Business Analyst

Median Income Change 2000 - 2008

	2000	2008	% Change
Lancaster	**$33,517**	**$41,886**	**25.0%**
Northumberland	**$38,066**	**$47,713**	**25.3%**
Richmond	**$33,526**	**$42,224**	**25.9%**
Westmoreland	**$35,734**	**$44,591**	**24.8%**
Region	**$35,629**	**$44,332**	**24.4%**

Source: ESRI Business Analyst

The region lags the state in income and has a slower growth rate than the state. The median income in 2008 is lower than the median state income was in 2000. This lower income is likely a result of the economy historically being based on fishing and now being a retiree destination.

Region to State Comparison Median Household Income 2000 - 2008

	2000	2008	%Change
Region	$35,629	$44,332	24.4%
State	$46,729	$61,817	32.3%

Source: ESRI Business Analyst

HUD Median Family Income Level

	MFI
Lancaster	$55,300
Northumberland	$63,400
Richmond	$54,400
Westmoreland	$53,300

Source: US Dept. of Housing and Urban Development

One concern with developing data between Census is that different agencies and organizations have different methods of calculating data such as income, population estimates, etc. In the case of income ESRI Business Analyst and HUD have different numbers. HUD assumes a household of nearly 4 people to calculate its median family income. Census data shows the typical family size in the Northern Neck is between 2.7 and 3.0 persons per family and the household size is 2.25 – 2.6. HUD income levels are the standard used to calculate rents and eligibility for housing and other public assistance. Bay Aging and other entities in the region use the HUD Standards.

HUD Income Levels by Members in Family

		1	2	3	4	5	6	7	8
Lancaster	< 30% of MFI	$11,600	$13,300	$14,950	$16,600	$17,950	$19,250	$20,600	$21,900
	50% MFI	$19,350	$22,100	$24,900	$27,650	$29,850	$32,050	$34,300	$36,500
	80% MFI	$31,000	$35,400	$39,850	$44,250	$47,800	$51,350	$54,850	$58,400
Northumberland	< 30% of MFI	$13,300	$15,200	$17,100	$19,000	$20,500	$22,050	$23,550	$25,100
	50% MFI	$22,200	$25,350	$28,550	$31,700	$34,250	$36,750	$39,300	$41,850
	80% MFI	$35,500	$40,500	$45,650	$50,700	$54,750	$58,800	$62,850	$66,900
Richmond	< 30% of MFI	$11,400	$13,050	$14,650	$16,300	$17,600	$18,900	$20,200	$21,500
	50% MFI	$19,050	$21,750	$24,500	$27,200	$29,400	$31,550	$33,750	$35,900
	80% MFI	$30,450	$34,800	$39,150	$43,500	$47,000	$50,450	$53,950	$57,400
Westmoreland	< 30% of MFI	$11,200	$12,800	$14,400	$16,000	$17,300	$18,500	$19,850	$21,100
	50% MFI	$18,650	$21,300	$24,000	$26,650	$28,800	$30,900	$33,050	$35,200
	80% MFI	$29,850	$34,100	$38,400	$42,650	$46,050	$49,450	$52,900	$56,300

Source: US Dept. of Housing and Urban Development

Another indicator is the number of households below the area median income. The following table is a calculation of the percentage of homes that fall above or below the median income for the area. Users of this report are urged to interpret the differing sets of definitions carefully.

% Households by Percentage Area Median Income* 2008

	Lancaster %	Northumberland %	Richmond %	Westmoreland %	Region %
< 50% AMI	23.4%	25.5%	23.7%	25.7%	25.2%
50 – 80% AMI	17.9%	14.9%	14.6%	14.7%	16.1%
80 – 100% AMI	8.4%	9.5%	11.5%	8.6%	8.5%
100 – 150%	11.6%	24.1%	17.0%	20.8%	20.1%
150% +	38.7%	26.0%	33.2%	30.2%	30.1%

*Assumes an equal distribution across Household Income Divisions; Source: czbLLC

EMPLOYMENT

As mentioned, the character of the Northern Neck is changing from an agriculture and fishing based economy to one focused on tourism, service industries and retirees.

Unemployment Rate (November 2008)

	Unemployed
Lancaster	6.28%
Northumberland	5.88%
Richmond	6.51%
Westmoreland	6.45%
State	4.61%

Source: Virginia Economic Development Partnership

The region has a significantly higher unemployment rate than the State, again, indicating its past reliance on agriculture and fishing which are in decline.

The commuting patterns of the region vary as well. Northumberland and Westmoreland Counties, which are more strongly influenced by the Washington, DC area see a significant outflow of commuters, while Richmond and Lancaster Counties see a net inflow of commuters. This is 2000 data so there may have been changes in the last 8 years; however, there were not significant changes from 1990 – 2000 so it can be assumed that the commuting patterns are fairly stable.

In and Out Commuting 2000

	Live and Work in County	In	Out	Net in / out
Lancaster	52.2%	29.3%	18.5%	651 In
Northumberland	40.3%	13.9%	45.8%	1,784 Out
Richmond	28.2%	38.4%	33.4%	263 In
Westmoreland	36.0%	12.0%	52.0%	3,202 Out

Source: Virginia Economic Development Partnership / 2000 US Census

The large majority of out-commuters from the 4 counties are staying in the Northern Neck. Essex County is one of the larger destinations for commuters out of the region. In commuters follow a similar pattern, with most of those from outside the region coming in from Essex County. Northumberland had the smallest percentage of in commuters which makes sense given its relative isolation and unemployment rate.

In Commuting Patterns 2000

	Lancaster	Northumberland	Richmond	Westmoreland	Outside of Region
Lancaster		57.8%	6.1%	NA	36.1%
Northumberland	37.5%		37.8%	15.0%	9.7%
Richmond	10.0%	30.8%		35.4%	23.8%
Westmoreland	NA	22.8%	45.2%		32.0%

Source: Virginia Economic Development Partnership / 2000 US Census

The occupation data indicates the types of jobs available in the region.

Employment by Occupation (1ST Qtr. 2008)

	Lancaster	Northumberland	Richmond	Westmoreland
Construction / Extraction	12.5%	15.3%	9.8%	9.0%
Farming, Fishing, Forestry	0.4%	0.5%	2.9%	3.9%
Professional	22.0%	22.3%	28.5%	25.2%
Transportation	9.0%	17.9%	10.2%	18.0%
Sales & Office	32.6%	26.8%	23.3%	23.8%
Service	23.5%	17.2%	25.2%	20.1%

Source: Virginia Economic Development Partnership

Employment and Weekly Wages by Industry (2nd Quarter 2008)

	Lancaster Wage		Northumberland Wage		Richmond Wage		Westmoreland Wage		State Wage	
Avg Weekly	$558		$521		$506		$530		$585	
Agriculture, Forestry, Fishing, Hunting	22	$563	15	$736	140	$470	269	$483	11,834	$512
Mining	NA	NA	NA	NA	NA	NA	NA	NA	9,090	$1,099
Utilities	NA	NA	NA	NA	NA	NA	9	$816	11,429	$1,490
Construction	494	$602	320	$744	116	$669	234	$503	226,757	$828
Manufacturing	181	$387	481	$593	137	$714	657	$651	266,943	$913
Wholesale Trade	90	$652	81	$515	101	$766	55	$527	120,757	$1,192
Retail Trade	847	$398	363	$328	284	$366	441	$359	418,415	$482
Transportation and Warehousing	79	$690	54	$441	29	$663	57	$730	101,918	$784
Information	75	$620	17	$517	100	$1,157	12	$439	88,540	$1,396
Finance and Insurance	242	$965	69	$569	69	$729	114	$559	127,817	$1,216
Real Estate and Rental and Leasing	56	$355	27	$404	19	$244	29	$322	57,526	$782
Professional and Technical Services	159	$851	157	$686	63	$831	81	$653	371,770	$1,610
Management of Companies and Enterprises	90	$1,123	NA	NA	NA	NA			76,414	$1,780
Admin / Support	144	$499	93	$349	68	$594	138	$574	212,325	$611
Educational Services	45	$715	NA	NA	NA	NA	NA	NA	57,050	$767
Health Care and Social Assistance	990	$648	75	$632	825	$433	199	$587	356,074	$804
Arts, Entertainment, and Recreation	37	$475	98	$377	26	$534	144	$342	52,776	$457
Accommodation and Food Services	599	$329	169	$189	145	$214	357	$210	308,125	$304
Other Services, except Public Administration	323	$396	209	$314	114	$442	126	$337	131,491	$671
Federal Government	43	$863	30	$762	37	$818	65	$789	159,025	$1,568
State Government	55	$639	32	$740	509	$693	72	$567	142,579	$777
Local Government	560	$555	460	$613	411	$893	747	$690	383,425	$766

NA means the data is non-disclosable (too few entities); Source: Virginia Employment Commission

PUBLIC AND ASSISTED HOUSING RESOURCES

HUD vouchers in the Northern Neck are handled by the County Departments of Social Services. The vouchers are portable, so residents are able to live in other counties than the one providing the vouchers. For example, of the 47 Northumberland County vouchers, only 28 recipients reside in Northumberland County while the others are in Richmond and Essex Counties (Essex is outside the Northern Neck). Seven of Westmoreland County's vouchers are in Richmond and Essex Counties. Richmond County does not manage its HUD vouchers, they are managed by Northumberland and Westmoreland Counties. Richmond County does provide a low income housing list to those needing that resource.

Section 8 Vouchers

	Vouchers	**Waiting List**
Lancaster	76	130
Northumberland	47	100
Richmond	Managed by Northumberland and Westmoreland	
Westmoreland	53	120

Source: Interviews with County DSS Staff

Northumberland County only has five of its vouchers in multifamily units, the rest are in single family homes due to the lack of multifamily options.

Low Income Housing

	Location	**# of Units**	**Units Occupied**	**Rents**
Colonial Beach Apts	Colonial Beach	32 (2 currently at Market Rate)		1 Bdr \$570 2 Bdr \$708 (\$774 Market)
Montross Apts	Montross			
River Woods Public Housing	Colonial Beach	83 (1 –3 Bdr)	100% 10 on Waiting List	30% of income

Low Income Housing Tax Credit Properties

Name	**City**	**Units**	**Units Occupied**	**Funding Source**	**Rents**
Indian Creek Apts	Kilmarnock	20			
Warsaw Manor*	Warsaw	56 (4 2bdr)	100% 20 on Waiting List	USDA Rural Development	30% of income
Reedville Manor*	Reedville	26 (1bdr for			
Kilmarnock Village	Kilmarnock	24			

Source: US Dept. of Housing and Urban Development
* Elderly and Disabled

The primary provider of services for the intellectually disabled is the Middle Peninsula – Northern Neck Community Services Board. This agency provides service to a 10 county region including the Northern Neck. The organization receives funding from a number of state and federal sources, but does not receive funding directly to provide housing. They provide 9 group homes in their service area, 3 for mentally ill residents and 6 for intellectually disabled. The vouchers, are intended to provide bridge assistance until recipients receive HUD vouchers and follow the same income criteria. There are several vouchers used in Kilmarnock, two in Warsaw. These are funded out of the agency's general funds since there is not direct money to provide them. There are also three halfway homes for substance abuse treatment, one of them HUD subsidized.

Group Homes owned by MPNNCSB

	City	# of Beds	Occupied
Mentally Ill	Saluda	8	100%
	Gloucester	4	100%
	Warsaw*	8	100%
Intellectually Disabled	Matthews	4	100%
	Middlesex County	5	100%
	Urbanna	7	100%
	Tappahannock	5	100%
	Warsaw*	5	100%
	Kilmarnock*	5	100%
Managed Apt. Complexes	Kilmarnock*	8 1Bdr Apts	100%
	Lively*	6 1Bdr Apts	100%

*These complexes are in the Northern Neck Region

Bay Aging is the agency that provides assistance to elderly and low income residents in a 10 county region including the Northern Neck. They manage eight senior apartment complexes across the 10 counties, including one that opened in January 2009. There are 286 total units with no vacancies. Three of the complexes currently do not have waiting lists but are still full. Rents are charged based on County income levels and HUD standards.

Bay Aging Apartment Complexes

Complex Name	City	# Units	Occupancy	1 Person HUD Limit	2 Person HUD Limit
The Meadows*	Colonial Beach	33	100%	$29,850	$34,100
Winters Point	West Point	27	100%	$24,250	$27,700
Daffodil Gardents	Gloucester	64	100%	$22,800	$26,050
Mill Pond Village*	Montross	24	100%	$18,650	$21,300
Tartan Village*	Kilmarnock	22	100%	$19,350	$22,100
Port Town Village	Urbanna	25	100%	$19,700	$22,500
Parker Run*	Montross	24	100%	$18,650	$21,300
Parker View	Williamsburg	67	100%	$22,800	$26,050

*These complexes are in the Northern Neck Region

In addition to the apartment complexes, Bay Aging manages an Indoor Plumbing Rehabilitation program. This program is available based on income levels for those homes without full indoor plumbing. The program can actually result in major rehabilitation of homes beyond just plumbing improvements. The program is limited by income but not by age. Bay Aging has served approximately 70 homes in the last 2 years. Income limits are 80% of median income and it is a 10 year 0% loan. This program in Lancaster County is managed by the County Department of Social Services and serves 15 – 20 homes per year.

Bay Aging also manages the Community Development Block Grant program that allows municipalities to apply for grants for planning and home rehabilitation. Approximately 30 homes have been rehabilitated through this program. There is also the weatherization program that provides assistance with weatherizing homes and other light repairs, again based on income but not age. This program has helped approximately 170 households in the last 2 years. Income limits are 130 percent of the poverty level adjusted annually. Finally, there is the Emergency Home Repair program that is a matching grant program for more extensive repairs of up to $1,000 or no more than ½ the total cost. Income cannot exceed 80% of the HUD Area Median Income. They also offer homebuyer counseling, and other education programs.

Other service providers include the Westmoreland Housing Coalition. This group helps with basic home improvements, as well as 0% loans for indoor plumbing and home rehabilitation. Funding comes from the Virginia Water Project, Bay Aging, and USDA /

Rural Development. It uses HUD income eligibility standards. It has served 17 households in the last year. Telamon Corporation used grants from HUD and Virginia DHCD to build farmworker housing in Westmoreland County. They built six duplexes to house up to 48 single workers and four homes for families. These units were built on the farm property and provides housing for workers employed at those sites. LINK of Hampton Roads provide emergency mortgage assistance to Richmond and Westmoreland Counties as well as homebuyer counseling and related services. Quin Rivers Agency for Community Action provides similar services in Lancaster and Northumberland Counties. Scenario, Inc. is a community housing development organization serving the Northern Neck.

MARKET RATE HOUSING INFORMATION

Typical Retirement and Assisted Living Facilities

	City	Beds	Rents	Occupancy
Mayfair House	Kilmarnock	84 (soon expanding)	$2 – 3,000	100%
The Orchard	Kilmarnock	40 (1 bdr apts)	$3,200	90%
River Meadows	Warsaw	12 (1bdr apts)	$1 – 2,000	50%
Westminster – Canterbury	Irvington	1 & 2 Bdr	$2,400 - $3,935	85%

In Colonial Beach, a two bedroom townhome was renting for $750, while a 4 bedroom townhome on the water was asking $1,600. Off the water properties were in the $1,000 - $1,200 range for 3 bedrooms. Again, the market is split between those who live and work in the region and those wanting a second home or coming from outside the area where rents are significantly higher. There were 22 total listings in Colonial Beach.

Throughout the four counties there were limited rental properties. The highest rent was for a four bedroom home on the water in Irvington, with an asking price of $3,250. Other waterfront homes were in the $1,600 to $1,800 range. Rents in Montross were typically much lower, with three bedrooms ranging from $750 - $1,000, with ten properties listed for rent. Kilmarnock had only two properties for rent: a three bedroom for $1,400 and a two bedroom for $2,000. Overall, the single family rental market is fairly limited with only about 14 percent of homes in the region being rented. This, combined with the scarcity of multifamily properties, creates a significant challenge for lower income residents who cannot afford to purchase a home and are struggling to find suitable housing.

Typical Multi Family

	City	Beds	Rents	Occupancy
College Green Apts	Warsaw	1 and 2 bdr		
Mack Haven Apts	Warsaw			
Holly Court	Kilmarnock			

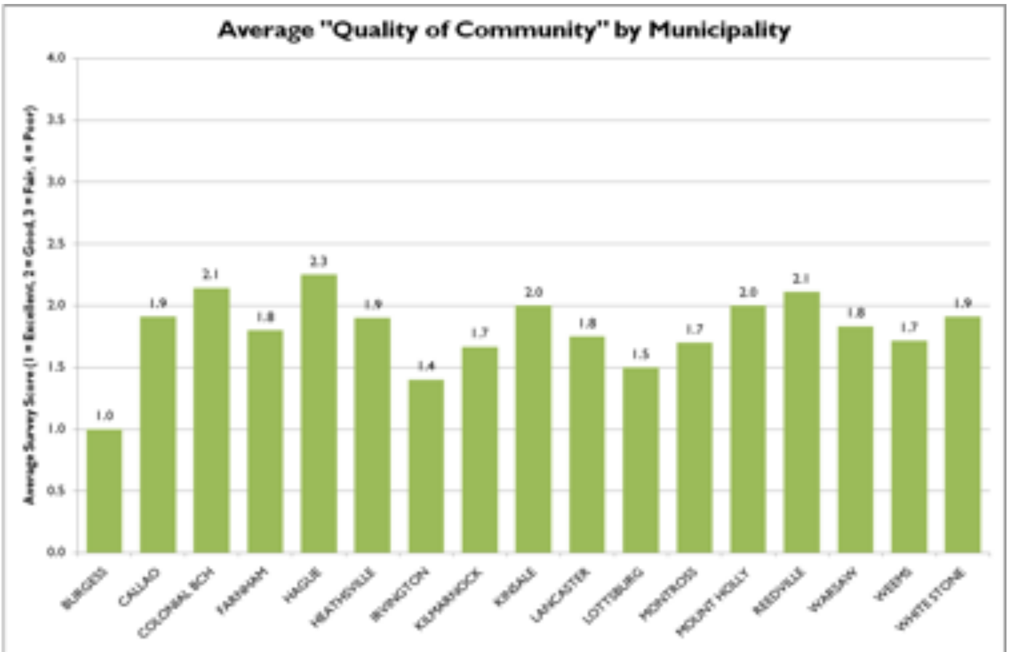
Surveys of Residents
Two surveys were conducted to supplement telephone conversations with Northern Neck residents and businesses. The first was a scientifically valid telephone survey of residents. The second was an informal (not scientifically valid) internet-based survey of self-described leaders in the Northern Neck. Both were conducted between October and November, 2008.

