

## Chapter 6: Housing

Actions of the county and town governments affect the provision of housing, and it is necessary that these government bodies plan to meet both present and future housing needs. This section considers the housing market in Page County, housing need, and projected changes in the total housing stock through 2020.

### 6.1 Housing Market

Page County is defined as a basic housing market. The county is also part of the regional housing market. Further, because of access to the metropolitan area via Route I-66, the county is a sub-market of the Washington, D.C. Metropolitan Area housing market. Families earning their primary income in the metropolitan area now consider Page County as a place to live.

### 6.2 Demand for New Housing

Based on the Federal Housing Administration market analysis criteria, the major determinants of housing demand are:

- The rate of growth in the number of households
- Affordability
- Liquid asset holdings, down payment and mortgage term requirements
- Space, convenience and style requirements

### Households

The household is the basic unit of demand. Each household requires a dwelling unit. The terms "dwelling unit" and "housing" are used interchangeably. The following definitions apply:

- Dwelling unit - A house, mobile home, apartment, group of rooms, or single room occupied, or intended for occupancy, as separate living quarters.
- Household - All of the persons who occupy a dwelling unit. They may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements, except those living in group quarters.

**Exhibit 35: Households and Housing Units**

	Actual			
	1980	1990	2000	2010
Population	19,401	21,690	23,177	24,042
Persons not in households	139	214	260	262
Persons per household	2.78	2.67	2.46	2.47
Number of households	6,929	8,043	9,316	9,623
Number of Housing Units	8,329	8,948	10,557	11,591

Sources: Summary Tape 1A, U.S. Bureau of Census, 1990 and 2000, 2009-2010.

As shown in **Exhibit 35**, the size of households in Page County has declined steadily over the past 30 years from 2.78 persons per household in 1980 to 2.47 in 2010. The national average in 1980 was 2.75. By 2010 the national average was 2.63.

The declining household size means that the rate of housing unit growth will have to exceed the population growth in order to meet the housing demand.

**Affordability**

A major concern to builders is the housing price range new householders can afford. As shown in **Exhibits 29 and 30**, between 1990 and 2014 Page County's per capita income levels and medium household incomes are the lowest among the surrounding counties. Page County also has the highest estimated number of individuals and children living below the poverty line among the surrounding communities. (**Exhibit 31**)

**Exhibit 36** displays Page County 2010 household income levels and the affordable housing costs for home-buying households at each income level. It should be noted, that in 2010, 26.1 percent of Page County households fell into the category for whom the maximum affordable housing is \$62,498. An additional 48.9 percent of Page County residents fell into the category for which the maximum purchase price would be \$187,498. According to the U.S. Census Bureau, the median income of Page County residents in 2010 was \$37,970. That figure falls within the "Moderate Income" category and supported housing needs in the \$70,000 to \$124,998 price range.

**Exhibit 36: Page County Household Incomes and Affordable Housing**

Household Incomes in 2010	General Income Level	Number of Households *	Percent of Total Households	Affordable Housing Range at 2 and 2.5 Times Gross Annual Income (Purchase Price) +	Affordable Total Monthly Housing at 28% Gross Monthly Income	Affordable Mortgage or Rental Payment at 75% Total Monthly Housing Cost
Less than \$10,000	Low	763	7.9%	Less Than \$20,000	\$233 maximum	
\$10,000 - \$14,999		595	6.2%	\$20,000 to \$37,498	\$233 to \$350	
\$15,000 - \$24,999		1153	12.0%	\$30,000 to \$62,498	\$350 to \$583	\$263 to \$437
\$25,000 - \$34,999	Moderate	1472	15.3%	\$50,000 to \$87,498	\$583 to \$817	\$438 to \$612
\$35,000 - \$49,999		1579	16.4%	\$70,000 to \$124,998	\$817 to \$1,167	\$613 to \$875
\$50,000 - \$74,999		1659	17.2%	\$100,000 to \$187,498	\$1,167 to \$1,750	\$876 to \$1,312
\$75,000 - \$99,999	High	1205	12.5%	\$150,000 to 249,998	\$1,750 to \$2,333	\$1,313 to \$1,750
\$100,000 - \$149,999		740	7.7%	\$200,000 to \$374,998	\$2,333 to \$3,500	\$1,751 to \$2,625
\$150,000 or more		457	4.8%	\$300,000 or more	\$3,500 or more	\$2,626 or more
Total		9,623	100.0%			

Sources: U.S. Census Bureau, 2006-2010 American Community Survey \*This particular breakdown of households is only available as an estimate † Includes maintenance, taxes, insurance, and utilities.