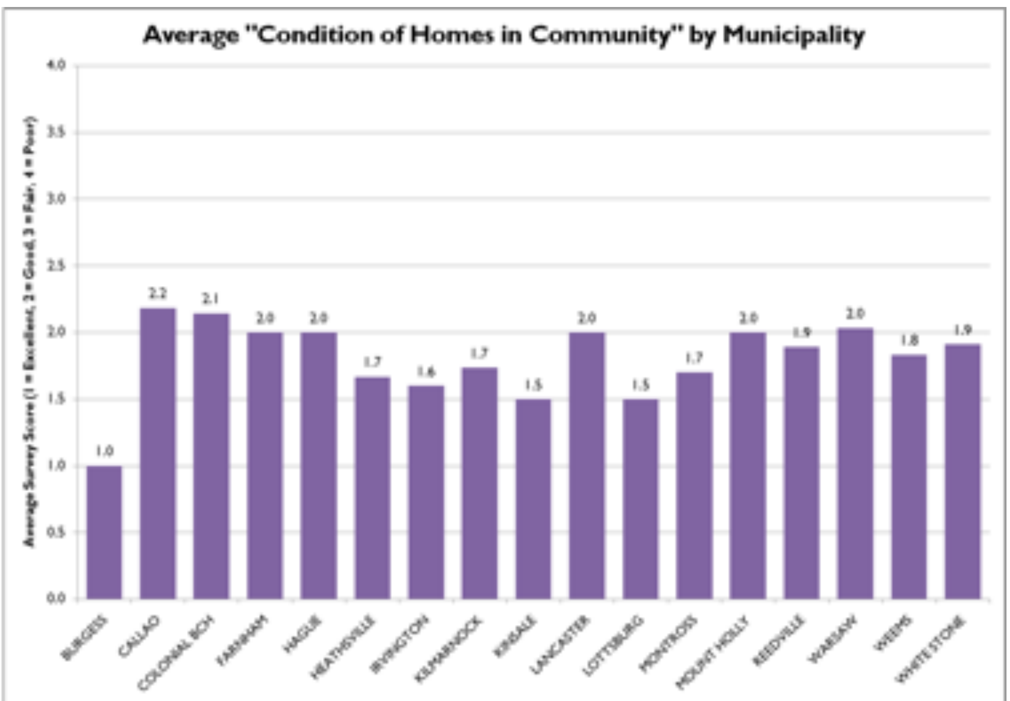
Telephone Survey
On behalf of czbLLC, Cornell University's Survey Research Institute conducted a telephone survey of residents of the Northern Neck Region in Virginia to assess the opinions of residents on general conditions in the Northern Neck Region. The survey focused on housing and urban development issues. The Northern Neck Region is composed of Lancaster, Northumberland, Richmond, and Westmoreland County.

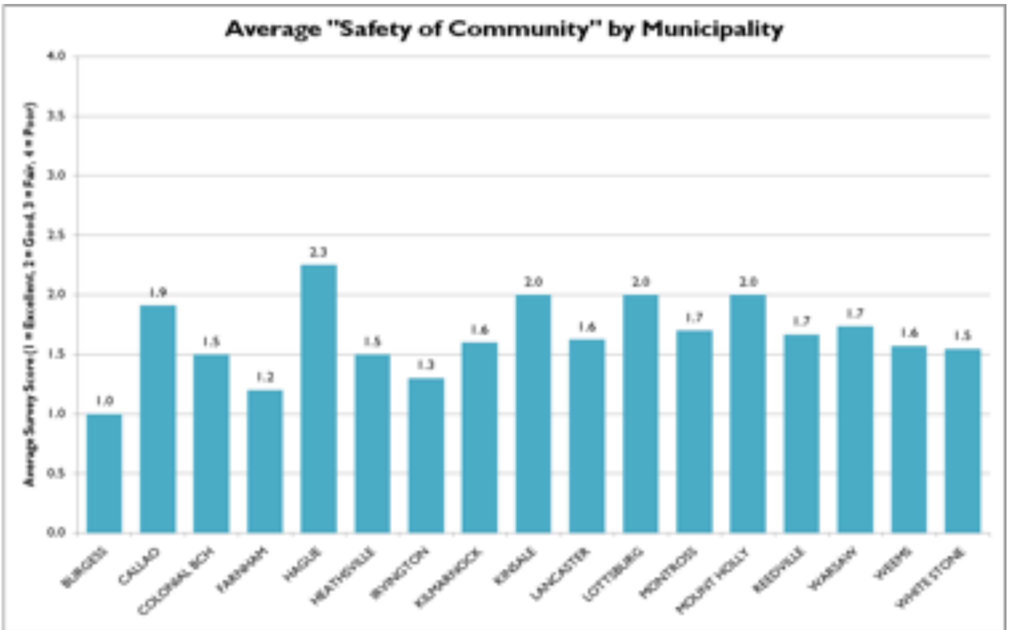
Genesys Sampling Systems provided a listed sample of Northern Neck residents. All interviews were conducted using a Computer Assisted Telephone Interviewing (CATI) software system.

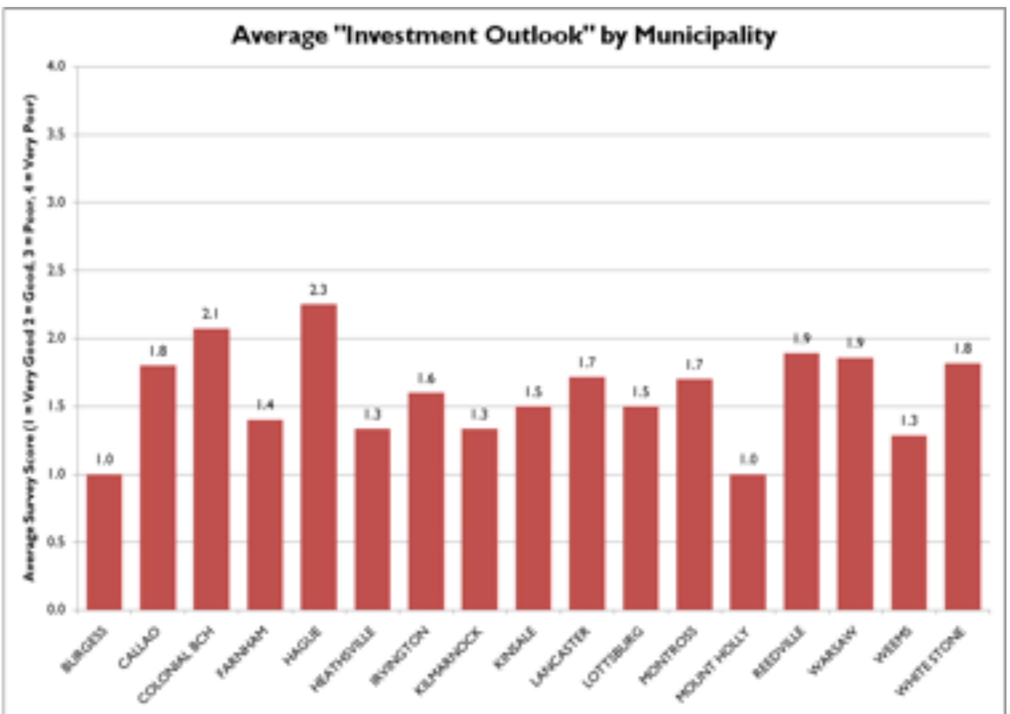
A first round of data collection began on October 28, 2008 and was completed on November 14, 2008. Overall, 120 surveys were completed—30 surveys in each of the four counties. The data collected in this first round had a low incidence of rented households. To compensate, a listed sample of Northern Neck residents deemed likely renters was provided by Genesys. A second round of data collection with this new, renter-targeted sample began on November 24, 2008 and was completed on December 4, 2008. An additional 30 surveys were completed across the four counties during this second round.

Summary Findings









Compared to one another, Burgess, Irvington, Heathsville, Kilmarnock, and Weems typically ranked best on these four questions; the next best group of municipalities included Lottsburg, Farnham and Montross. These were followed by Lancaster, Kinsale, and White Stone, then Mount Holly, Reedville and Warsaw. Callao, Colonial Beach, and Hague typically ranked lowest.

City	# of Surveys	Community Quality Rank	Condition of Homes Rank	Safety Rank	Investment Outlook Rank	Average Rank
BURGESS	1	1	1	1	1	1
IRVINGTON	10	2	4	3	9	5
HEATHSVILLE	10	10	5	4	4	6
KILMARNOCK	15	4	7	8	5	6
WEEMS	7	6	8	7	3	6
LOTTSBURG	2	3	2	14	7	7
FARNHAM	5	8	12	2	6	7
MONTROSS	10	5	6	11	10	8
LANCASTER	8	7	11	9	11	10
KINSALE	2	13	3	15	8	10
WHITE STONE	11	12	10	6	13	10
MOUNT HOLLY	1	14	13	16	2	11
REEDVILLE	9	15	9	10	15	12
WARSAW	30	9	15	12	14	13
CALLAO	11	11	17	13	12	13
COLONIAL BEACH	14	16	16	5	16	13
HAGUE	4	17	14	17	17	16

Results

Table 1 provides a general outline regarding the value of home, household composition, monthly rent, and age of respondents.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Years living in current home	150	0	65	12.81	13.730
Price of home when originally purchased	99	0	1000000	180029.29	190102.253
Estimated current sale price of home	96	20000	1500000	398270.83	291913.811
Value of typical home	98	35000	1000000	332704.08	228680.897
Monthly rent-initially	30	0	1200	327.67	277.514
Monthly rent-now	31	0	1200	360.94	264.834
Year of birth	149	1913	1989	1946.06	15.474
Number of people in household	150	1	7	2.18	1.280
Average commute for primary earner in minutes	61	1	180	31.95	40.472

Table 2 organizes the respondents into the four counties in Virginia's Northern Neck. These counties include Westmoreland, Richmond, Northumberland, and Lancaster. The greatest number of respondents lived in Lancaster.

Table 2. Northern Neck County

	Frequency	Percent	Cumulative Percent
Westmoreland	31	20.7	20.7
Richmond	37	24.7	45.3
Northumberland	33	22.0	67.3
Lancaster	49	32.7	100.0
Total	150	100.0	

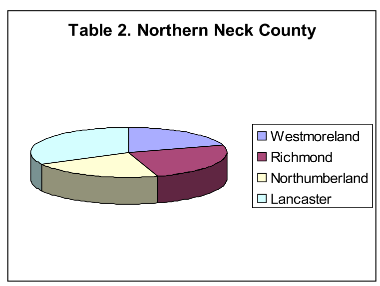


Table 3 shows the 25 zip codes within the Northern Neck where the respondents lived.

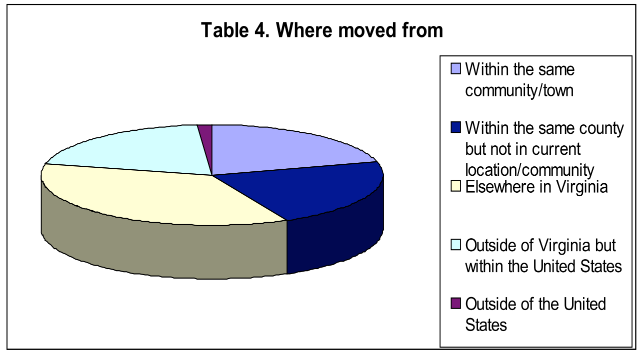
Table 3. ZIP code

	Frequency	Percent	Cumulative Percent
22345	1	.7	.7
22374	1	.7	1.3
22432	3	2.0	3.3
22435	6	4.0	7.3
22443	14	9.3	16.7
22460	5	3.3	20.0
22469	2	1.3	21.3
22472	2	1.3	22.7
22473	7	4.7	27.3
22480	11	7.3	34.7
22482	17	11.3	46.0
22488	3	2.0	48.0
22503	4	2.7	50.7
22507	1	.7	51.3
22511	5	3.3	54.7
22517	2	1.3	56.0
22520	11	7.3	63.3
22524	1	.7	64.0
22529	1	.7	64.7
22539	8	5.3	70.0
22572	28	18.7	88.7
22576	5	3.3	92.0
22578	9	6.0	98.0
22579	2	1.3	99.3
23423	1	.7	100.0
Total	150	100.0	

Table 4 tracks where respondents moved from prior to living in their current residence. Thirty-six percent of the respondents moved from elsewhere in Virginia. Twenty-two percent previously lived within the same county, but not the same community.

Table 4. Where moved from

	Frequency	Percent	Cumulative Percent
Within the same community/town	31	20.7	20.7
Within the same county but not in current location/ community	33	22.0	42.7
Elsewhere in Virginia	54	36.0	78.7
Outside of Virginia but within the United States	30	20.0	98.7
Outside of the United States	2	1.3	100.0
Total	150	100.0	



Nearly 23 percent of the respondents cited retirement as their reason for moving to their current home. Other responses shown in Table 5 include a family change and finding a better fit in the new community.

Table 5. Reason moved into current home

	Frequency	Percent	Cumulative Percent
Family change (divorce, marriage, other)	28	18.7	18.7
Job change	13	8.7	27.3
Retirement	34	22.7	50.0
Cost of living in previous area was too expensive	4	2.7	52.7
Decreasing community quality in previous location	3	2.0	54.7
School quality in previous location was poor	2	1.3	56.0
Size of previous home was too small	10	6.7	62.7
Size of previous home was too large	1	.7	63.3
Previous home was too much to maintain	9	6.0	69.3
The home I always wanted came on the market	5	3.3	72.7
New community was a better fit for myself and/or my family	22	14.7	87.3
Other reason	19	12.7	100.0
Total	150	100.0	

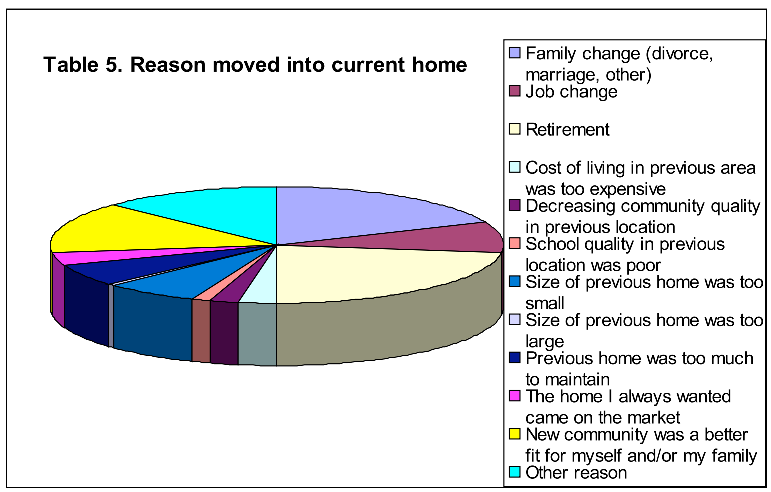


Table 6 measures the respondents' perception of the quality in their community. Fifty-one percent said that the quality of life is about the same as when they first moved into their current home. Thirty-seven percent believe the quality of life has improved.

Table 6. Quality of life

	Frequency	Percent	Cumulative Percent
Is about the same as when I moved into my current home	77	51.3	51.7
Is better than when I moved into my current home	55	36.7	88.6
Is worse than when I moved into my current home	17	11.3	100.0
Total	149	99.3	
Do not know	1	.7	
Total	150	100.0	

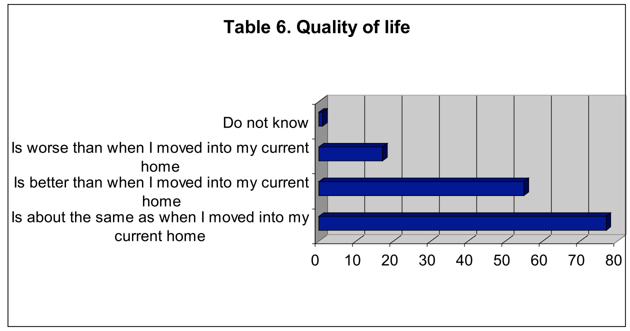


Table 7 shows that 53 percent of respondents' homes have a higher value than when they first moved into their current home. Twenty-four percent believe the value has stayed the same.

Table 7. Real estate values

	Frequency	Percent	Cumulative Percent
Are about the same as when I moved into my current home	36	24.0	25.0
Are higher than when I moved into my current home	79	52.7	79.9
Are lower than when I moved into my current home	29	19.3	100.0
Total	144	96.0	
Do not know	5	3.3	
Refused	1	.7	
Total	6	4.0	
Total	150	100.0	

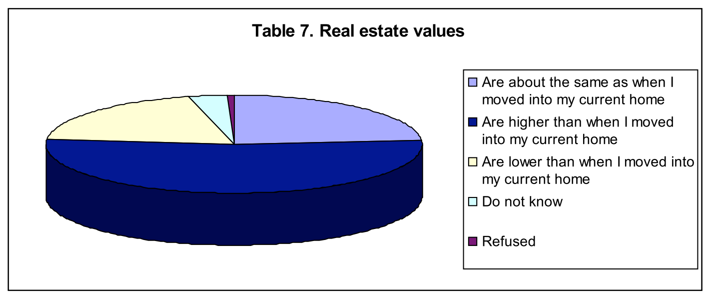


Table 8 shows how the respondents rate the quality of their home. Forty-eight percent believe their homes are excellent quality and 38 percent said they are good quality.

Table 8. Overall quality of home

	Frequency	Percent	Cumulative Percent
Excellent	72	48.0	48.3
Good	57	38.0	86.6
Fair	16	10.7	97.3
Poor	4	2.7	100.0
Total	149	99.3	
Do not know	1	.7	
Total	150	100.0	

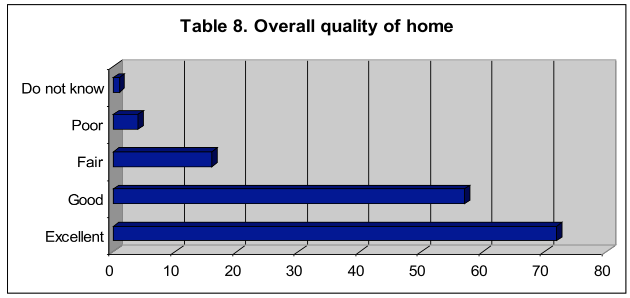


Table 9 shows the positive perceptions the respondents had of their community. Fifty-two percent rated it at good and 33 percent rated it as excellent.

Table 9. Overall quality of community

	Frequency	Percent	Cumulative Percent
Excellent	50	33.3	33.3
Good	78	52.0	85.3
Fair	19	12.7	98.0
Poor	3	2.0	100.0
Total	150	100.0	

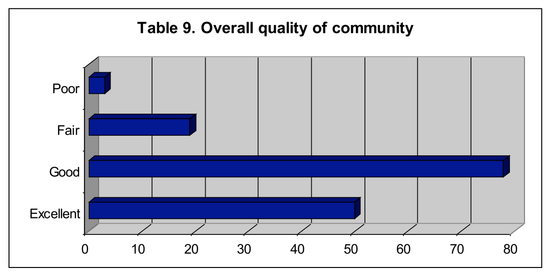


Table 10 explores the condition of homes within the community. Sixty-eight percent of respondents rated the quality of their community as good and 21 percent rated it as excellent.