**Explanation of the terms used in Exhibit 36.**

The affordable total monthly housing cost at 28 percent of the household's gross monthly income is an estimate of one week's take-home pay and is an accepted guide for total monthly housing cost. The affordable mortgage or rental payment is obtained by multiplying the total monthly housing cost by 75%. The remaining 25 percent is to cover utilities, maintenance, taxes, insurance, and other incidental housing costs. Depending upon which costs are included in the rent or mortgage payment, the affordable rent or mortgage figure may equal total monthly housing costs.

**Liquid Assets, Down Payment and Mortgage Terms**

The most important figure for the homebuyer is the monthly housing payment. This category of determinants is difficult to predict because mortgage interest rates and down payment requirements fluctuate. Households with little or no liquid assets need State and Federal programs to put home ownership within their reach. Down payment requirements for banks and savings and loan associations are sometimes beyond the reach of first-time homebuyers. For low and moderate-income households, who are first time buyers, lower down payment loans are offered through the Virginia Housing Development Authority or Farmers Home Administration.

Retiree or out-commuter new households are likely to have higher assets with which to purchase housing in the local market. Both of these groups come primarily from, or travel to, the Washington Metropolitan Area. Because they may have liquid assets from the sale of property or from higher wages relative to the area, they are able to afford more costly housing than the typical Page County family. This may also be true with respect to households in higher income jurisdictions within the NSVRC.

### **Space, Convenience and Style Requirements**

Page County's housing is primarily single-family, detached, owner-occupied homes. Because the price of such houses has increased significantly, demand will rise for more rental units to serve the increased number of small households and those families that cannot afford, or may not wish, to buy a home. These demands are now being met by the sale or rent of townhouse units and by apartments. More apartment construction may be anticipated in the future, along with efforts to convert large single-family homes into apartment units.

A significant feature of Page County's housing development is the growing popularity of manufactured homes. The cost per square foot of living space is noticeably lower than in individually constructed units. Low and middle-income households, retired residents and second-home buyers have a wide variety of manufactured home styles and sizes from which to choose.

### **6.3 Adequacy of Current Housing Stock**

The several measures of the adequacy of the current housing stock include the number of housing units failing to meet minimum standards, vacancy rate, the rate of housing loss, and the adequacy of affordable housing.

As shown on **Exhibit 37**, the total number of housing units increased 18 percent between 1990 and 2000 and 9 percent between 2000 and 2010. Over the same time periods the number of vacant units also increased from 5 percent in 1990 to 17 percent in 2010. Only between 1 and 2 percent of these vacant homes are for sale and about 1 to 3.8 percent are not for sale or rent.

**Exhibit 37: Page County Housing Stock**

	1990		2000		2010	
	Number	Percent of Total	Number	Percent of total	Number	Percent of total
<b>Total Units</b>	8,948		10,557		11,600	
<b>Vacant Units*</b>	447	5.00%	1,252	11.90%	1,968	17.00%
For Sale	175	2.00%	119	1.10%	243	2.10%
Not for Sale or Rent	272	3.00%	279	2.60%	435	3.80%
<b>Units for Seasonal, Recreational or Occasional Use</b>	446	5.00%	651	6.2	849	7.30%
<b>Occupied Units</b>	8,055	90.00%	9,305	88.10%	9,746	84.00%
Owner Occupied	6,191	76.90%	6,872	73.90%	7,085	72.70%
Renter Occupied	1,864	23.10%	2,433	26.10%	2,661	27.30%
More than 1.0 Persons per Room	235	2.90%	167	1.80%	122	1.30%
<b>Lack Complete Plumbing</b>	382	4.30%	154	1.5	18	0.20%
<b>Units at Address</b>						
Single Units including Townhouses	7,072	79.00%	8,434	79.9	9,229	79.60%
2+ Units (Multi-Family)	621	6.90%	767	7.7	753	6.50%
Mobile Homes	1,255	14.00%	1,296	12.3	1,609	13.90%
<b>Location</b>						
In-Town	3,263	36.50%	3,565	33.8	4,124	35.60%
Out-of-Town	5,685	63.50%	6,992	66.2	7,476	64.40%

Source: US Census Bureau

\*A housing unit is declared vacant if no one is living in it on census day unless its occupant or occupants are absent only temporarily such as on vacation, in the hospital for a short stay or on a business trip and will be returning. Housing units temporarily occupied at the time of the census by individuals who have a usual residence elsewhere are also classified as vacant.

The data for **Exhibits 35** and **37** was provided by US Census Bureau. The reason for the different numbers in these two exhibits is unavailable.

The number of houses listed as units for seasonal, recreational or occasional use has increased steadily (5% in 1990, 6.2% in 2000 and 7.3% in 2010). The increase in the number of unoccupied houses for rental or seasonal

use could create future issues if units are converted to permanent residential use, resulting in unplanned expenses on infrastructure to include emergency services and capacity of the school system.

Owner occupied homes have declined from 76.9 percent in 1990 to 72.7 percent in 2010 with corresponding increase in rented property over the same period.

The percentage of units that fail to meet “structural adequacy” as measured by lack of complete plumbing or overcrowding has declined steadily between 1990 (7.2%) and 2010 (1.5%).

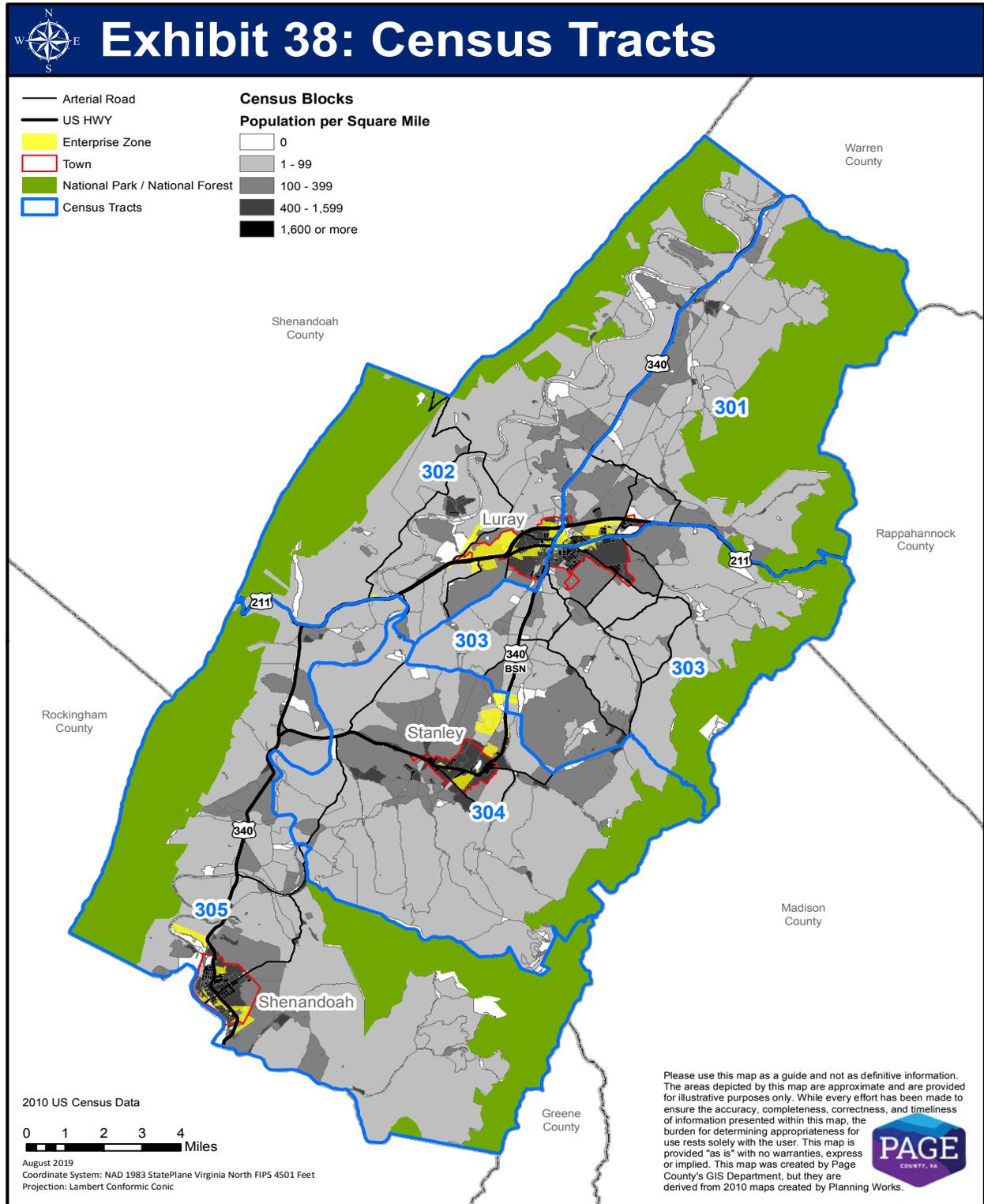
Single units, including town houses, make up almost 80 percent of Page County’s housing. The number of single units increased almost 1 percent between 1990 and 2000 but declined slightly between 2000 and 2010 (79.9 % to 79.6 %). Multi-family units make up 6.5 percent of the housing. Mobile homes make up 14 percent of Page County’s housing. Campers, vans and houseboats make up about 1 percent.