Table 10. Condition of houses in community

	Frequency	Percent	Cumulative Percent
Excellent	31	20.7	20.8
Good	102	68.0	89.3
Fair	14	9.3	98.7
Poor	1	.7	99.3
Not applicable	1	.7	100.0
Total	149	99.3	
Refused	1	.7	
Total	150	100.0	

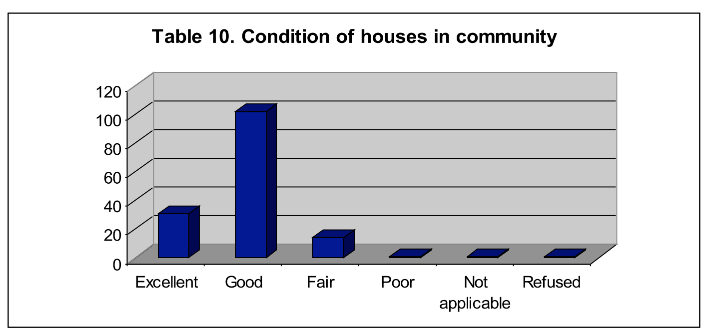


Table 11 shows the safety of the community. Fifty percent view the safety of the community as good and 43 percent said excellent.

Table 11. Safety of community

	Frequency	Percent	Cumulative Percent
Excellent	65	43.3	43.3
Good	75	50.0	93.3
Fair	10	6.7	100.0
Total	150	100.0	

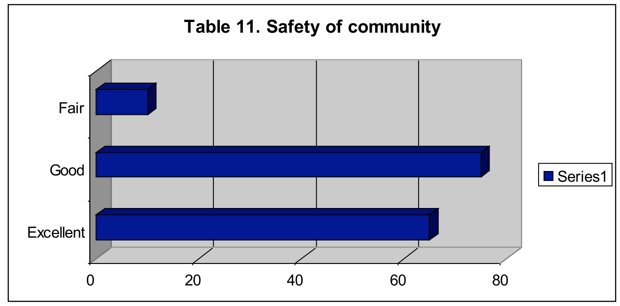


Table 12 shows that 39 percent of respondents rate the quality of schools in the community as good and 19 percent rate them as fair.

Table 12. Quality of schools in community

	Frequency	Percent	Cumulative Percent
Excellent	25	16.7	18.5
Good	58	38.7	61.5
Fair	29	19.3	83.0
Poor	10	6.7	90.4
Not applicable	13	8.7	100.0
Total	135	90.0	
Do not know	15	10.0	
Total	150	100.0	

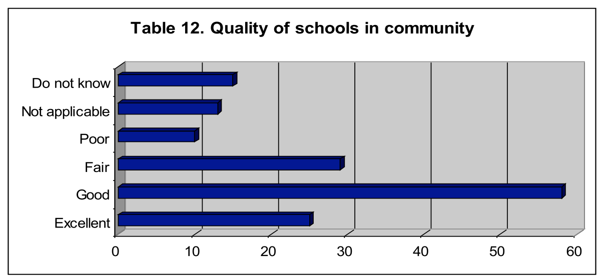
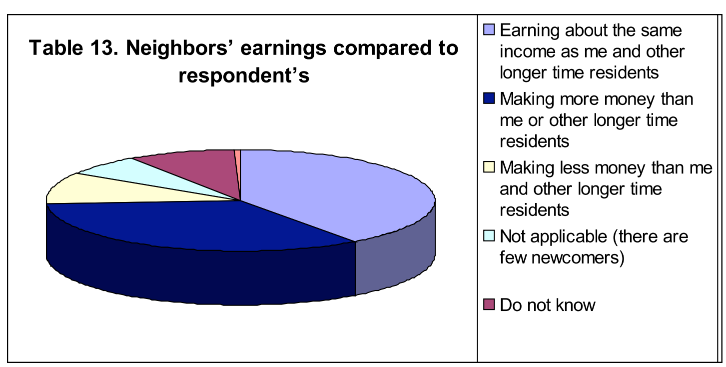


Table 13 shows that 40 percent of respondents believe that they earn about the same income as those currently moving into the community. Thirty-four percent believe they are making less money than their new neighbors.

Table 13. Neighbors' earnings compared to respondent's

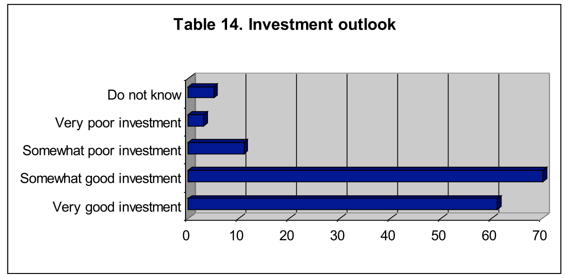
	Frequency	Percent	Cumulative Percent
Earning about the same income as me and other longer time residents	60	40.0	44.1
Making more money than me or other longer time residents	51	34.0	81.6
Making less money than me and other longer time residents	15	10.0	92.6
Not applicable (there are few newcomers)	10	6.7	100.0
Total	136	90.7	
Do not know	13	8.7	
Refused	1	.7	
Total	14	9.3	
Total	150	100.0	



Respondents were asked their views regarding buying property in terms of a long-term investment (5+ years). Table 14 shows that 47 percent believe the investment outlook is somewhat good while 41 percent rated it as very good in their current county.

Table 14. Investment outlook

	Frequency	Percent	Cumulative Percent
Very good investment	61	40.7	42.1
Somewhat good investment	70	46.7	90.3
Somewhat poor investment	11	7.3	97.9
Very poor investment	3	2.0	100.0
Total	145	96.7	
Do not know	5	3.3	
Total	150	100.0	



As shown in Table 15, 77 percent of respondents are certain to stay their current county for the next two years. Seventeen percent are lively to stay.

Table 15. Likelihood of moving out of county next 2 yrs

	Frequency	Percent	Cumulative Percent
Certain to stay	115	76.7	76.7
Likely to stay	26	17.3	94.0
Likely to move	5	3.3	97.3
Certain to move	4	2.7	100.0
Total	150	100.0	

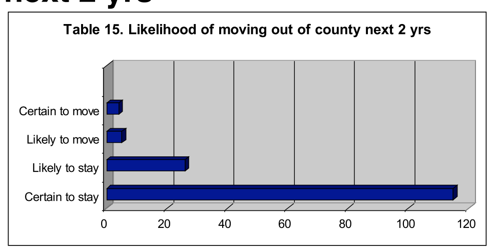


Table 16 shows the variety of reasons respondents who are likely to move within the next two years listed. The reasons include an expensive cost of living, home maintenance, retirement, leaving the state, and expensive mortgage/rent payments.

Table 16. Primary reason for moving

	Frequency	Percent	Cumulative Percent
Mortgage/rent payments are too expensive	1	.7	11.1
Cost of living in area is too expensive	1	.7	22.2
Leaving the state	1	.7	33.3
Home is too much to maintain	1	.7	44.4
Retirement	1	.7	55.6
Family change (divorce, marriage, other)	1	.7	66.7
Decreasing community quality	1	.7	77.8
Other reason	2	1.3	100.0
Total	9	6.0	
System	141	94.0	
Total	150	100.0	

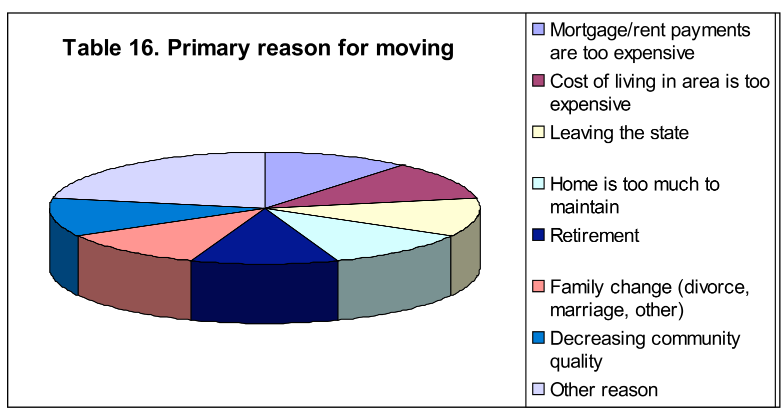
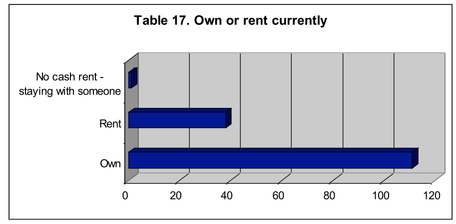


Table 17 shows that 74 percent of respondents own their home and 25 percent rent.

Table 17. Own or rent currently

	Frequency	Percent	Cumulative Percent
Own	111	74.0	74.0
Rent	38	25.3	99.3
No cash rent - staying with someone	1	.7	100.0
Total	150	100.0	



Of the respondents who now own their home, 66 percent owned their previous residence, 28 percent rented their previous residence, and 6 percent did not know.

Table 18. Rent/own previously

	Frequency	Percent	Cumulative Percent
Rent	31	20.7	29.8
Own	73	48.7	100.0
Total	104	69.3	
Do not know	7	4.7	
System	39	26.0	
Total	46	30.7	
Total	150	100.0	

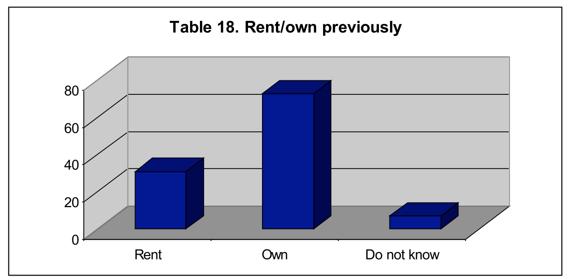


Table 19 shows that 95 percent of the respondents who own their home do not owe more than the value of their home.

Table 19. Owe more than value of home

	Frequency	Percent	Cumulative Percent
Yes	6	4.0	5.4
No	105	70.0	100.0
Total	111	74.0	
System	39	26.0	
Total	150	100.0	

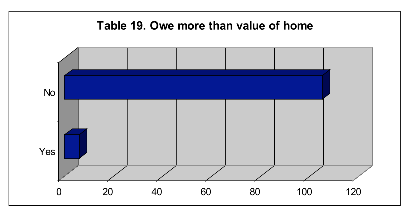


Table 20 shows that 75 percent of respondents can afford to upgrade their home either in terms of size, location and/or amenities while staying within the same county. Twenty-two percent cannot and 4 percent did not know.

Table 20. Could afford to upgrade home in county

	Frequency	Percent	Cumulative Percent
Yes	83	55.3	77.6
No	24	16.0	100.0
Total	107	71.3	
Do not know	4	2.7	
System	39	26.0	
Total	43	28.7	
Total	150	100.0	

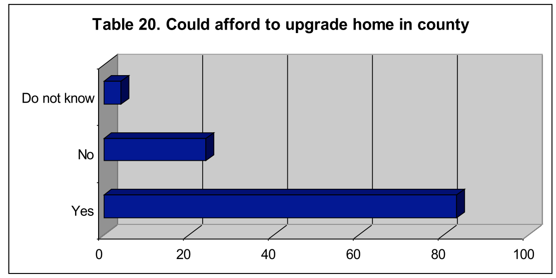
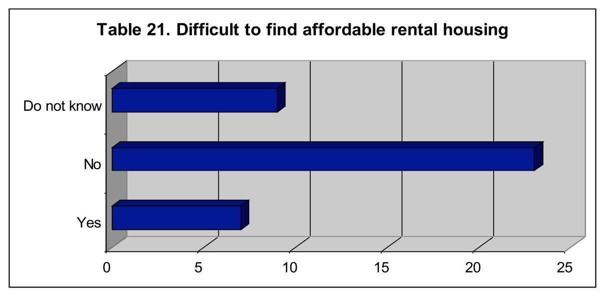


Table 21 shows that 59 percent of the respondents who are currently renting feel that it is not difficult to find affordable rental housing options. The options are both in good condition and near their place of employment. Eighteen percent feel that it is difficult to find them and 23 percent do not know.

Table 21. Difficult to find affordable rental housing

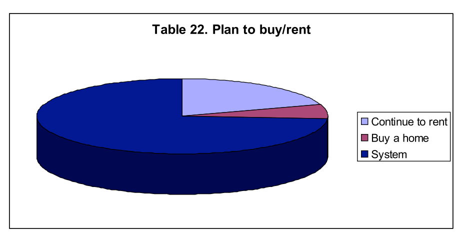
	Frequency	Percent	Cumulative Percent
Yes	7	4.7	23.3
No	23	15.3	100.0
Total	30	20.0	
Do not know	9	6.0	
System	111	74.0	
Total	120	80.0	
Total	150	100.0	



In the next two years 77 percent of the respondents who currently rent plan to continue to rent. Twenty-three plan to buy a home.

Table 22. Plan to buy/rent

	Frequency	Percent	Cumulative Percent
Continue to rent	30	20.0	76.9
Buy a home	9	6.0	100.0
Total	39	26.0	
System	111	74.0	
Total	150	100.0	



Out of the respondents who are currently renting, but plan to purchase a home in the next 2 years, 69 percent would purchase a single family unattached home.

Table 23. Type of home likely to buy

	Frequency	Percent	Cumulative Percent
Single-family unattached home	27	18.0	84.4
Single-family row house	1	.7	87.5
Condo	2	1.3	93.8
Other (please specify)	2	1.3	100.0
Total	32	21.3	
Do not know	7	4.7	
System	111	74.0	
Total	118	78.7	
Total	150	100.0	

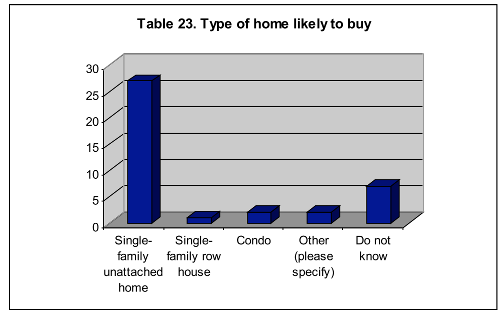


Table 24 shows that out of the respondents who are currently renting, but plan to purchase a home in the next 2 years, 41 percent would purchase a home in Lancaster.

Table 24. Location of home purchase

	Frequency	Percent	Cumulative Percent
Westmoreland	7	4.7	19.4
Richmond	7	4.7	38.9
Northumberland	6	4.0	55.6
Lancaster	16	10.7	100.0
Total	36	24.0	
Do not know	3	2.0	
System	111	74.0	
Total	114	76.0	
Total	150	100.0	

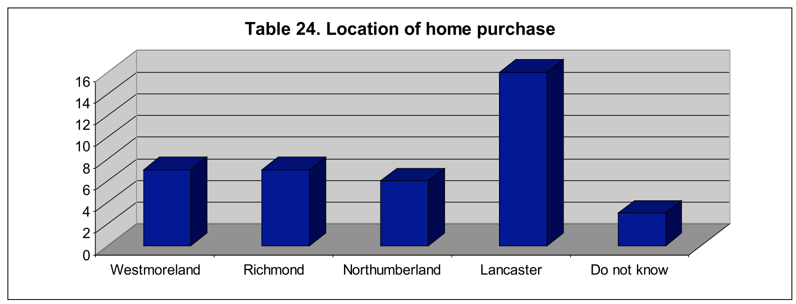


Table 25 shows that 41 percent of current renters noted that the primary factor in their decision to rent was not having to maintain a rental property. Twenty-six said that property maintenance was not at all a factor in their decision to rent.

Table 25. Do not have to maintain a rental property - Decision to rent

	Frequency	Percent	Cumulative Percent
Not at all a factor in decision to rent	10	6.7	26.3
2	3	2.0	34.2
3	6	4.0	50.0
4	3	2.0	57.9
Primary factor in decision to rent	16	10.7	100.0
Total	38	25.3	
Do not know	1	.7	
System	111	74.0	
Total	112	74.7	
Total	150	100.0	

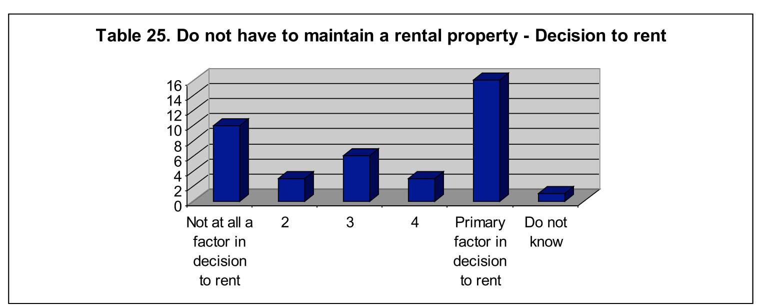


Table 26 shows that 64 percent of renters rated ‘relocating to another area’ as not being a factor for deciding to rent.

Table 26. Not planning on staying in the area - Decision to rent

	Frequency	Percent	Cumulative Percent
Not at all a factor in decision to rent	25	16.7	67.6
2	4	2.7	78.4
3	5	3.3	91.9
4	1	.7	94.6
Primary factor in decision to rent	2	1.3	100.0
Total	37	24.7	
Do not know	2	1.3	
System	111	74.0	
Total	113	75.3	
Total	150	100.0	

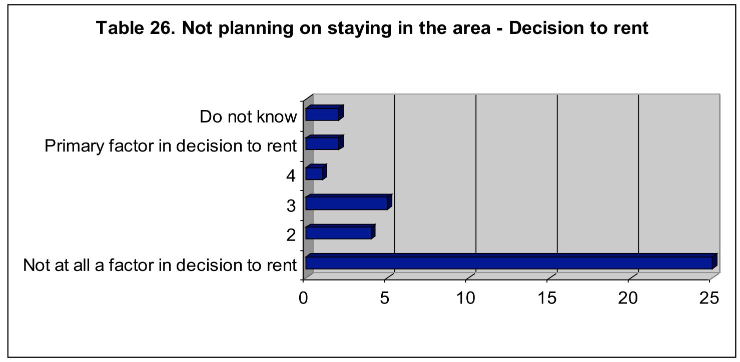


Table 27 shows that 46 percent of the renters said that the high price of the downpayment was not at all a factor in their decision to rent. Thirty-one percent said the downpayment was the primary factor in their decision to rent.

Table 27. Downpayment is too high - Decision to rent

	Frequency	Percent	Cumulative Percent
Not at all a factor in decision to rent	18	12.0	50.0
2	3	2.0	58.3
3	2	1.3	63.9
4	1	.7	66.7
Primary factor in decision to rent	12	8.0	100.0
Total	36	24.0	
Do not know	3	2.0	
System	111	74.0	
Total	114	76.0	
Total	150	100.0	

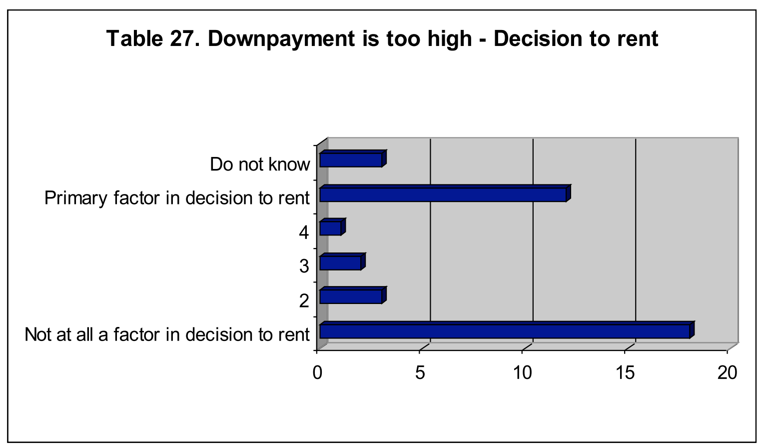


Table 28 shows that 56 percent of the renters said that the lack of housing choices was not at all a factor in their decision to rent.