### **Housing Stock that Fails to Meet Minimum Standards**

If all existing housing units met minimum standards, the housing market would require only the addition of enough units to meet the growth in households with enough surplus units to provide an adequate vacancy rate. However, not all housing units in Page County meet minimum standards. Substandard units must be brought up to meet minimum standards or new units need to be provided to replace them.

**The two most common indicators of substandard units are overcrowding (defined as 1.01 or more persons per room) and a lack of complete plumbing facilities for the household’s exclusive use. Since an overcrowded unit may be otherwise adequate, the best available indicator of structural inadequacy is the lack of complete plumbing. Complete plumbing facilities are defined as hot and cold piped water, a flush toilet, and a bathtub or shower. Using lack of complete plumbing as the indicator of adequacy, substandard housing stock has declined steadily.**

Exhibit 38: Page County Census Tracts



## Vacancy Rate

**Exhibit 39** provides a breakdown of vacant homes for each of the census tracts within the county. The census tracts include the towns, which are broken out separately in the Exhibit. An adequate vacancy rate should be maintained in the housing market to provide for the movement of households and the creation of new households.

In its Statewide Housing Needs Analysis, 1975, The Virginia Housing Development Authority recommended vacancy rates based on population growth rates (derived from annual percentage increases). Since Page County's population growth has been slow to moderate since 1990 (6.9% 1990-2000, 3.7% from 2000-2010 and -1.3% 2010-2015), this report recommends vacancy rates of 1 -1.25% for owned houses and 4-5% for rental housing.

### Exhibit 39: Vacant Dwelling Units – 1990, 2000, 2010

Area	1990			2000			2010		
	Total Dwelling Units	Vacant	Vacancy Rate	Total Dwelling Units	Vacant	Vacancy Rate	Total Dwelling Units	Vacant	Vacancy Rate
<b>Census Tract</b>									
301	1,037	89	8.6%	1,151	100	8.7%	2,599	600	23.1%
302	1,579	222	14.1%	2,027	433	21.4%	2,187	236	10.8%
303	1,945	190	9.8%	2,223	186	8.4%	2,385	336	14.1%
304	2,221	184	8.3%	2,644	294	11.1%	2,142	416	19.4%
305	2,166	208	9.6%	2,512	239	9.5%	2,287	266	11.6%
Total	8,948	893	10%	10,557	1,252	11.9%	11,600	1,854	16.0%
<b>Town</b>									
Luray	2,013	167	8.3%	2,191	154	7.0%	2,250	215	9.6%
Shenandoah	752	13	1.7%	812	48	5.9%	1,076	108	10.0%
Stanley	498	25	5.0%	562	36	6.4%	769	74	9.6%

Source: U.S. Census, 1990, 2000 Note: The census tracts listed above include the towns, therefore dwelling units within the towns should be treated as a subset of the five census tracts, not in addition to the census tracts.

As shown in **Exhibit 37**, Page County's vacancy rates greatly exceed these recommended rates. The County's total vacancy rate steadily increased from 10% in 1990 to 16% in 2010. As shown in **Exhibit 39**, the northwest section of the County (tract 301) had the highest vacancy rate, 23.1%. The south eastern section (tract 304) had the second highest vacancy rate, 19.4%. From 1990 to 2010 the towns have more modest vacancy rates. In 2010, the rates ranged from 10% in Shenandoah to 9.6% in Luray and Stanley.

By definition, "vacancy" includes houses reserved for seasonal use. The county should determine which are truly for "seasonal" use as a component of the growing tourism industry.

### 6.3 Adequacy of Affordable Housing

Another measure of adequacy is the cost of housing units in relation to household incomes. If the household is paying more than 25 to 30 percent of its gross income for housing, including utilities, then the unit (whether structurally standard or not) may be considered too costly relative to the household income. This is one measure of the degree to which the market does not provide adequate housing at certain price levels.

#### Exhibit 40: Housing Costs in Relation to Household Incomes - 2010

Costs as a Percent of Household Income	Renter Households		Owner Households	
	Number	Percent	Number	Percent
Less than 20.0 percent	525	22.4%	3,818	52.6%
20.0 to 24.9 percent	340	14.5%	997	13.7%
25.0 to 29.9 percent	272	11.6%	757	10.4%
30.0 to 34.9 percent	213	9.1%	267	3.7%
35.0 percent or more	725	30.9%	1,416	19.5%
Households not computed as Percent of Income	272	11.6%	27	.4%
Total Households	2,347		7,282	

Source: U.S. Census Bureau, 2006-2010 American Community Survey

In 2010, 213 (9.1%) units exceeded 30 to 34.9% of the tenant's incomes. An additional 725 units (30.9%) of rented housing stock exceeded 35% of the tenant's monthly income. In the case of owners, 267 (3.7%) cost more than 30-34.9% of their income. An additional, 1,416 units (19.5%) cost more than 35% or more of the owner's income.

Surprisingly, 22.4% of renters and 52% of owners spend less than 20% of their incomes on housing. Given the low median income of Page County households (\$44,200), this may be because many owners live in housing that has been in the family for one or more generations

The housing market is the system that allocates housing resources within the county. In simple terms, people buy or rent the kind of housing they can afford. The Virginia Housing Development Authority and Farmers' Home Administration expand the range of choice for low and moderate-income households through their loan programs. U.S. Department of Housing and Urban Development's Section 236 and Section 8 rental housing program units provide some assistance to renters, as does the Farmers Home Administration's Section 515 Rural Rental Housing Program.

Based on housing costs, most of the county’s low- and moderate-income households will be unable to rent or buy homes for prices they can afford. The county needs to develop a policy wherein “affordable housing” is defined as what is determined to be affordable to the county’s low-, moderate-, and high-income residents as shown in **Exhibit 36**.

Further, the county needs to ensure that the emphasis of new residential development is to provide housing affordable for citizens who live and work in the county. Housing needs for those with income levels not necessarily representative of the county should be addressed only when the above needs are met.

#### **Exhibit 41: Dwelling Unit Projections by Decade**

	Actual		Projected	
	1990-2000	2000-2010	2010-2020	2020-2030
<b>Average Annual Growth of Units</b>	18.0%	9.9%	10.3%	11.8%
Total Units, End of Decade	10,557	11,600	12,796	14,305
Total Units, Beginning of Decade	8,948	10,557	11,600	12,796
Loss for Decade (6.4%)	-573	-676	-742	-818
Net Dwelling Unit Base	8,375	9,881	10,858	11,978
New Units in Decade	2,182	1,710	1,938	2,327
<i>Annual Average</i>	<i>218</i>	<i>171</i>	<i>194</i>	<i>233</i>

Sources: U.S. Bureau the Census 2010 and Components of Inventory Change.

The average rate of housing growth per year over a ten year period represents new housing plus the replacement of housing lost through deterioration, natural disasters, or conversion to non-housing use (6.4%).