Table 28. Lack of housing choices - Decision to rent

	Frequency	Percent	Cumulative Percent
Not at all a factor in decision to rent	22	14.7	57.9
2	3	2.0	65.8
3	5	3.3	78.9
4	4	2.7	89.5
Primary factor in decision to rent	4	2.7	100.0
Total	38	25.3	
Do not know	1	.7	
System	111	74.0	
Total	112	74.7	
Total	150	100.0	

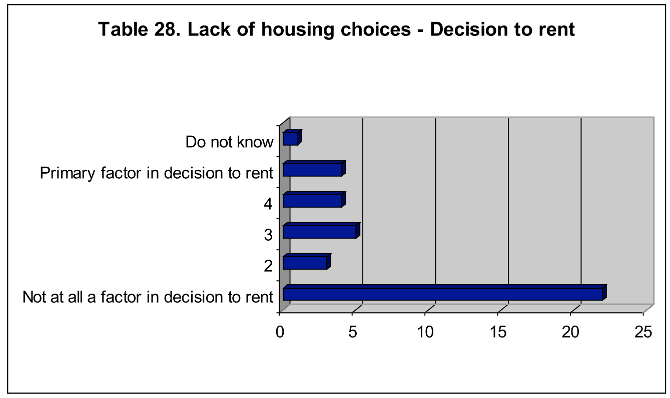


Table 29 shows that 46 percent of the renters said that small size or poor quality of the homes was not at all a factor in their decision to rent.

Table 29. Homes are of poor quality or are too small - Decision to rent

	Frequency	Percent	Cumulative Percent
Not at all a factor in decision to rent	18	12.0	48.6
2	5	3.3	62.2
3	5	3.3	75.7
4	4	2.7	86.5
Primary factor in decision to rent	5	3.3	100.0
Total	37	24.7	
Do not know	2	1.3	
System	111	74.0	
Total	113	75.3	
Total	150	100.0	

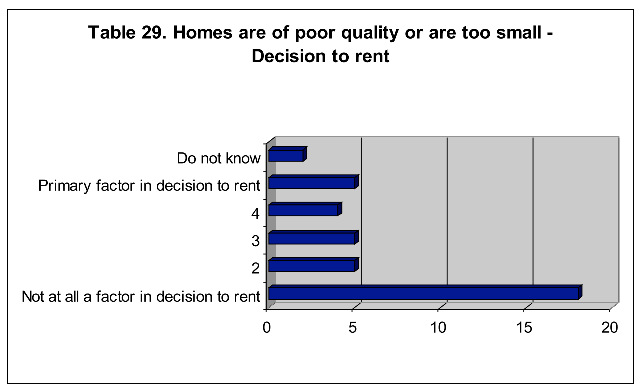


Table 30 shows that 36 percent of the renters said that less-expensive rent prices were not at all a factor their decision to rent. Fifteen percent said that cheaper rent was a primary factor in their decision to rent and 15 percent gave this factor a rating of 3.

Table 30. Cheaper to rent - Decision to rent

	Frequency	Percent	Cumulative Percent
Not at all a factor in decision to rent	14	9.3	40.0
2	4	2.7	51.4
3	6	4.0	68.6
4	5	3.3	82.9
Primary factor in decision to rent	6	4.0	100.0
Total	35	23.3	
Do not know	4	2.7	
System	111	74.0	
Total	115	76.7	
Total	150	100.0	

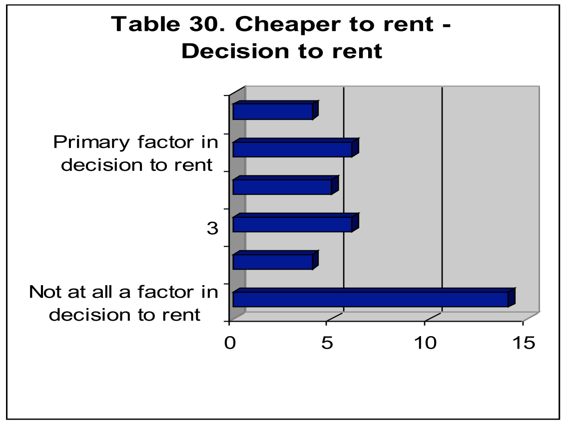


Table 31 shows, that for 62 percent of the renters, waiting for prices of homes to bottom out was not at all a factor in the decision to rent.

Table 31. Waiting for prices to bottom out - Decision to rent

	Frequency	Percent	Cumulative Percent
Not at all a factor in decision to rent	24	16.0	64.9
2	3	2.0	73.0
3	4	2.7	83.8
4	6	4.0	100.0
Total	37	24.7	
Do not know	2	1.3	
System	111	74.0	
Total	113	75.3	
Total	150	100.0	

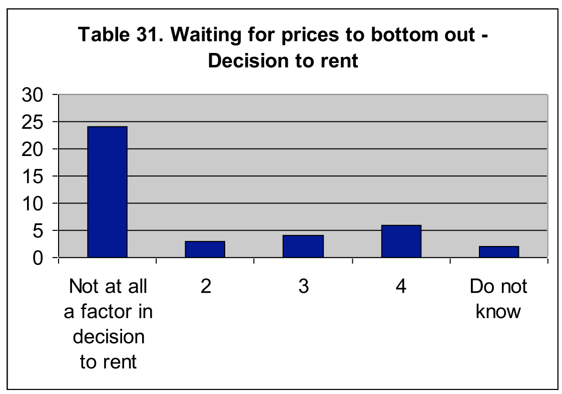


Table 32 shows that many of the respondents live alone or with another person.

Table 32. Number of people in household

	Frequency	Percent	Cumulative Percent
1	49	32.7	32.7
2	65	43.3	76.0
3	12	8.0	84.0
4	12	8.0	92.0
5	10	6.7	98.7
7	2	1.3	100.0
Total	150	100.0	

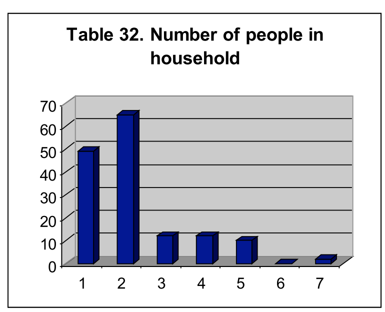


Table 33 shows the economic background of the respondents. There is a wide range of annual household income with three categories having similar numbers of respondents.

Table 33. Total annual household income before taxes

	Frequency	Percent	Cumulative Percent
Less than $25,000	30	20.0	23.3
$25,000 to $50,000	27	18.0	44.2
$50,000 to $75,000	33	22.0	69.8
$75,000 to $100,000	13	8.7	79.8
$100,000 to $150,000	15	10.0	91.5
$150,000 or more	11	7.3	100.0
Total	129	86.0	
Do not know	11	7.3	
Refused	10	6.7	
Total	21	14.0	
Total	150	100.0	

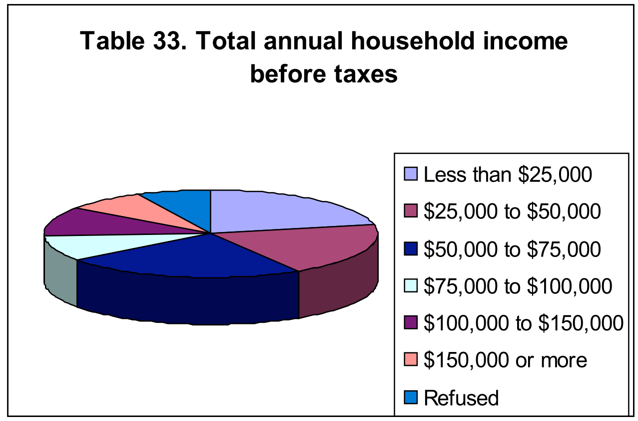
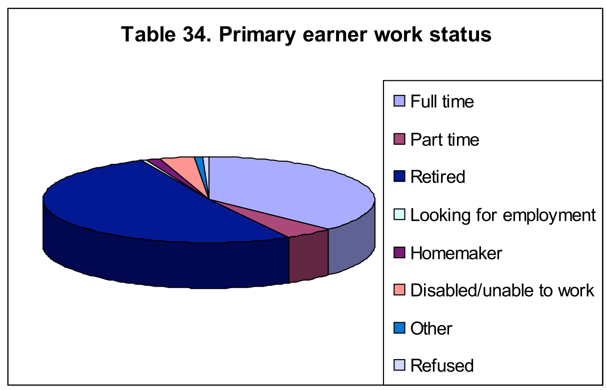


Table 34 shows that 51 percent of respondents are retired and 37 percent are employed full time.

Table 34. Primary earner work status

	Frequency	Percent	Cumulative Percent
Full time	56	37.3	37.6
Part time	7	4.7	42.3
Retired	77	51.3	94.0
Looking for employment	1	.7	94.6
Homemaker	2	1.3	96.0
Disabled/unable to work	5	3.3	99.3
Other	1	.7	100.0
Total	149	99.3	
Refused	1	.7	
Total	150	100.0	



Conclusion

Residents of the Northern Neck are content with their homes and quality of life. Respondents had a very positive perception of their community and what it has to offer in terms of quality of home, quality of community, security, and investment potential. A vast majority of the respondents believed that both the quality and condition of their home was either good or excellent. Also, 85 percent of the respondents rated the community to be good or excellent quality. Eighty-eight percent said buying home in region was good or very good long-term investment. This suggests that quality homes are available in the Northern Neck region and would not be a deterrent for renters looking to purchase a home in the near future. The quality of schools in the area was one element that received a less-positive rating. However, 77 percent of respondents were certain they would stay in the Northern Neck region.

Informal Survey Results

Which of the NN counties do you live in now?		
Answer Options	Response Frequency	Response Count
Westmoreland	2.3%	1
Richmond	11.4%	5
Northumberland	25.0%	11
Lancaster	52.3%	23
I do not currently live in one of these four counties	9.1%	4
answered question	44	44

Primarily, I am (now) a		
Answer Options	Response Frequency	Response Count
Lender	9.3%	4
Builder	4.7%	2
Realtor	0.0%	0
Landlord	7.0%	3
Elected Govt Official	11.6%	5
Appointed Govt Official	20.9%	9
Employer in the Private Sector	14.0%	6
Other	4.7%	2
Other (please specify)	41.9%	18
answered question	43	43

How concerned are you about the following housing supply issues:					
Answer Options	Very Concerned	Somewhat Concerned	Somewhat Unconcerned	Not at All Concerned	Response Count
Availability of housing options affordable to the very poor	21	19	0	2	42
Availability of housing options affordable to the working poor	30	10	2	0	42
Availability of housing options for moderate income NN families	20	18	4	0	42
Availability of housing options for middle income NN families	12	16	11	3	42
Availability of housing options for upper income NN families	2	1	12	27	42
answered question				42	42

Based on your sense of the housing market in NN, to what extent are each of these factors driving demand in the area?						
Answer Options	Serious Factor	Moderate Factor	Minor Factor	Not a Factor	Rating Average	Response Count
Demand for primary homes by newcomers settling in (not retirees)	7	13	18	3	2.41	41
Demand for second homes by outsiders (weekenders)	12	15	10	4	2.15	41
Demand for homes by retirees coming from someplace outside the NN	20	9	5	6	1.93	40
Demand for homes by NN workers	15	13	12	2	2.02	42
answered question					42	42

Based on your sense of the housing market in NN, to what extent are each of these factors driving demand in the area?						
Answer Options	Serious Factor	Moderate Factor	Minor Factor	Not a Factor	Rating Average	Response Count
Speculation by developers from within the NN	8	16	13	4	2.32	41
Speculation by developers from someplace else	11	11	13	5	2.30	40
General pressure from the Richmond area	8	15	14	5	2.38	42
General pressure from the Washington, DC area	13	12	9	7	2.24	41
answered question					42	42

In your view, how important is the level of wages paid by Northern Neck employers to driving the housing market in the region?		
Answer Options	Response Frequency	Response Count
Very Important	38.1%	16
Somewhat Important	35.7%	15
Somewhat Unimportant	16.7%	7
Not at all Important	9.5%	4
answered question	42	42
skipped question	2	2

When you think about the housing market across the NN over the past five years (2003-2008), for each of the four counties is it your sense that the market (compare 2008 with 2003 knowing of the vast fluctuations between):				
Answer Options	Has stayed about the same	Has gotten stronger	Has gotten weaker	Response Count
Westmoreland	12	16	9	37
Richmond	19	12	6	37
Northumberland	10	22	5	37
Lancaster	7	24	9	40
answered question	answered question	answered question	40	40

When you think about the housing market across the NN over the past 8-12 months (CY 2008), for each of the four counties is it your sense that the market:				
Answer Options	Has stayed about the same	Has gotten stronger	Has gotten weaker	Response Count
Westmoreland	11	2	24	37
Richmond	11	1	25	37
Northumberland	10	3	23	36
Lancaster	10	5	23	38
answered question			40	40

Thinking about an assortment of pressures across the Northern Neck, please choose the County that most applies					
Answer Options	Westmoreland	Northumberland	Richmond	Lancaster	Response Count
Highest housing costs	0	3	0	35	38
Most affordable to teachers, hospital technicians, police (workers) ($40,000/yr and up per HH)	14	8	13	4	39
Most affordable to low-income ($20,000 - $40,000/ HH)	14	5	17	2	38
Most resistant to allowing affordable housing to be built, anywhere, of any kind	1	4	3	27	35
Most accepting of affordable housing for working families	15	7	7	8	37
Most accepting of "change"	8	9	6	12	35
Least accepting of "change"	2	6	10	17	35
Other (please specify)				1	1
answered question				39	39

This is a skewed sample in an unscientific survey, given so many respondents were from Lancaster. But the perception does track with real estate sales data.

Some developments 'typify' certain approaches to housing and to economic development. You may have some or no familiarity with the following. Some of what is below exists, others are hypothetical.							
Answer Options	Love it/ Bring it on!	Guarded Support	Kinda dislike	Hate it	N/A	Rating Average	Response Count
The Wal-Mart outside of Kilmarnock	17	10	8	4	0	1.97	39
The small boutiques and shops in and around Irvington	26	11	2	0	0	1.38	39
Riverwood Apartments in Colonial Beach	3	9	5	3	18	2.40	38
Omega fish processing (Menhaden) facility in Reedville	15	18	3	1	0	1.73	37
Big Box development along Rt 360 outside of Warsaw	5	12	11	5	2	2.48	35
Golf course/retirement village development along Rt 200 outside of Irvington	19	12	5	3	0	1.79	39
Fredericksburg - style development along Rt 3	3	10	12	11	2	2.86	38
answered question						39	39

Here there are important learnings from the above responses. On one hand, the mixed message regarding support for strip and big box development, and also for boutiques, would seem contradictory. On the other hand, it also suggests a belief that the two need not be mutually exclusive. At the same time there is some concern about strip retail. What's not clear is the level of understanding that makes explicit the link between low-wage jobs and housing market accessibility.

From what you know of the following places, how would you rate them as models for the development of Northern Neck?					
Answer Options	Good Model for the NN	The NN Should Avoid Becoming Like it	Take Some Parts and Leave Others	I don't Know	Response Count
Aspen, Colorado	1	4	8	27	40
Jackson Hole, Wyoming	3	5	7	24	39
Park City, Utah	0	4	4	30	38
The Poconos (Pennsylvania)	4	4	11	19	38
The Outer Banks (NC)	3	16	12	7	38
Hilton Head (SC)	4	9	13	12	38
Asheville Region (NC)	5	5	11	17	38
Shenandoah Valley (VA)	8	2	15	13	38
Cape May (NJ)	4	4	10	20	38
West Marin (Point Reyes), CA	0	3	4	30	37
Other (please specify)				2	2
answered question				40	40

How would you rate the general maintenance level of the following property types in the area?							
Answer Options	Excellent Upkeep/ Condition	Good Upkeep/ Condition	Acceptable Upkeep/ Condition	Poor Upkeep/ Condition	Abysmal Upkeep/ Condition	Conditions are Irrelevant to me	Response Count
Single Family Detached Homes in the NN in the country	4	17	13	3	0	0	37
Single Family Detached Homes in towns	7	18	8	4	0	0	37
Large Apartments	0	8	19	4	0	3	34
Small Apartments	0	5	17	12	0	0	34
Mobile Homes	1	1	13	19	2	0	36
Public or Subsidized Housing to the Extent You're Aware of It	0	2	15	16	2	1	36
answered question						37	37

There are many ways to address housing affordability challenges in the Northern Neck. Please respond to these options			
Answer Options	Acceptable	Not Acceptable	Response Count
Large multifamily projects between towns along the highway (30 units or more)	10	27	37
Medium multifamily projects between towns along the highway (20-20 units)	15	22	37
Small multifamily projects between towns along the highway (2-20)	25	12	37
Infill small projects in the towns (2-12 units)	32	5	37
Infill medium sized projects in the towns (10-30 units)	25	11	36
Upgrading single family homes (weatherization, new roofing, et cetera)	34	3	37
New construction single family homes scattered throughout	32	5	37
High rises (3 stories or more)	11	26	37
Garden apartment complexes like in Colonial Beach	26	9	35
answered question		37	37

The above and subsequent tables illustrate uncertainty about the big picture. The main trend shaping the Northern Neck's housing markets is pressure from external drivers in the form of retirement by non-locals (*come here's*) bringing higher incomes and wealth than local (*been here's*), second home purchases by non-locals, tourism (non-local), and demand for agricultural and fishing products (low wages in the case of agricultural and non-local ownership in the case of fish product exportation).

Specifically, 74% of leaders think the kind of affordable housing exemplfied by Riverwoood Apartments in Colonial Beach is acceptable, while 73% of the same group thinks a large multifamily rental project between towns on the highway (exactly what Riverwood is) is unacceptable. Similarly 77% of leaders think future development in the Northern Neck should be environmentally appropriate while 72% think its okay to develop in the open space between towns, a development behavior that is environmentally unsound.

Efforts to educate the public about the links between housing and wages and economic development, and housing markets and cultural heritage and environmental protections will likely be beneficial.

Whatever the housing challenges may be in the Northern Neck, the best way to address them is to:							
Answer Options	Strongly Agree	Agree Somewhat	Agree	Disagree Somewhat	Strongly Disagree	Rating Average	Response Count
Strictly regulate the activities of slum landlords	27	2	5	2	1	1.00	37
Enforce existing codes more aggressively, including the use of citations, liens, eminent domain, property demolition	7	6	10	9	3	1.00	35
Enforcement of codes, but with a light hand	3	6	6	15	7	1.00	37
Some combination of enforcement of codes and free market principles	10	12	10	5	0	1.00	37
Allow the free market to handle things itself	9	12	6	10	1	1.00	38
Other (please specify)						0	0
answered question						38	38

On net, how would you rate the influences from weekenders visiting on NN?		
Answer Options	Response Frequency	Response Count
Positive	73.7%	28
Negative	5.3%	2
Neutral	21.1%	8
answered question	38	38

In thinking about the role of government and the role of the private sector in shaping the housing market and the general character of the Northern Neck, do you agree with the following?							
Answer Options	Totally Agree	Agree Somewhat	Disagree Somewhat	Totally Disagree	NA from my perspective	Rating Average	Response Count
Every effort should be made to keep the Northern Neck mainly an agricultural community comprised of small family farms	2	14	14	6	4	2.90	40
The area between towns should be kept off limits from housing and other development	3	7	17	12	1	3.03	40
Housing challenges and opportunities should be met wherever the market chooses to develop	8	12	12	7	1	2.53	40
Sprawling strip retail should not be allowed	14	11	10	3	2	2.20	40
Open space should be preserved through public land trusts and other covenants	15	17	3	4	1	1.98	40
Zoning should strictly regulate what kinds of housing development gets approved	16	15	7	1	1	1.90	40
The regulatory environment in one NN county should be the same as in the others	3	12	13	10	2	2.90	40
It's sometimes OK to permit gated communities of wealthy families to be built	18	11	4	6	1	2.03	40
It's sometimes OK to permit concentrated development of housing for poor families to be built	14	10	9	4	3	2.30	40
Farmland preservation is related to strengthening the housing market	4	11	13	8	4	2.93	40
Sprawling strip retail is related to strengthening the housing market	2	10	13	11	3	3.08	39
Future development in the Northern Neck should be green (environmentally appropriate)	15	15	6	2	1	1.95	39
Other (please specify)						4	4
answered question						40	40

On net, how would you rate the influences from new home buyers from the DC area on NN?		
Answer Options	Response Frequency	Response Count
Positive	57.9%	22
Negative	13.2%	5
Neutral	28.9%	11
answered question	38	38

Northern Neck Leadership		
On net, how would you rate the influences from new homebuyers from the Richmond area on NN?		
Answer Options	Response Frequency	Response Count
Positive	71.1%	27
Negative	0.0%	0
Neutral	28.9%	11
answered question	38	38

Excerpted Comments from Informal Survey (not edited for spelling or syntax)

1. Economic segregation (large blocks of housing for the very poor -- as opposed to middle class) is a recipiet for disaster. One bad family and the whole place becomes a breeding ground for a host of social problems.

2. reccomend a new zoning district for workforce housing with smaller lot sizes, buffered areas,common use areas, paved roads,green areas, strict conditions on developers and owners to keep maintenance and properties up. IT COULD BE DONE IF LOCAL GOVERNMENT WILL LET IT HAPPEN. DEVELOPERS WOULD HAVE TO SHARE IN THE RESPONSIBILITIES AND MAINTENANCE WITH HOME OWNERS AND COMUNITY BOARDS W/ POLITICAL AND COUNTY/TOWN OFFICERS ON BOARDS ALONG WITH DEVELOPERS AND HOMEOWNERS. DEVELOPE RULES AND REGS AND ADHERE TO THEM.

3. I think we should approach hosing like in mollusk single building 2 families in many areas.

4. I have a very good overall knowledge of the NN but am somewhat removed since I no longer live there.

5. The economy of the NN is highly dependent upon an active real estate and development market. We should encourage appropriate development and make housing affordadle within the confines of zoning and other regulations. If laws are broken by developers they should be dealt with accordingly.

6. NN needs inventory of occupied housing not meeting habitation requirements.

7. Housing dvelovment generally follows infrastructure availability. If growth is to be controlled, a satisfactory level of infrastructure must be provided. This can likley be acomplished through public-private partnerships. Plan for the growth where the community would like to see it instead of dictating what can and cannot be constructed. The free market can best answer the housing needs.

8. I don't know all the conditions in all the counties. It is inappropriate to be asked to compare various items that would only be based on assumptions or preceptions. I believe the survey will be tarnished if all answers are given equal weight when many answer can only be assumptions .

9. The tone of the survey had some "leading" aspects to the questions, in my opinion.

10. The Northern Neck is a unique and beautiful community. The come here's of which I am one need to remember the persons born here need to have opportunities to make a good living also. Yes affordable housing is needed but the young who don't work need to be responsible also.

11. not a good time for this type of project

12. I am sure that there is a great need for low income and moderate income housing at affordable prices, or rents, as well as the need for lending for families of modest income. I would prefer that our housing be placed near schools and towns and that we do everything that we can to keep the agricultural look of the area.

13. keep me intouch

14. The Northern Neck has a severe shortage of affordable housing for middle class working folks. There are no jobs for graduating seniors and nothing to hold them here. If we are to change, property taxes must rise. Businesses must move in to the area and housing must be available. If we leave it the way it is we will get what we've got...without change, why would be expect different results?? Controlled, well planned growth that has minimal impact on the Chesapeake Bay Watershed is the right way to proceed.

15. In the school system, our new employees do not live in our county because the cost of housing is too high. Therefore, when employment opportunities open in the county where they live, they leave us and go to work in that county. Therefore, we have a lot of turnover which is detrimental to the success of our students.

Conclusion from Informal Survey

Notes on Northern Neck Survey of Community Leaders (Survey Monkey)

- Over 50 percent have lived in the community for more than 20 years.
- Over 50 percent from Lancaster County
- Came from wide variety of occupations/positions
- Very strong concern about housing options available to poor and near-poor households in NN
- Somewhat concerned about housing options for middle income households
- They believe that demand for homes in NN is primarily being driven by retirees from outside the NN buying homes and from outsiders buying weekend/vacation homes.
- Pressure from the DC and Richmond area are perceived as the primary factors driving demand in NN. Internal speculation is also seen as a contributing factor.
- The housing market in every NN county but Richmond County is perceived to have gotten much stronger in the past 5 years. Richmond County is perceived to have mainly stayed about the same.
- Over the past 8-12 months the housing market in every county is strongly perceived to have gotten weaker.
- Westmorland is perceived as the most affordable county; Lancaster the least affordable.
- In terms of the role of Government and the private sector in shaping the housing market and character of the NN there was agreement on a few points: sprawling strip retail should be stopped; open spaces should be preserved; gated communities were viewed as highly acceptable; concentrated development of housing for poor families is also viewed as acceptable; future developments should be green.
- In terms of how to address affordability in the NN respondents were in favor of: upgrading single family homes; new construction of single family homes throughout; infill small projects in the towns; garden apartment complexes; infill of medium sized projects in the towns; and small multifamily projects between towns. Respondents were opposed to: large multifamily projects; high rises; and medium multifamily projects.
- The new home buyers from DC, Richmond, and weekenders are strongly perceived as positive influences on the NN.

Appendix A: Workforce Housing Demand and Resulting Development Scenarios

In total, we project an increased demand between 2010 and 2020 of 1,400 owner occupied units and only 19 renter occupied units, excluding seasonal units and second homes. This is a modest amount of housing and most of it will be readily produced in the market without any public intervention. Any new workforce housing will have to compare favorably in design, amenities, quality, location and price in order to compete with the existing housing supply of older, small single family homes.

The below table suggests that a workforce housing program could be targeted toward (in 1999 dollars):

- young (under 35) married couples and single parents with incomes below $75,000
- married couples aged 35-54 with incomes below $35,000
- single parents aged 35-54 with incomes below $75,000, and
- non-elderly singles with incomes below $50,000.

Our projections of housing demand for the year 2020 for the Northern Neck are presented below, showing total demand and projected change in demand. The householders under 35 will be entering the housing market for the first time and represent new demand for units, but only a small increase in aggregate demand. Young single parent families with incomes below $25,000 are a particularly sizeable category of housing demand for this segment.

The 35-54 age category is projected to shrink due to migration and cohort effects.

The 55-64 year old category includes a component of workforce housing demand and is projected to increase slightly over the decade.

The largest projected gains will be in demand in the 65 and older category across all incomes. Demand for senior life-style housing will remain strong. However, much of the projected gain reflects a cohort increase related to aging in place rather than demand for new units. The Northern Neck will experience increased demand for elderly housing services to maintain independent living as well as housing quality, particularly for those with limited incomes and assets.

Projected Housing Demand for Northern Neck, 2020						
	<$25,000	$25,-34,999	$35,-49,999	$50,-74,999	$75,-99,999	$100,000+
	Married Couples					
<35	189	164	299	259	86	56
35-54	443	235	557	894	407	342
55-64	583	430	590	835	429	641
65-74	695	416	675	939	493	413
75+	483	231	260	379	134	223
	Other Families					
<35	447	73	65	22	6	7
35-54	372	225	216	93	25	26
55-64	191	85	126	80	18	24
65-74	185	80	87	68	22	26
75+	186	47	93	103	54	58
	Non-Families					
<64	1,803	654	401	314	101	133
65+	3,205	617	341	278	103	147

Projected Change in Housing Demand for Northern Neck, 2020						
	<$25,000	$25,-34,999	$35,-49,999	$50,-74,999	$75,-99,999	$100,000+
	Married Couples					
<35	6	6	10	11	5	2
35-54	-133	-63	-157	-250	-115	-115
55-64	30	17	37	48	24	28
65-74	188	112	183	252	132	111
75+	73	38	43	64	22	38
	Other Families					
<35	7	2	2	0	0	0
35-54	-86	-52	-67	-28	-9	-10
55-64	10	5	8	5	1	1
65-74	49	21	23	18	6	7
75+	28	7	14	17	8	9
	Non-Families					
<64	-130	-52	-29	-25	-8	-12
65+	680	130	72	60	22	32

Although the projected gross demand provides the overall market context for workforce housing, the number of households who are actively in the housing market over a decade depend on several factors. Even in the context of decline in aggregate levels of demand among younger households, nearly all of the households under the age of 35 will be in the market searching for housing at some time during the decade as they form independent households. In contrast, most of the householders aged 35 and older will have already formed households earlier and will only be active home seekers if they decide to move. Although it is difficult to predict, around 25% to 50% (or more) could be movers during a ten-year span. This includes any projected increase in this birth cohort due to net in-migration.

From 2010 to 2020 approximately 2,220 housing units will be needed in the Northern Neck for households headed by the under 35 age group. Another 640 units will be needed due to net in-migration of householders aged 35 to 54. We project that most of these 2,220 units will be owner-occupied, but about 400 (14% of the total) will be in the rental market. This housing demand can be met with existing or newly built units.

The incomes of these households will influence how their housing demand is met. Incomes below 50% of the Median Family Income (MFI) in the area are probably too low to acquire new units without the help of significant subsidies. Incomes above 120% of the median can probably obtain housing in the open market without much assistance. Incomes between 50% and 120% of the median are likely to be the primary targets of workforce housing strategies. The next table illustrates the income, age and tenure profiles for the workforce housing demand between 2010 and 2020 by newly forming households (under age 35 in 2020) and net in-migration of the birth cohorts aged 35-54 in 2020. About 1,100 units are projected to be needed in the Northern Neck during the decade for the targeted income groups, with most of this demand for owner-occupied units (900 units). Nearly half (530 units) will be demand by households with incomes between 50%-80% of MFI. Based on past consumption patterns, nearly 400 of these households will want to be homeowners but could struggle to find affordable units.

About 600 workforce housing units will be needed for households with incomes between 80% and 120% of the median. The largest concentration will be in Westmoreland (240 units). Most of this demand will be for owner occupancy.

Workforce Housing Demand Projections, 2010-2020					
	Total	**Under 35**	**35-54**	**Owner**	**Renter**
Northern Neck	**1,143**	**940**	**203**	**899**	**244**
50-80%MFI	531	468	63	388	143
80-100%MFI	310	267	42	248	62
100-120%MFI	303	205	98	264	39
Lancaster	**253**	**199**	**54**	**200**	**53**
50-80%MFI	132	129	3	94	38
80-100%MFI	70	42	28	61	8
100-120%MFI	50	27	23	44	6
Northumberland	**268**	**221**	**46**	**217**	**51**
50-80%MFI	128	97	32	100	29
80-100%MFI	68	74	-6	54	14
100-120%MFI	71	50	21	62	9
Richmond Co	**204**	**150**	**54**	**159**	**45**
50-80%MFI	91	65	25	69	21
80-100%MFI	63	48	15	43	20
100-120%MFI	51	37	14	47	4
Westmoreland	**418**	**369**	**49**	**323**	**95**
50-80%MFI	179	176	3	124	55
80-100%MFI	109	103	6	89	20
100-120%MFI	130	90	40	110	20

Projected demand includes all the younger households expected to enter the housing market between 2010 and 2020 (householders under age 35 in 2020) and the increase in housing units demanded in the 35 to 54 age group due to net in-migration. Much of this demand will be met by units already in place, but is of sufficient magnitude to support new construction of affordable workforce housing units.

Workforce Housing Demand Examples: Home Ownership

Workers in modest paying jobs such as those in retail sales, protective services, teaching, and nursing, are vital to the commercial and economic health of communities in the Northern Neck area. The common term for describing affordable housing for low- to moderate-income essential workers of a community is workforce housing. The problem of housing affordability is magnified for workers in these essential jobs as they compete with each other, other modest-income workers, and those with higher incomes for affordable housing.

Wages reported in the May 2007 Bureau of Labor Statistics for the Northeastern Virginia Nonmetropolitan Area provide a reasonable estimate of 2007 wages within the Northern Neck area.[4] To illustrate workforce housing demand, we use as examples retail sales

[4] Included in the Northeastern Virginia Non-metropolitan Area are the counties of Accomack, Essex, King George, Lancaster, Middlesex, Northampton, Northumberland, Richmond, and Westmoreland.

workers, police officers, elementary school teachers and registered nurses. Retail sales workers constitute one of the largest occupation categories in the area and are essential to local businesses. Police officers provide indispensable safety and security for residents and can provide additional benefit by being able to afford to live close to their jobs and among other residents in the Northern Neck. Attracting and retaining the best elementary teachers is obviously in the best interest of the long-term viability of the community. Registered nurses, with high potential for being recruited to other areas, are critical to a healthcare system that is responding to and will continue to respond to the growing number of older citizens both existing and those moving to Northern Neck for retirement.

In 2007 mean annual wages were $21,300 for retail sales workers; $37,190 for police officer; $45,590 for elementary teachers; and $55,030 for registered nurses.

Having affordable housing opportunities for these workers and others doing essential work is vital to the Northern Neck area. However, the average wage, in the case of a retail sales worker, does not even support the average rent of a one-bedroom apartment (estimated at $570 per month) in Northern Neck. And between 2005 and October 2008, only 28 houses in the Northern Neck area sold for less than $59,214, the home buying power of a retail sales worker.

Many contemporary households include two workers. Even when there might be only one worker in the household, that person can and sometimes has to work extra hours or another job to make ends meet. This can be particularly difficult for a single parent. But in many cases, the individual wage of those working in workforce occupations is insufficient for finding affordable housing in the Northern Neck area. And even with additional income sources, finding affordable housing can be difficult.

In order to more accurately estimate household consumption, we calculated the ratio of total household income to the full-time wage income for the average retail sales worker, police officer, elementary teacher, and registered nurse[5]. Household incomes for retail sales workers and police officers were 1.4 to 1.6 times higher than their individual incomes and had estimated average annual household incomes of $33,228 and $52,066 respectively[6].

Based on these household incomes, the average retail sales worker could afford a home of $92,400 and the average police officer could afford a house selling for $145,000. The supply of houses in the Northern Neck at or below these levels was

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[5] Based on an analysis of the pooled 2005, 2007 Census Public Use Microdata Sample data for the Public Use Microdata Area (PUMA) of Richmond, Westmoreland, Northumberland, Lancaster, Accomack, Northampton, King George, Essex, and Middlesex Counties.

[6] Using the Census Public Use Microdata Sample file for pooled 2005, 2007 for PUMA 1900, we calculated a ratio by dividing the individual wage of a worker working full time in a particular occupation into the household income for that worker and derived the median ratio for a particular occupation. We multiplied the median ratio of 1.56 for retail sales workers and 1.40 for police officers by the May 2007 Bureau of Labor Statistics average annual wage for those occupations to get the estimated average household income.

limited. Between 2005 and October 2008, only 115 houses sold for less than $92,400 and less than 300 units sold for less than $145,000 in the area.

The current employment atmosphere of layoffs and cutbacks could have a significant negative impact on workers in essential jobs within the community. With less opportunity for additional income, not only will workers who are seeking affordable housing be affected, but some could struggle to afford the housing which they currently occupy. As the economy has worsened, more of these workers are encountering credit problems that could hinder their housing consumption for several years.

Workforce Housing Demand Examples: Rental Housing

Much of the rental housing in the Northern Neck area consists of single-family residences. In Lancaster, Northumberland, and Westmoreland Counties about two thirds of the occupied rental units in 2000[7] were single-family detached units. Richmond County had the largest percentage of multi-family rental units (30%) in 2000, while Northumberland had the smallest percentage (6%).

The demand for rental units has typically been strong in Northern Neck with most rental units occupied. In recent months (late 2008), however, rental demand has slowed and landlords have more unrented units. Still, the January 14, 2009 *Northern Neck News* listed only about 13 available rental units (four single-family residences, one duplex, one 3 bedroom unit, three 2 bedroom units, and four 1 bedroom units). The average rental cost for the 13 available units was $616.

Rental Housing in the Northern Neck generally costs between $600 and $750 per month for a small, older single-family residence, although in Warsaw a small house may rent for $1,000 per month. [8] Adding to the cost of renting single-family residences are high utility bills. Many older residences have oil heat and are poorly insulated. Rents range from $800 to $900 for a two to three bedroom townhouse in Settler's Landing. (Located in Warsaw, Settler's Landing was built about 6 years ago during the real estate boom and was attractive to rental property investors. Investors are offering reduced rents now that the housing market has cooled.) Partly in response to the rental needs of incoming teachers, about 25 duplex units were built in the Northern Neck area in 2005 that rent for around $650 per month. A two bedroom apartment in a multi-family complex costs about $650 per month to rent while a one bedroom unit costs about $570.

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[7] Source: U.S.Census Bureau, 2000.

[8] Sources: Rental Housing Interviews with Patti Minor, Hometown Realty, January 15, 2009 and Lee Self, developer and landlord, January 16, 2009. Northern Neck News, January 14, 2009.