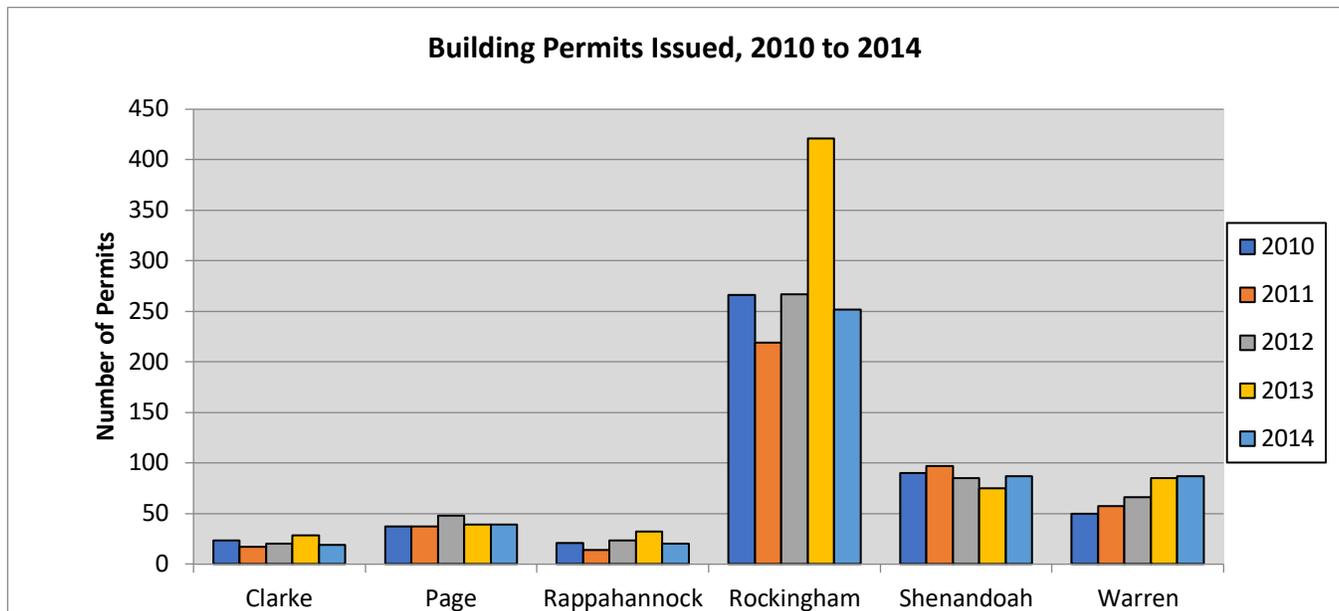
Between 1970 and 1990, the population grew rapidly, about 1.2% to 1.7% per year, on average. Between 1990 and 2000, the growth rate dropped back to around 0.6% per year and between 2000 and 2010 it dropped further, to about 0.3% per year. The sudden population growth between 1970 and 1990 may have been the cause of the higher housing growth rate between 1990 and 2000.

#### **6.4 New Housing in Page County**

The number of building permits issued by each nearby county in the NSVRC and their corresponding monetary value is an indication of Page County's share of the new housing market of the counties.

**Exhibit 42: Building Permits Issued, 2010 to 2014**

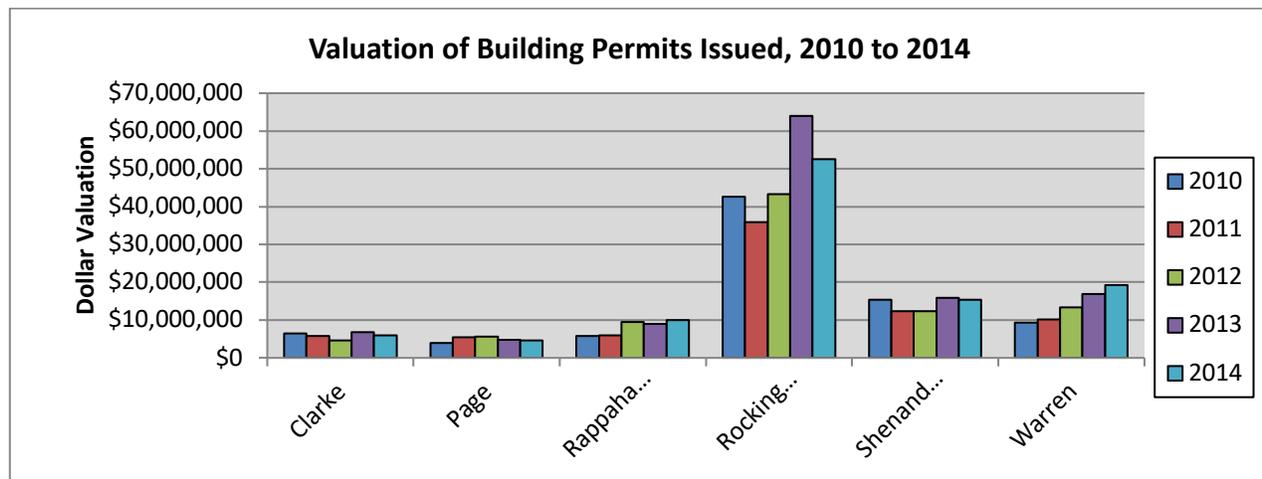
Area	2010	2011	2012	2013	2014
Clarke	23	17	20	28	19
Page	37	37	48	39	39
Rappahannock	21	14	23	32	20
Rockingham	266	219	267	421	252
Shenandoah	90	97	85	75	87
Warren	50	57	66	85	87



**Exhibit 42** illustrates that the number of building permits issued in Page County increased from 37 in 2010 and 2011 to 48 in 2012. Between 2010 and 2014 Clarke and Rappahannock Counties issued fewer permits than Page County. Rockingham County issued the greater number of permits during this period.

**Exhibit 43: Valuation of Building Permits Issued, 2010 to 2014**

Area	2010	2011	2012	2013	2014
Clarke	\$6,408,000	\$5,769,000	\$4,652,000	\$6,784,000	\$5,849,753
Page	\$3,987,500	\$5,418,344	\$5,590,622	\$4,825,073	\$4,633,058
Rappahannock	\$5,682,600	\$5,999,697	\$9,496,664	\$8,955,922	\$9,892,000
Rockingham	\$42,580,730	\$35,955,678	\$43,303,439	\$63,998,445	\$52,470,738
Shenandoah	\$15,393,097	\$12,254,775	\$12,327,761	\$15,895,072	\$15,391,277
Warren	\$9,287,500	\$10,199,476	\$13,380,500	\$16,887,045	\$19,155,950



Source: Weldon Cooper Center for Public Service, U.S. Census Bureau

**Exhibit 43** shows that the value of the permits issued by Page County was lowest of those in all the other Counties listed except in 2012, when the values of Clark County’s permits were the lowest. The value of Page County permits declined from 2012 to 2014.

### 6.5 Summary

As defined in **Chapter 6: Housing**, a household consists of all persons who occupy a dwelling unit. Dwelling units include houses, mobile homes, apartments, a group of rooms or a single room intended for occupancy as a separate living quarters. Affordable housing in relation to median household income in 2014 (\$44,851) indicates that 50 percent of Page County residents could not afford housing purchase costs in excess of \$124,998 or rentals in excess of \$1,167 per month. (**Exhibit 29 and 36**)

The total number of housing units in 2010 was 11,600 of which 1,968 were vacant. Vacant units include units for seasonal, recreational, or occasional use. In 2010, Seasonal Units, numbered 849, 7.3% of the total units and 43.1% of the vacant units. The number of seasonal units increased 90% between 1990 and 2010 (**Exhibits 37**), indicative of increased tourism in Page County.

Housing unit growth is related to population growth. Between 1990 and 2000, average housing growth was 18%. Between 2000 and 2010, it dropped to 9.9% (**Exhibit 39**). During those periods, population growth increased 6.8% and 3.7 % respectively. Between 2010 and 2015, the population decreased 1.3% (**Exhibit 10**).

One measure of the adequacy of affordable housing is whether renters or owners are paying in excess of 25% to 30% of household income for housing. In 2010, 40% of renters and 23% of owners spent more than 30% of household income on housing. Surprisingly, 52% of owners and 20% of renters spend less than 20% of their

household income on housing (**Exhibit 40**). Many owners and renters may live in housing that has been in the family for one or more generations.

In 2014, Page County issued 39 building permits, more than Clark and Rappahannock Counties, but fewer than Rockingham, Shenandoah or Warren Counties (**Exhibit 42**). The value of the permits issued by Page County in 2014 was lower than the total value of those issued in the other NSVRC counties (**Exhibit 43**). The average value of structures per permit was also lower in Page County than in other nearby counties.