Development Scenarios for Workforce Housing
In an attempt to provide direction to the Northern Neck Housing Study Committee, we prepared scenarios for developments throughout the Northern Neck that we determined would provide housing the market would support (with subsidy), and do so in a manner that would be acceptable to the community. Four scenarios were developed as follows:

1. Affordable mixed-income rental housing project in Kilmarnock
2. Affordable home ownership project in Reedville
3. Affordable home ownership project in Warsaw
4. Affordable home ownership project in Colonial Beach

Location	Tenure	Market	Income	Rent/PITI	Units
Kilmarnock	Rental	Mixed	$33,914	$848	18
Reedville	Owner	80% AMI	$36,068	$902	8
Warsaw	Owner	80% AMI	$32,150	$804	24
Colonial Beach	Owner	80% AMI	$38,258	$956	12

Several combination scenarios were generated, with the following variables:

Home Ownership			
Design Complexity	**Construction Quality**	**Building Lot Size**	**Unit Size**
4 corner	Exceptional	1/2 Acre	1600 SF
6 corner	Best	1 Acre	1800 SF
	Good		2000SF
	Average		

Each scenario had a number of possible outcomes. For instance, we evaluated the potential development challenges of infilling a small cluster of townhouse style home ownership products in each location, on 1/2 or 1 acre parcels, of varying construction quality - from good to exceptional - with a range of unit complexities (captured in the number of corners), and a range of unit sizes. This made it possible to evaluate a range of types within the constraints that resident and leader surveys suggested acceptable.

Rental				
Configuration	**Construction Quality**	**Project Size**	**Unit Size**	**Building Lot Size**
Studio	Exceptional	4-9 units	650 SF	.5 du/a
1 BR	Best	10+ units	750 SF	1 du/a
2 BR	Good		850 SF	
3 BR	Average		1000 SF	
4 BR				

As a result of considering these variables, affordable workforce housing, aimed at first time buyers employed in the Northern Neck, pricing would range from $165,374 to $207,911, requiring household incomes of $59,062 to $74,253. This is based on our determination of land costs of what is available for purchase in the current (December, 2008) market ranging from $32,444/acre (non waterfront) to $111,365/acre (waterfront)

RESULTS, Single-Family Price Range				
Based on three variables: square footage, design (4-6 corner), land size.				
SF	**4 Corner 1/2 Acre**	**6 Corner 1/2 Acre**	**4 Corner 1 Acre**	**6 Corner 1 Acre**
1,600	$ 165,374	$ 168,744	$ 182,894	$ 186,264
1,800	$ 171,282	$ 174,936	$ 188,802	$ 192,456
2,000	$ 186,244	$ 190,391	$ 203,764	$ 207,911

At this range of feasibility, applied to a Northern Neck prototype first time buyer family, the following would unfold:

Job	Salary	Employer	Purchasing Power	Gap (High)	Gap (Low)
Medical Lab Technician	$41,000	Rappahannock General Hospital	$114,800	$93,111	$50,574

A lab technician would have an average cost gap of $71,841, or a wage gap of $25,657. For the lab technician, with an income at 100% of the 2008 median in Lancaster County ($41,886), purchasing (the most affordably built quality home possible at politically acceptable densities) is not possible without substantial subsidy. The same is true for a full time purchasing supervisor at the Northern Neck Electrical Cooperative, with earnings at 100% of the Richmond County 2008 median ($42,224)

Job	Salary	Employer	Purchasing Power	Gap (High)	Gap (Low)
Purchasing Supervisor	$43,784	Northern Neck Electrical Cooperative	$122,595	$85,316	$42,779

To make home ownership possible for the lower middle workforce, efforts will need to be made on several fronts to reduce cost gaps. First, land will have to be developed at densities that thread the needle between what works politically in any given jurisdiction, and reduce the land per unit costs. Second, the size of the unit and the quality of construction will have to generate affordability. Third, subsidy in some additional form - from employers or through creative mortgage finance - will be necessary.

Example Buyer	Salary	Average Gap to Buy Already Reduced Cost Product
Medical Lab Technician	$41,000	$71,842
Purchasing Supervisor	$43,784	$64,047

Going forward, home ownership scenarios for working families across the Northern Neck make sense in places where higher densities are consistent with current development trends and are supportable by infrastructure, and on land that is feasible (non-waterfront) to develop. Modest sized home owner developments in Reedville, Warsaw, and Colonial Beach can be done with appropriate employer assistance to facilitate down payment requirements. It is probably not feasible to develop owner housing for families much below 100% AMI without access to considerably more subsidy than articulated here, except in Richmond County. At 80% AMI (the lowest income traditionally suitable for home ownership) in Richmond County, a worker earning $33,779 ($16,64/hr - starting salary for a Journey Lineman at the Rural Electrical Cooperative or an employee with ten years experience at Ace Hardware) could afford a home priced at $95,000, a full $128,000 short of the median sales price for 2008 for the Warsaw area.

SINGLE FAMILY FOR SALE

Single Family, For Sale Worksheet					
		4-Corner Structure			
SF	**1,200**	**1,400**	**1,600**	**1,800**	**2,000**
Exceptional*	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Best	$ 114.47	$ 109.57	$ 105.68	$ 102.10	$ 101.59
Good	$ 99.44	$ 95.17	$ 91.75	$ 84.66	$ 84.24
Average	$ 85.53	$ 81.93	$ 79.01	$ 73.27	$ 72.87
		6-Corner Structure			
SF	**1,200**	**1,400**	**1,600**	**1,800**	**2,000**
Exceptional*	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Best	$ 116.01	$ 111.32	$ 107.79	$ 105.47	$ 104.99
Good	$ 100.64	$ 96.64	$ 93.53	$ 86.39	$ 86.01
Average	$ 87.14	$ 83.59	$ 80.96	$ 75.15	$ 74.79

RESULTS, Single-Family Price Range

Based on three variables: square footage, design (4-6 corner), Land size.

SF	**4 Corner 1/2 Acre**	**6 Corner 1/2 Acre**	**4 Corner 1 Acre**	**6 Corner 1 Acre**
1,600	$ 165,374	$ 168,744	$ 182,894	$ 186,264
1,800	$ 171,282	$ 174,936	$ 188,802	$ 192,456
2,000	$ 186,244	$ 190,391	$ 203,764	$ 207,911

Note:
For sale units can absorb the additional cost for sewers/waste based on lot size but again, based on location, subsidies from none to large will be required.

Scenario 1: Single Family For Sale in Clusters (Reedville, Colonial Beach, Warsaw)

SCENARIO 1: USES	Costs For a "Average" Construction		USES	Costs For a "Average" Construction	
	4 Corner, Single Family Home			6 Corner, Single Family Home	
	Non-Water Lot Location, 1/2 acre			Non-Water Lot Location, 1/2 acre	
	Square Feet:	2,000		Square Feet:	2,000
Land Costs			**Land Costs**		
Finished Lot, Non-water @ 1/2 acre		**$ 16,222**	Finished Lot, Non-water @ 1/2 acre		**$ 16,222**
Legal, Planning Predevelopment		$ 550	Legal, Planning Predevelopment		$ 550
Property/ Special District Tax		$ 56	Property/ Special District Tax		$ 56
Total Land Development Cost		**$ 16,828**	**Total Land Development Cost**		**$ 16,828**
Common Costs			**Common Costs**		
Landscaping		$ 650	Landscaping		$ 650
Construction		$ 145,740	Construction		$ 149,580
Sewage system add-on		$ 6,000	Sewage system add-on		$ 6,000
Other		$ 820	Other		$ 820
Warranty/repair		$ 168	Warranty/repair		$ 168
G&A/Overhead		$ 646	G&A/Overhead		$ 646
Total Common Costs		**$ 154,024**	**Total Common Costs**		**$ 157,864**
Marketing & Sales			**Marketing & Sales**		
Marketing		$ 250	Marketing		$ 250
Sal Commission, Closing Cost, Etc.		$ 650	Sal Commission, Closing Cost, Etc.		$ 650
Total Marketing & Sales		**$ 900**	**Total Marketing & Sales**		**$ 900**
Contingencies		**$ 696**	**Contingencies**		**$ 696**
Total		**$ 172,448**	**Total**		**$ 176,288**
Minimum Profit Margin	8.00%		Minimum Profit Margin	8.00%	
Profit		**13,796**	**Profit**		**14,103**
Required Sale Price		**$ 186,244**	**Required Sale Price**		**$ 190,391**

SCENARIO 1: USES	Costs For a "Average" Construction		USES	Costs For a "Average" Construction	
	4 Corner, Single Family Home			6 Corner, Single Family Home	
	Non-Water Lot Location, 1 acre			Non-Water Lot Location, 1 acre	
	Square Feet:	2,000		Square Feet:	2,000
Land Costs			**Land Costs**		
Finished Lot, Non-water @ 1/2 acre		**$ 32,444**	Finished Lot, Non-water @ 1/2 acre		**$ 32,444**
Legal, Planning Predevelopment		$ 550	Legal, Planning Predevelopment		$ 550
Property/ Special District Tax		$ 56	Property/ Special District Tax		$ 56
Total Land Development Cost		**$ 33,050**	**Total Land Development Cost**		**$ 33,050**
Common Costs			**Common Costs**		
Landscaping		$ 650	Landscaping		$ 650
Construction		$ 145,740	Construction		$ 149,580
Sewage system add-on		$ 6,000	Sewage system add-on		$ 6,000
Other		$ 820	Other		$ 820
Warranty/repair		$ 168	Warranty/repair		$ 168
G&A/Overhead		$ 646	G&A/Overhead		$ 646
Total Common Costs		**$ 154,024**	**Total Common Costs**		**$ 157,864**
Marketing & Sales			**Marketing & Sales**		
Marketing		$ 250	Marketing		$ 250
Sal Commission, Closing Cost, Etc.		$ 650	Sal Commission, Closing Cost, Etc.		$ 650
Total Marketing & Sales		**$ 900**	**Total Marketing & Sales**		**$ 900**
Contingencies		**$ 696**	**Contingencies**		**$ 696**
Total		**$ 188,670**	**Total**		**$ 192,510**
Minimum Profit Margin	8.00%		Minimum Profit Margin	8.00%	
Profit		**15,094**	**Profit**		**15,401**
Required Sale Price		**$ 203,764**	**Required Sale Price**		**$ 207,911**

Scenario 2: Single Family For Sale in Clusters

SCENARIO 2:	USES	Costs For a "Average" Construction			USES	Costs For a "Average" Construction		
		4 Corner, Single Family Home				6 Corner, Single Family Home		
		Non-Water Lot Location, 1/2 acre				Non-Water Lot Location, 1/2 acre		
		Square Feet:		1,800		Square Feet:		1,800
		Land Costs				Land Costs		
		Finished Lot, Non-water @ 1/2 acre	$	16,222		Finished Lot	$	16,222
		Legal, Planning Predevelopment	$	550		Legal, Planning Predevelopment	$	550
		Property/ Special District Tax	$	56		Property/ Special District Tax	$	56
		Total Land Development Cost	$	16,828		Total Land Development Cost	$	16,828
		Common Costs				Common Costs		
		Landscaping	$	650		Landscaping	$	650
		Construction	$	131,886		Construction	$	135,270
		Sewage system add-on	$	6,000		Sewage system add-on	$	6,000
		Other	$	820		Other	$	820
		Warranty/repair	$	168		Warranty/repair	$	168
		G&A/Overhead	$	646		G&A/Overhead	$	646
		Total Common Costs	$	140,170		Total Common Costs	$	143,554
		Marketing & Sales				Marketing & Sales		
		Marketing	$	250		Marketing	$	250
		Sal Commission, Closing Cost, Etc.	$	650		Sal Commission, Closing Cost, Etc.	$	650
		Total Marketing & Sales	$	900		Total Marketing & Sales	$	900
		Contingencies	$	696		Contingencies	$	696
		Total	$	158,594		Total	$	161,978
		Minimum Profit Margin	8.00%			Minimum Profit Margin	8.00%	
		Profit		12,688		Profit		12,958
	SOURCES				SOURCES			
		Sale Price	$	171,282		Sale Price	$	174,936

SCENARIO 2:	USES	Costs For a "Average" Construction			USES	Costs For a "Average" Construction		
		4 Corner, Single Family Home				6 Corner, Single Family Home		
		Non-Water Lot Location, 1 acre				Non-Water Lot Location, 1 acre		
		Square Feet:		1,800		Square Feet:		1,800
		Land Costs				Land Costs		
		Finished Lot, Non-water @ 1/2 acre	$	32,444		Finished Lot	$	32,444
		Legal, Planning Predevelopment	$	550		Legal, Planning Predevelopment	$	550
		Property/ Special District Tax	$	56		Property/ Special District Tax	$	56
		Total Land Development Cost	$	33,050		Total Land Development Cost	$	33,050
		Common Costs				Common Costs		
		Landscaping	$	650		Landscaping	$	650
		Construction	$	131,886		Construction	$	135,270
		Sewage system add-on	$	6,000		Sewage system add-on	$	6,000
		Other	$	820		Other	$	820
		Warranty/repair	$	168		Warranty/repair	$	168
		G&A/Overhead	$	646		G&A/Overhead	$	646
		Total Common Costs	$	140,170		Total Common Costs	$	143,554
		Marketing & Sales				Marketing & Sales		
		Marketing	$	250		Marketing	$	250
		Sal Commission, Closing Cost, Etc.	$	650		Sal Commission, Closing Cost, Etc.	$	650
		Total Marketing & Sales	$	900		Total Marketing & Sales	$	900
		Contingencies	$	696		Contingencies	$	696
		Total	$	174,816		Total	$	178,200
		Minimum Profit Margin	8.00%			Minimum Profit Margin	8.00%	
		Profit		13,985		Profit		14,256
	SOURCES				SOURCES			
		Sale Price	$	188,802		Sale Price	$	192,456

Scenario 3: Single Family For Sale in Clusters

SCENARIO 3:	**USES**	**Costs For a "Average" Construction**			**USES**	**Costs For a "Average" Construction**		
		4 Corner, Single Family Home				**6 Corner, Single Family Home**		
		Non-Water Lot Location, 1/2 acre				**Non-Water Lot Location, 1/2 acre**		
		Square Feet:		**1,600**		**Square Feet:**		**1,600**
		Land Costs				**Land Costs**		
		Finished Lot, Non-water @ 1/2 acre	$	16,222		Finished Lot	$	16,222
		Legal, Planning Predevelopment	$	550		Legal, Planning Predevelopment	$	550
		Property/ Special District Tax	$	56		Property/ Special District Tax	$	56
		Total Land Development Cost	**$**	**16,828**		**Total Land Development Cost**	**$**	**16,828**
		Common Costs				**Common Costs**		
		Landscaping	$	650		Landscaping	$	650
		Construction	$	126,416		Construction	$	129,536
		Sewage system add-on	$	6,000		Sewage system add-on	$	6,000
		Other	$	820		Other	$	820
		Warranty/repair	$	168		Warranty/repair	$	168
		G&A/Overhead	$	646		G&A/Overhead	$	646
		Total Common Costs	**$**	**134,700**		**Total Common Costs**	**$**	**137,820**
		Marketing & Sales				**Marketing & Sales**		
		Marketing	$	250		Marketing	$	250
		Sal Commission, Closing Cost, Etc.	$	650		Sal Commission, Closing Cost, Etc.	$	650
		Total Marketing & Sales	**$**	**900**		**Total Marketing & Sales**	**$**	**900**
		Contingencies	**$**	**696**		**Contingencies**	**$**	**696**
		Total	**$**	**153,124**		**Total**	**$**	**156,244**
		Minimum Profit Margin	8.00%			Minimum Profit Margin	8.00%	
		Profit		**12,250**		**Profit**		**12,500**
	SOURCES				**SOURCES**			
		Sale Price	**$**	**165,374**		**Sale Price**	**$**	**168,744**

SCENARIO 3:	**USES**	**Costs For a "Average" Construction**			**USES**	**Costs For a "Average" Construction**		
		4 Corner, Single Family Home				**6 Corner, Single Family Home**		
		Non-Water Lot Location, 1 acre				**Non-Water Lot Location, 1 acre**		
		Square Feet:		**1,600**		**Square Feet:**		**1,600**
		Land Costs				**Land Costs**		
		Finished Lot, Non-water @ 1/2 acre	$	32,444		Finished Lot	$	32,444
		Legal, Planning Predevelopment	$	550		Legal, Planning Predevelopment	$	550
		Property/ Special District Tax	$	56		Property/ Special District Tax	$	56
		Total Land Development Cost	**$**	**33,050**		**Total Land Development Cost**	**$**	**33,050**
		Common Costs				**Common Costs**		
		Landscaping	$	650		Landscaping	$	650
		Construction	$	126,416		Construction	$	129,536
		Sewage system add-on	$	6,000		Sewage system add-on	$	6,000
		Other	$	820		Other	$	820
		Warranty/repair	$	168		Warranty/repair	$	168
		G&A/Overhead	$	646		G&A/Overhead	$	646
		Total Common Costs	**$**	**134,700**		**Total Common Costs**	**$**	**137,820**
		Marketing & Sales				**Marketing & Sales**		
		Marketing	$	250		Marketing	$	250
		Sal Commission, Closing Cost, Etc.	$	650		Sal Commission, Closing Cost, Etc.	$	650
		Total Marketing & Sales	**$**	**900**		**Total Marketing & Sales**	**$**	**900**
		Contingencies	**$**	**696**		**Contingencies**	**$**	**696**
		Total	**$**	**169,346**		**Total**	**$**	**172,466**
		Minimum Profit Margin	8.00%			Minimum Profit Margin	8.00%	
		Profit		**13,548**		**Profit**		**13,797**
	SOURCES				**SOURCES**			
		Sale Price	**$**	**182,894**		**Sale Price**	**$**	**186,264**

RENTAL/MIXED

$ 583.28	Average Rent for 3,424 units of various sizes					
	Comparable to current 1 bdrm rent at Colonial Beach					
			$/Avg		**Lancaster***	
FMR Averages			**SF**		**Estimate**	
Studio	$	449	$	0.69	$ 0.86	**$ 561**
1 bedroom	$	551	$	0.73	$ 0.92	**$ 689**
2 bedrooms	$	678	$	0.80	$ 1.00	**$ 848**
3 bedrooms	$	854	$	0.85	$ 1.07	**$ 1,068**
NOTE:						

Using the Lancaster 80% of AMI and 30% for rent amount as atypical 2-bedroom unit, we prorated this typical 2 bedroom $/SF cost for all unit types based on the FMR/SF relationships.

Income/Expense - Richmond MSA		
Based on 3,424 units		
		Per Unit
Revenue		**Average**
	Gross Potential Rent	$ 7,181
	Other Income*	$ 133
		$ 7,314
	Average Vacancy Factor	4.30%
	Net Revenue	**$ 6,999**
Expenses		
	Property Management	$ 359
	Administration	$ 295
	Payroll/Benefits	$ 953
	Maintenance	$ 802
	Utilities	$ 523
	Insurance	$ 202
	Taxes	$ 389
	Other Expenses	$ 91
	Total Operating Expense	**$ 3,614**
	Net Operating Income	**$ 3,385**
*interest, collections, etc.		

		Unit Size			
Unit Type		**SF**			
Studio		650			
1 bedroom		750			
2 bedrooms		850			
3 bedrooms		1000			
PROPOSED		**18 Unit Property:**			
Type		**Unit**	**SF**		
Unit		**Mix**			
Studio		2	1,300		
1 bedroom		7	5,250		
2 bedrooms		7	5,950		
3 bedrooms		2	2,000		
TOTALS		**18**	**14,500**	**806**	**Avg. SF**

NOTES:
Two different construction price schemes were developed based on a small multi-family structure (4-9 units) and a large structure (over 10 units).
We considered several different size option from small (1,200 SF) to moderate (2,000 SF) because of the starter home, 1st time buyer focus.

		4 - 9 units			
Avg Unit SF	**650**	**750**	**800**	**900**	**1000**
Exceptional	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Best	$ 106.81	$ 104.12	$ 103.04	$ 101.36	$ 100.10
Good	$ 94.65	$ 92.22	$ 91.27	$ 89.83	$ 88.74
Average	$ 84.07	$ 81.92	$ 81.10	$ 79.75	$ 78.81

		10 or more units			
Avg Unit SF	**650**	**750**	**800**	**900**	**2000**
Exceptional	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Best	$ 101.03	$ 98.45	$ 97.40	$ 95.78	$ 94.50
Good	$ 89.32	$ 87.06	$ 86.11	$ 84.66	$ 83.60
Average	$ 79.02	$ 76.98	$ 76.18	$ 74.90	$ 73.92

Notes:

MSDS (Mass Sewage Disposal) was incorporated into the cost projections, which have important type 1 and 2 implications regarding capacity . The main one for rental is that projects in excess of 8 units will have to absorb high infrastructure costs given the types of soil throughout the Northern Neck. In conclusion, rental units in Kilmarnock will not work unless subsidized beyond the typical LIHTC equity contribution. Please note that the LIHTC equity is low because the market for credits has plummeted. Last year at this time tax credits were getting between $0.85 - $.093/credit; currently we are seeing $0.65 - $.070/credit. This may continue to drop so the numbers for multifamily are highly speculative. Needless to add, multifamily will only work if we can find a site that “perks” or is connected to sewer lines and allows for a high density/acre – 4 or more units. Otherwise, the additional land/sewer costs puts the project generally out of reach.

Kilmarnock Rental Scenario

SCENARIO 1: Based on FMR's For Rent & 1/2 Acre/Unit

DEVELOPMENT SCHEDULE

Project Name: **PROTOTYPE 18 Unit Multifamily, 14,500 SF (on 9 acres)**

Development Costs		**Project Totals**
Land Acquisition		$291,999
Construction Multifamily (Avg $/Avg Unit SF)	$76.18	$1,104,610
Construction: Other		$0
Construction Contingency	5.00%	$55,231
Site Improvement & Landscaping		$5,000
Construction Interest Expense	5.75%	$34,933
Permits & Fees (Per Unit)	$450	$8,100
Const. Financing Points & Fees	0.50%	$5,523
Architectural and Engineering	6.00%	$69,590
Environmental Studies		$7,500
Permanent Loan Points & Fees	0.50%	$3,660
Financial / Project / Const. Management		$0
Surveys		$7,500
Title & Recording	2.00%	$14,640
Taxes (During Construction)		$2,142
Appraisal		$7,500
Legal		$15,000
Accounting (Start-Up)		$5,500
Marketing / Market Study		$5,000
Insurance (During Construction)		$5,500
Developers General & Admin.	4.16%	$75,000
Developers Fee	4.16%	$75,000
Post Construction Audit		$5,000
Lease-up/Operating Reserve		$0
Total Development Cost		**$1,803,928**
Per Unit Average		$ 100,218
Financing Overview		**Proposed Financing**
1st Mortgage		$731,979
2nd Mortgage		$0
Federal Loan Fund(s)		$0
Grants / Other Subsidies		$0
Limited Partnership (LIHTC) - estimated		$575,000
Developer/Managing General Partner Loan		$0
		$1,306,979
Totals:		
Current Shortfall		**$496,949**

SF	14,500	**Vacancy Factor:**		4.30%
Units	18			
Avg SF	806			
Acres	9			
Rents		**FMR**		
Studio		$ 449		
1 bedroom		$ 551		
2 bedrooms		$ 678		
3 bedrooms		$ 854		
Income Based On Unit Mix			**FMR**	**Total**
Studio		2	$ 449	$ 10,776
1 bedroom		7	$ 551	$ 46,284
2 bedrooms		7	$ 678	$ 56,952
3 bedrooms		2	$ 854	$ 20,496
TOTALS		**18**		**$ 134,508**
				Based on FMRs
INCOME & EXPENSE				
INCOME				
Gross Rental Income				$134,508
Interest / Service Income				$125
Miscellaneous Income				$50
Apartment Vacancy				$5,784
Effective Rental Income				**$128,899**
EXPENSE				
Property Management				$6,462
Administration				$5,310
Payroll/Benefits				$17,154
Maintenance				$14,436
Utilities				$9,414
Insurance				$3,636
Taxes				$7,002
Other Expenses				$1,638
Total Operating Expense				**$65,052**
Net Operating Income				**$63,847**
Debt Service Coverage			1.15	
Maximum available for annual DS			$55,519	
Maximum Monthly Payment			$ 4,627	
Supportable Mortgage at:			$731,979	
Interest		6.50%		
Term (months)		360		

DEVELOPMENT SCHEDULE

Project Name: **PROTOTYPE 18 Unit Multifamily, 14,500 SF (on 9 acres)**

Development Costs		**Project Totals**
Land Acquisition		$291,999
Construction Multifamily (Avg $/Avg Unit SF)	$76.18	$1,104,610
Construction: Other		$0
Construction Contingency	5.00%	$55,231
Site Improvement & Landscaping		$5,000
Construction Interest Expense	5.75%	$34,933
Permits & Fees (Per Unit)	$450	$8,100
Const. Financing Points & Fees	0.50%	$5,523
Architectural and Engineering	6.00%	$69,590
Environmental Studies		$7,500
Permanent Loan Points & Fees	0.50%	$5,508
Financial / Project / Const. Management		$0
Surveys		$7,500
Title & Recording	2.00%	$22,033
Taxes (During Construction)		$0
Appraisal		$7,500
Legal		$15,000
Accounting (Start-Up)		$5,500
Marketing / Market Study		$5,000
Insurance (During Construction)		$5,500
Developers General & Admin.	4.14%	$75,000
Developers Fee	4.14%	$75,000
Post Construction Audit		$5,000
Lease-up/Operating Reserve		$0
Total Development Cost		**$1,811,028**
Per Unit Average		$ 100,613
Financing Overview		**Proposed Financing**
1st Mortgage		$1,101,660
2nd Mortgage		$0
Federal Loan Fund(s)		$0
Grants / Other Subsidies		$0
Limited Partnership (LIHTC) - estimated		$575,000
Developer/Managing General Partner Loan		$0
		$1,676,660
Totals:		
Current Shortfall		**$134,367**

SF	14,500	**Vacancy Factor:**		4.30%
Units	18			
Avg SF	806			
Acres	9			
Rents		**Lancaster**	(estimate)	
Studio		$ 561		
1 bedroom		$ 689		
2 bedrooms		$ 848		
3 bedrooms		$ 1,068		
Income Based On Unit Mix			**Lancaster**	**Total**
Studio		2	$ 561	$ 13,475
1 bedroom		7	$ 689	$ 57,878
2 bedrooms		7	$ 848	$ 71,219
3 bedrooms		2	$ 1,068	$ 25,630
TOTALS		**18**		**$ 168,202**
				Based on FMRs
INCOME & EXPENSE				
INCOME				
Gross Rental Income				$168,202
Interest / Service Income				$125
Miscellaneous Income				$50
Apartment Vacancy				$7,233
Effective Rental Income				**$161,145**
EXPENSE				
Property Management				$6,462
Administration				$5,310
Payroll/Benefits				$17,154
Maintenance				$14,436
Utilities				$9,414
Insurance				$3,636
Taxes				$7,002
Other Expenses				$1,638
Total Operating Expense				**$65,052**
Net Operating Income				**$96,093**
Debt Service Coverage			1.15	
Maximum available for annual DS			$83,559	
Maximum Monthly Payment			$ 6,963	
Supportable Mortgage at:			$1,101,660	
Interest		6.50%		
Term (months)		360		

DEVELOPMENT SCHEDULE

Project Name: **PROTOTYPE 18 Unit Multifamily, 14,500 SF (on 9 acres)**

Development Costs		**Project Totals**
Land Acquisition		$291,999
Construction Multifamily (Avg $/Avg Unit SF)	$76.18	$1,104,610
Construction: Other		$0
Construction Contingency	5.00%	$55,231
Site Improvement & Landscaping		$5,000
Construction Interest Expense	5.75%	$34,933
Permits & Fees (Per Unit)	$450	$8,100
Const. Financing Points & Fees	0.50%	$5,523
Architectural and Engineering	6.00%	$69,590
Environmental Studies		$7,500
Permanent Loan Points & Fees	0.50%	$5,508
Financial / Project / Const. Management		$0
Surveys		$7,500
Title & Recording	2.00%	$22,033
Taxes (During Construction)		$0
Appraisal		$7,500
Legal		$15,000
Accounting (Start-Up)		$5,500
Marketing / Market Study		$5,000
Insurance (During Construction)		$5,500
Developers General & Admin.	4.14%	$75,000
Developers Fee	4.14%	$75,000
Post Construction Audit		$5,000
Lease-up/Operating Reserve		$0
Total Development Cost		**$1,811,028**
Per Unit Average		$ 100,613
Financing Overview		**Proposed Financing**
1st Mortgage		$1,101,660
2nd Mortgage		$0
Federal Loan Fund(s)		$0
Grants / Other Subsidies		$0
Limited Partnership (LIHTC) - estimated		$575,000
Developer/Managing General Partner Loan		$0
		$1,676,660
Totals:		
Current Shortfall		**$134,367**

SF	14,500	**Vacancy Factor:**		4.30%
Units	18			
Avg SF	806			
Acres	9			
Rents		**Lancaster**	(estimate)	
Studio		$ 561		
1 bedroom		$ 689		
2 bedrooms		$ 848		
3 bedrooms		$ 1,068		
Income Based On Unit Mix			**Lancaster**	**Total**
Studio		2	$ 561	$ 13,475
1 bedroom		7	$ 689	$ 57,878
2 bedrooms		7	$ 848	$ 71,219
3 bedrooms		2	$ 1,068	$ 25,630
TOTALS		**18**		**$ 168,202**
				Based on FMRs
INCOME & EXPENSE				
INCOME				
Gross Rental Income				$168,202
Interest / Service Income				$125
Miscellaneous Income				$50
Apartment Vacancy				$7,233
Effective Rental Income				**$161,145**
EXPENSE				
Property Management				$6,462
Administration				$5,310
Payroll/Benefits				$17,154
Maintenance				$14,436
Utilities				$9,414
Insurance				$3,636
Taxes				$7,002
Other Expenses				$1,638
Total Operating Expense				**$65,052**
Net Operating Income				**$96,093**
Debt Service Coverage			1.15	
Maximum available for annual DS			$83,559	
Maximum Monthly Payment			$ 6,963	
Supportable Mortgage at:			$1,101,660	
Interest		6.50%		
Term (months)		360		

SCENARIO 2: Based on Lancaster Estimated Rents & 1 Acre/Unit

DEVELOPMENT SCHEDULE

Project Name: **PROTOTYPE 18 Unit Multifamily, 14,500 SF (on 18 acres)**

SF	14,500	
Units	18	
Avg SF	806	
Acres	18	
Vacancy Factor:		4.30%

Development Costs		**Project Totals**
Land Acquisition		583,998
Construction Multifamily (Avg $/Avg Unit SF)	$76.18	$1,104,610
Construction: Other		$0
Construction Contingency	5.00%	$55,231
Site Improvement & Landscaping		$5,000
Construction Interest Expense	5.75%	$34,933
Permits & Fees (Per Unit)	$450	$8,100
Const. Financing Points & Fees	0.50%	$5,523
Architectural and Engineering	6.00%	$69,590
Environmental Studies		$7,500
Permanent Loan Points & Fees	0.50%	$3,660
Financial / Project / Const. Management		$0
Surveys		$7,500
Title & Recording	2.00%	$14,640
Taxes (During Construction)		$1,669
Appraisal		$7,500
Legal		$15,000
Accounting (Start-Up)		$5,500
Marketing / Market Study		$5,000
Insurance (During Construction)		$5,500
Developers General & Admin.	4.13%	$87,500
Developers Fee	4.13%	$87,500
Post Construction Audit		$5,000
Lease-up/Operating Reserve		$0
Total Development Cost		**$2,120,454**
Per Unit Average		$ 117,803
Financing Overview		**Proposed Financing**
1st Mortgage		$731,979
2nd Mortgage		$0
Federal Loan Fund(s)		$0
Grants / Other Subsidies		$0
Limited Partnership (LIHTC) - estimated		$575,000
Developer/Managing General Partner Loan		$0
		$1,306,979
Totals:		
Current Shortfall		**$813,475**

Rents	**FMR**
Studio	$ 449
1 bedroom	$ 551
2 bedrooms	$ 678
3 bedrooms	$ 854

Income Based On Unit Mix		**FMR**	**Total**
Studio	2	$ 449	$ 10,776
1 bedroom	7	$ 551	$ 46,284
2 bedrooms	7	$ 678	$ 56,952
3 bedrooms	2	$ 854	$ 20,496
TOTALS	**18**		**$ 134,508**

INCOME & EXPENSE		**Based on FMRs**
INCOME		
Gross Rental Income		$ 134,508
Interest / Service Income		$ 125
Miscellaneous Income		$ 50
Apartment Vacancy		$ 5,784
Effective Rental Income		**$128,899**
EXPENSE		
Property Management		$6,462
Administration		$5,310
Payroll/Benefits		$17,154
Maintenance		$14,436
Utilities		$9,414
Insurance		$3,636
Taxes		$7,002
Other Expenses		$1,638
Total Operating Expense		**$65,052**
Net Operating Income		**$63,847**
Debt Service Coverage	1.15	
Maximum available for annual DS	$55,519	
Maximum Monthly Payment	$ 4,627	
Supportable Mortgage at:	$731,979	
Interest	6.50%	
Term (months)	360	

SCENARIO 2: Based on Lancaster Estimated Rents & 1 Acre/Unit

DEVELOPMENT SCHEDULE

Project Name: **PROTOTYPE 18 Unit Multifamily, 14,500 SF (on 18 acres)**

SF	14,500	
Units	18	
Avg SF	806	
Acres	18	
Vacancy Factor:		4.30%

Development Costs		**Project Totals**
Land Acquisition		583,998
Construction Multifamily (Avg $/Avg Unit SF)	$76.18	$1,104,610
Construction: Other		$0
Construction Contingency	5.00%	$55,231
Site Improvement & Landscaping		$5,000
Construction Interest Expense	5.75%	$34,933
Permits & Fees (Per Unit)	$450	$8,100
Const. Financing Points & Fees	0.50%	$5,523
Architectural and Engineering	6.00%	$69,590
Environmental Studies		$7,500
Permanent Loan Points & Fees	0.50%	$5,508
Financial / Project / Const. Management		$0
Surveys		$7,500
Title & Recording	2.00%	$22,033
Taxes (During Construction)		$0
Appraisal		$7,500
Legal		$15,000
Accounting (Start-Up)		$5,500
Marketing / Market Study		$5,000
Insurance (During Construction)		$5,500
Developers General & Admin.	4.11%	$87,500
Developers Fee	4.11%	$87,500
Post Construction Audit		$5,000
Lease-up/Operating Reserve		$0
Total Development Cost		**$2,128,026**
Per Unit Average		$ 118,224
Financing Overview		**Proposed Financing**
1st Mortgage		$1,101,660
2nd Mortgage		$0
Federal Loan Fund(s)		$0
Grants / Other Subsidies		$0
Limited Partnership (LIHTC) - estimated		$575,000
Developer/Managing General Partner Loan		$0
		$1,676,660
Totals:		
Current Shortfall		**$451,366**

Rents	**Lancaster** (estimated)
Studio	$ 561
1 bedroom	$ 689
2 bedrooms	$ 848
3 bedrooms	$ 1,068

Income Based On Unit Mix		**Lancaster**	**Total**
Studio	2	$ 561	$ 13,475
1 bedroom	7	$ 689	$ 57,878
2 bedrooms	7	$ 848	$ 71,219
3 bedrooms	2	$ 1,068	$ 25,630
TOTALS	**18**		**$ 168,202**

INCOME & EXPENSE		**Based on Lancaster**
INCOME		
Gross Rental Income		$ 168,202
Interest / Service Income		$ 125
Miscellaneous Income		$ 50
Apartment Vacancy		$ 7,233
Effective Rental Income		**$161,145**
EXPENSE		
Property Management		$6,462
Administration		$5,310
Payroll/Benefits		$17,154
Maintenance		$14,436
Utilities		$9,414
Insurance		$3,636
Taxes		$7,002
Other Expenses		$1,638
Total Operating Expense		**$65,052**
Net Operating Income		**$96,093**
Debt Service Coverage	1.15	
Maximum available for annual DS	$83,559	
Maximum Monthly Payment	$ 6,963	
Supportable Mortgage at:	$1,101,660	
Interest	6.50%	
Term (months)	360	

Results

OUTCOMES:

RESULTS, Single-Family Price Range
Based on three variables: square footage, design (4-6 corner), Land size.

SF	4 Corner 1/2 Acre	6 Corner 1/2 Acre	4 Corner 1 Acre	6 Corner 1 Acre
1,600	$ 165,374	$ 168,744	$ 182,894	$ 186,264
1,800	$ 171,282	$ 174,936	$ 188,802	$ 192,456
2,000	$ 186,244	$ 190,391	$ 203,764	$ 207,911

Implications: For-Sale units
Northumberland area at 80% of AMI will meet the income range parameters, require minimal subsidy at each SF/Design alternative for single-family units between 1,600 -1,800 SF and for 1/2 acre lots at the 2,000 SF price points.

Richmond area AMI is insufficient at all price points for single-family homes without subsidies. **All SF price points will require significant subsidies.**

Westmoreland AMI appears adequate for all price points with no or minimal subsidy.

RESULTS, Multifamily Rental Units
Based on two variables: Rents (FMR/Lancaster Rents), Land size (1/2 acre/unit and 1 acre/unit).

Acres	FMR	Lancaster	
1/2	$496,949	$134,367	Shortfalls
1	$813,475	$451,366	Shortfalls

Implications: Rental units
Lancaster area (Kilmarnock) at 80% of AMI will require significant subsidy in addition to using LIHTC.

NOTE: LIHTC are an estimate based on current TC pricing (low) and based on a mixed-income project, with 100% LI equity should rise reducing the shortfall.

COMMENT ON HOW TO APPROACH AFFORDABLE WORKFORCE HOUSING

There are numerous ways to evaluate the enormous amount of data presented in this report. On one hand, population growth is flat, the Northern Neck is getting older, the economy - while in transition from being purely extractive - remains basically low-wage, service-sector based. Consequently, as evidenced by household formation trends, demand for new housing deriving from growth will be nominal (net demand for 1,143 units by 2020) across the entire Northern Neck. On the other hand, fully 74% of projected demand will be by households with incomes between 50-120% AMI, and about one in two (531 households) will be demand for housing by households with incomes between 50-80% AMI. This works out to a rough annual average demand for 14 rental units a year and 40 home ownership units a year for workforce housing.

This is a low but steady level of demand for new product, which, when combined with current weatherization and other rehabilitation efforts, could redefine the degree of access for workers. The approach described in the above scenarios illustrates from a feasibility perspective how the work of providing this supply might unfold. These are take offs only, meant to illustrate the relationship of land to per unit construction costs, the implications for density and scale, pricing, and, in the current economy, the role of the low income housing tax credit in assisting with rental production. And embedded in these scenarios is the burden of predevelopment costs and financing, which will be substantial and will fall to the local sponsor, plus our view that demand notwithstanding, a cautious approach is recommended.

We recommend using the above scenarios not as prescriptive, but as grounding for going forward, aware that smaller units become more affordable but harder to market.

There is a strategic way to move forward, incorporating the above take offs and assumptions, but in a broader manner. If the four counties could begin to work strategically, a very sound option would be to secure four to six 100 acre sites across the Northern Neck. Each could be owned by a partnership consisting of the counties and relevant employers. For instance, there could be a partnership between Northumberland County and Omega, and another between Rappannock Hospital and Lancaster County. These partnerships could acquire a 100 acre site of non waterfront property and set aside 50 acres for a septic drain field, then set aside 40 for open space and parks, and ten for housing.

This would create an opportunity to develop 20 units at .5 du/a. If these partnerships owned the land and provided 99 year ground leases, unit costs would go down, and a variety of options for land conveyance over time would materialize. It would amount to a combination of landbanking, workforce housing development, open space preservation, and economic development.

Appendix B: Engineering Analysis
Soil Suitability

Soil Suitability of Lancaster, Northumberland, Richmond & Westmoreland Counties, Virginia

Prepared for
The Northern Neck Housing Committee (NNHC)

By Tim P. Sexton, CPSS
Natural Resource Scientist
Draper Aden Associates
Draft Date: 1/27/09

The purpose of this portion of the study was to review the published and un-published soils and wetland maps of the four county area, and to interpret the Official Series Descriptions (OSD) both provided by the USDA- Natural Resource Conservation Service (NRCS), formerly the USDA, Soils Conservation Service (SCS).

Once the information was reviewed, an interpretative map of the four county area was prepared based upon the interpretative data and soils information provided by the soils data base of NRCS. This map will give the potential development in general, and will also provide an estimate of housing densities that may be possible using on-site sewage disposal for each type, given that the necessary detailed on-site soils investigations are performed when actual development is planned. The map is intended for use as a decision making tool for planning uses and is not suited for site specific determination for on-site sewage disposal.

For simplicity sake, the soils of the four county area have been divided into four catagories or feasibility groups.

Soil Feasibility Group 1

Feasibility Group 1, mapped in Green, are soils which may be suited for high density development using what is called Mass Drainfields, drainfields which dispose of more than 1,200 gallons per day per acre of soils. When proven out by detailed on-site soils investigations and evaluations, these areas may support multi-family, commercial, industrial, or other high use development.

Soils that fall into this Feasibility Group are deep and excessively well drained and have developed from sandy sediments of Coastal Plain origin. Depths to seasonal water table are normally greater than 60 inches below the surface. The soils series contained in this group are Kempsville, Rumford, Sassafras, Lakeland, Rumford, Catpoint, Suffolk, State and Turbeville. These soils were chosen because they met one or more of the following criteria; good internal drainage, potential high saturated hydraulic conductivity values, capability to pass water mounding analysis, depth to seasonal water table and reduced nitrogen loads entering the Chesapeake Bay.

The NRCS map units included are Kempsville; 6, 6B, 7 , 7B, KeA, KeB, KeB2; KeC2; KeC3.; Rumford; RtB, RuB, RuC2,14B, 15E, 17E, 16D, 18D; Sassafras: SaC3, SaD2, SaD3, SfB, SfA; Sloping Sandy Land; SSD; Lakeland; LaB; Metapeake; MaC2, MaD2; Catpoint; 5B, 3B; Suffolk; 19B, 21B; State; 20B; and Turbeville; 23C.

Soil Feasibility Group 2

Feasibility Group 2, mapped in Light Green, are soils which may be suited for moderate density development using what is called conventional drainfields, drainfields which dispose of less than 1000 gallons per day per acre of soils.   When proven out by detailed on-site soils investigations and evaluations, these areas may support single family and small commercial, and industrial development. The soils of this feasibility group may be developed when one acre or larger areas are considered for on-site sewage disposal.

Soils in this feasibility group are deep and well drained. They have developed from loamy sediments of coastal plain origin. Depths to seasonal high water table are normally greater than 36 inches below the surface. They normally occupy flatter slopes than those in Feasibility Group 1 and may have slower permeability rates. The soils series contained in this group are Caroline, Kempsville, Metapeake, Sassafras, Pamunkey, State, Suffolk, Bojac, and Turbeville.

The NRCS map units included in this feasibility group are Caroline; CaD3; Kempsville; KeA, 7A,7B, 7, 6B, KeB, KeB2, KeC2, KeC3; Matapeake; MaA, MaB, MaB2, MaC2; Sassafrass; SaA, SaB, SaB2, SaC2; Pamunkey; 11, 13; Rumford; 16D, 18D; State; 18A, 18B, 20A, 20B; Suffolk; 19A; Bojac; 4; and Turbeville; 23B

Soil Feasibility Group 3

The soils of Feasibility Group 3 are shown in yellow. The soils of this feasibility group may be suited for low density development (less than 600 gallons per day per acre) using Alternative Sewage Disposal Systems normally requiring pre-treatment prior to disposal. When detailed soils evaluations are performed to prove that the soils themselves are consistent enough to support these types of systems, they may be restricted by use and the number of bedrooms allowed. The soils of this feasibility group normally require larger lots (2 to 5 acres) to support on-site sewage disposal systems.

The soils in this feasibility Group are deep and moderately well drained. They have developed from loamy and clayey sediments of coastal plain origin. Depths to seasonal water table are normally found to be between 18 to 30 inches below the surface, and will not support conventional sewage disposal systems. The soil series contained in this feasibility group are Beltsville, Caroline, Mattapex, Woodstown, Atlee, Dogue, Emporia, Nansemond, Savannah, Tetotum, Ackwater, and Montross.

The NRCS map units included in this feasibility group are Beltsville; BeA, BeB, BeB2; Caroline; CaC3, CfB2, CfC2;

Mattapex; Mt; Woodstown; Wo; Steep Land; Ste; Atlee; 1; Dogue; 4B; emporia; 5B; Nansemond; 10, 12; Savannah; 19A, 19B, 17A, 17B; Tetotum; 22A, 22B2, 20A, 20B; Ackwater; 1A, 1B; Montross; 11A, 11B.

Soil Feasibility Group 4

The soils of this feasibility group are shown in Red. The soils of this feasibility group are not considered to be suitable for on-site sewage disposal and should be discounted for development using on-site sewage disposal. Furthermore, major areas of this soil feasibility group may be considered Non Tidal Wetland which are Federally protected. It is highly recommended that the Army Corps of Engineers (ACOE) be contacted and any necessary permits be obtained before encroaching into any of these soils.

The soils of this feasibility group are deep and poorly to somewhat poorly drained. Depths to seasonal water tables may be less than 12 inches below the surface for a significant time during the year. They are not normally considered suitable for alternative sewage disposal systems. The soils contained in this feasibility group are Bertie, Bladen, Craven, Dragston, Elkton, Fallsington, Lenior, Othello, Bibb, Levy, Leaf, Lumbee, Rappahannock, Tomotley, Wahee, Yemassee, Bohicket, Coastal Beach, Pits (borrow pits), Alluvial land, Tidal marsh, and Water.

The NRCS map units included in this feasibility group are Bertie; Br; Bladen; Bt; Coastal Beach; Co; Craven; CsA, CsB2, CsC2, CrD3; Dragston; Dr; Elkton; Ek; Fallsington; Lenior; Le; Othello; Ot; Bibb; 2; Levy; 2; Leaf; 8; Lumbee; 8,10; Rappahanock; 13, 15; Tomotley; 21; Wahee; 22; Yemassee; 23; Bohicket; 3 Alluvial Land; LO, Mx; Tidal marsh; To, Th; and Water; W.

Limitations

The information provided is based solely upon the interpretation of NRCS soils and mapping units. No site evaluations have been performed, nor has any ground truthing been done to consider the accuracy of any mapping units. The cartographic group of NRCS does not allow for any map unit to be smaller than six acres in area. Area of higher or lower quality my be encounterd in any map unit or feasibility group.

Appendix C: Engineering Analysis
Sewage System Potential

On-Site Sewage System Potential
Northern Neck Housing Committee (NNHC)

Prepared by Roger Cooley, P.E.
Draper Aden Associates
Draft Date: 1/27/09

The NNHC is interested in determining the areas of the four counties where affordable modest density housing would be feasible. Draper Aden Associates reviewed the published and unpublished soils and wetland maps of the four county area to determine where low operation and maintenance on-site systems might be feasible to serve these homes.

On-site sewage systems, which are systems that typically treat and dispose of wastewater below the surface of the ground, can be either single family or multifamily systems. The Virginia Department of Health (VDH) divides on-site systems into two different categories. The first category would be small on-site systems which disperse less than 1200 gallons per day (gpd) of wastewater per acre or larger systems that can be separated into disposal areas with less than 1200 gallons per day per acre. (A single family dwelling typically generates 300 gpd). The second category is considered mass sewage disposal systems (MSDS). MSDS are defined as systems where greater than 1200 gallons per day are disposed of in an acre or less. VDH does not have specific regulations governing MSDS, but the designs are similar to the smaller systems. MSDS require water mounding and nitrate loading calculations. Water mounding calculations require additional soils work, which can increase the cost of the design. Saturated hydraulic conductivity tests (Ksat) must be performed at the trench bottom and at restrictions below the trench bottom. Nitrate calculations are required to insure that the ground water nitrates standards are not exceeded. The VDH has a drinking water standard of 10 mg/L and the Department of Environmental Quality (DEQ) has a ground water standard of 5 mg/L. Based on the results of the water mounding calculations, the drainfield system may need to be spread out over a larger area, thereby increasing the land area required for the development. If there is not enough land area adjacent to and down gradient of the MSDS, biological nitrogen removal would be required. Providing nitrogen removal is considered advanced secondary treatment and will increase the cost of treatment from 50% to 150% depending on the amount of nitrogen that needs to be removed.

A conventional or standard on-site system will usually consist of a septic tank for primary treatment of the wastewater and a drainfield. The soil in the drainfield further treats the wastewater and disperses the treated wastewater into the environment. Primary treatment can remove 20 to 50 percent of the organic matter in the wastewater. Because the soil is expected to provide additional treatment to the wastewater, adequate depth of unsaturated soil is required. A minimum of 36 inches of unsaturated soil is required for standard on-site systems. These systems may flow by gravity or may be pumped either to the septic tank or drainfield.

Alternative on-site systems will usually consist of a secondary treatment system and a drainfield. Because secondary treatment systems can remove 80 to 95 % of the organic matter of the wastewater before it reaches the soil dispersal area, less depth of unsaturated soils are required. Alternative systems can be installed as shallow-placed systems and installed at depths less than standard systems. Since the soil does not have to provide much additional organic treatment, drainfields areas can be reduced. The reduction in drainfield sizing can reduce the required area for a drainfield, which can result in reduced land cost.

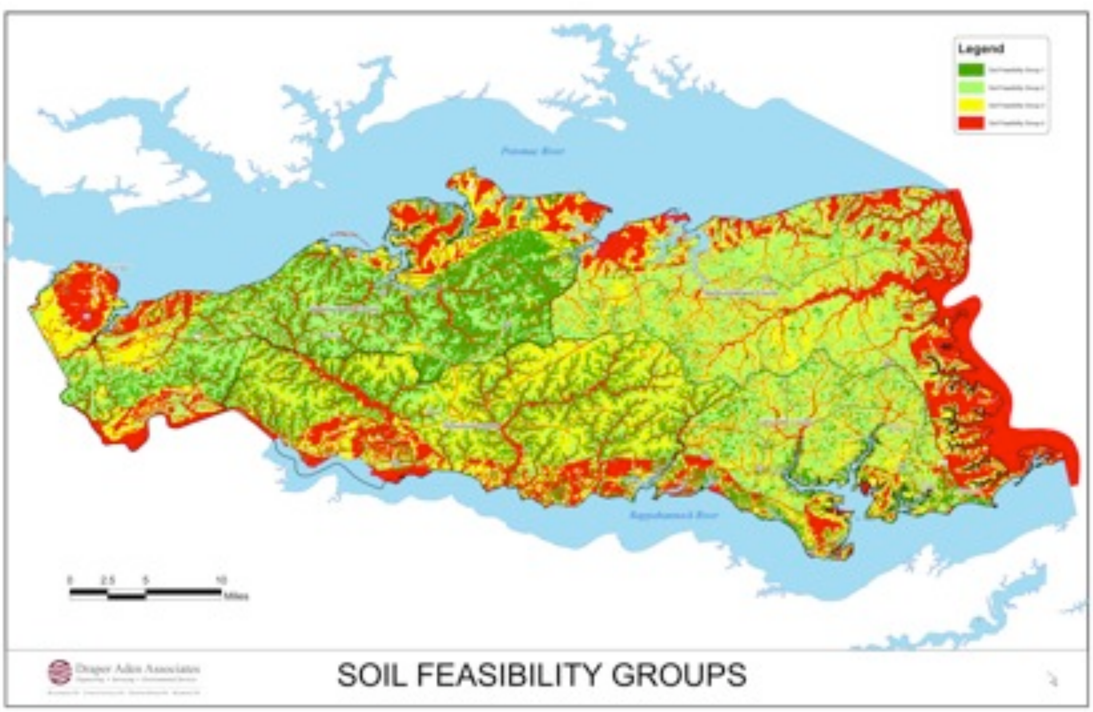
A review of the soils study and suitability map/s indicate four soil feasibility groups in the study area. Soil groups 1 and 2 have adequate soils for constructing affordable moderate to dense housing with on-site sewage systems. Soils group 3 would only be economical for low density housing if the cost of the land was sufficiently low to allow for the additional expense of an alternative treatment system. Soil group 4 is not usually considered suitable for on-site disposal of wastewater. All soils groups may be used as dilution area for MSDS when calculation ground water nitrate.

Soil group 1 should support standard drainfields for individual homes or multifamily dwellings. Single family systems maintained by the land owner is the simplest way to handle the wastewater at a cost of $5000 to $7000 per dwelling depending on dwelling size and soil conditions. By combining the wastewater for multiple dwellings into a cluster and keeping the flows to less than 1200 gpd the cost per dwelling could be reduced to around $3000 to $5000 per dwelling. However, managing a multiple dwellings system is more complicated. Usually a third party operator/owner is required to make sure the system is properly maintained. Based on a flow of 150 gallons per day (gpd) per bedroom 8 bedrooms could be placed on one system and not be defined as a MSDS. Soils group 1 may also support MSDS depending on a detailed soil and hydraulic investigation. The cost of constructing a MSDS without treatment would range from $3000 to $7000 per dwelling. If secondary or advanced secondary treatment is required for the MSDS the cost per dwelling would in the range of $8000 to $15,000.

Soil group 2 would support conventional/standard drainfields or small alternative systems, but may not support Mass Sewage Disposal System. A standard drainfield system would cost $5000 to $7000 per dwelling. The cost of an alternative system will vary greatly depending on site and soil conditions and would range from $8,000 to $15,000 per dwelling.

Table
Summary of Soils Group, type of system and cost

Soil Group	Type of Onsite System	Cost Range per Dwelling
1	Conventional or Standard Drainfield	$5,000 to $7,000
1	Multiple Dwelling or Cluster System less than 1200 and not a MSDS	$3,000 to $5,000
1	MSDS without secondary treatment	$3,000 to $7,000
1	MSDS with secondary or advanced secondary treatment	$8,000 to $15,000
2	Conventional or Standard Drainfield	$5,000 to $7,000
2	Multiple Dwelling or Cluster System less than 1200 and not a MSDS	$4,000 to $6,000
2	Alternative System not MSDS	$8,000 to $15,000



Appendix D: Keep Up Analysis

As the market changes over time the housing across the Northern Neck will become less affordable. Continued influx of high income second home owners and high wealth retirees will continue to exert pressure on the housing markets, especially in Lancaster and Northumberland. There will be pressure for local wages to keep pace, but the trend towards a more service oriented economy will mean decreased affordability and increased congestion. Below are the numbers of units projected (an expansion of the chart in Appendix A here to show demand by households with incomes < 30 MFI.

Workforce Housing Demand Projections, 2010-2020

Northern Neck Totals		**Gross**	**Net**			
	Total	**Under 35**	**35-54**	**Owner**	**Renter**	
<30MFI	458	419	39	255	203	
<50MFI	445	380	65	284	161	
<80%MFI	531	468	63	376	154	
<100%MFI	310	267	42	233	77	
<120%MFI	303	205	98	249	54	
Lancaster						
	Total Units	**Under 35**	**35-54**	**Owner**	**Renter**	**top income**
<30MFI	94	86	8	49	45	$17,850
<50MFI	80	73	7	52	28	$29,750
<80%MFI	132	129	3	94	38	$47,600
<100%MFI	70	42	28	61	8	$59,500
<120%MFI	50	27	23	44	6	$71,400
Northumberland						
	Total Units	**Under 35**	**35-54**	**Owner**	**Renter**	**top income**
<30MFI	132	130	2	94	38	$18,960
<50MFI	106	80	26	77	30	$31,600
<80%MFI	128	97	32	98	30	$50,560
<100%MFI	68	74	-6	49	19	$63,200
<120%MFI	71	50	21	59	12	$75,840
Richmond Co						
	Total Units	**Under 35**	**35-54**	**Owner**	**Renter**	**top income**
<30MFI	91	79	12	44	47	$15,960
<50MFI	74	67	7	51	23	$26,600
<80%MFI	91	65	25	60	31	$42,560
<100%MFI	63	48	15	34	29	$53,200
<120%MFI	51	37	14	35	16	$63,840
Westmoreland						
	Total Units	**Under 35**	**35-54**	**Owner**	**Renter**	**top income**
<30MFI	141	125	16	69	72	$16,830
<50MFI	185	160	25	105	80	$28,050
<80%MFI	179	176	3	124	55	$44,880
<100%MFI	109	103	6	89	20	$56,100
<120%MFI	130	90	40	110	20	$67,320

Appendix E: Note on Relevant Projects in the Pipeline

Projects at various stages of development across the Northern Neck should be taken into consideration before attempting to interpret this report and judge the merits of moving forward with development aspirations.

czbLLC would like to acknowledge the team that collaborated to generate this study:

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