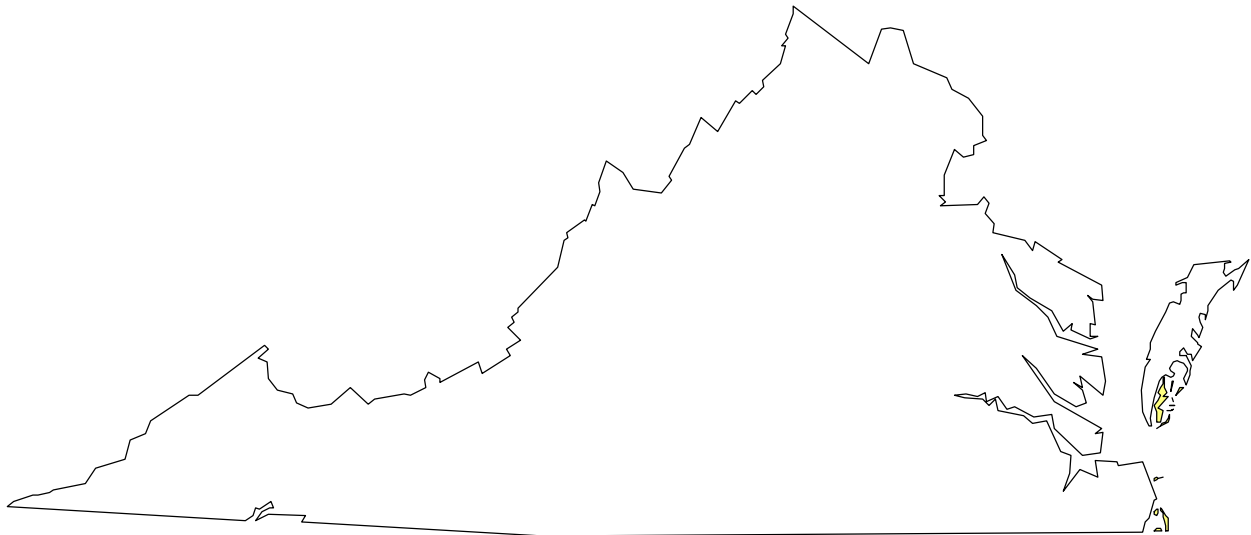


# **THE 1998 VIRGINIA ASSESSMENT/SALES RATIO STUDY**



**Virginia Department of Taxation  
P.O. Box 1880  
Richmond, Virginia 23218-1880  
May 2000**

## Table of Contents

	<b>Page</b>
<b>Introduction</b>	2
<b>Results of the Study</b>	3
<b>Figure 1</b> Frequency Distribution of the Median Ratio	5
<b>Figure 2</b> Frequency Distribution of the Coefficient of Dispersion	5
<b>Figure 3</b> Frequency Distribution of the Nominal Tax Rate	6
<b>Figure 4</b> Frequency Distribution of the Effective Tax Rate	6
<b>Figure 5</b> Frequency Distribution of the Estimated True Value	7
<b>Figure 6</b> Frequency Distribution of the Change in Estimated True Value	7
<b>Table 1</b> Latest Effective Reassessment for Virginia Localities, Number of Sales, Median Assessment/Sales Ratio, Coefficient of Dispersion, and Total Fair Market Value, 1998	8
<b>Table 2</b> Ratio of 1998 Assessed Valuations to 1998 Selling Prices of Real Estate for Selected Classifications of Property	12
<b>Table 3</b> Nominal and Effective True Real Property Tax Rates in Virginia Counties and Cities, 1997 and 1998	21
<b>Table 4</b> Estimated True Full Value of Locally Taxed Property in Virginia Counties and Cities, 1998: Real Estate and Public Service Corporations	25
<b>Table 5</b> Estimated True Value Per Capita of Locally Taxed Property in Virginia Counties and Cities, 1998: Real Estate and Public Service Corporations	29
<b>Appendix 1</b> Methodology and Terms	33
<b>Appendix 2</b> Number of Sales Included in Ratio Study Sample	36
<b>Appendix 3</b> Computations for State Median Ratio	40

# THE 1998 VIRGINIA ASSESSMENT/SALES RATIO STUDY

## Introduction

In accordance with Section 207 of Title 58.1 of the Code of Virginia, the Virginia Department of Taxation conducts an annual real property assessment/sales ratio study covering every city and county in the Commonwealth. This report summarizes the results of the 1998 study. The study estimates the existing assessment/sales ratio for each locality by comparing assessed values to the selling prices of bona fide sales of real property. A locality's total fair market value of real estate, divided by its assessment/sales ratio, produces an estimate of the locality's total true (full) value of real estate. The local true values developed in this study are used as a factor in Virginia's basic school aid distribution formula. The study also determines the effective local true tax rates across the State. The effective true tax rate (expressed per \$100 of true value) provides an appropriate means of comparing tax rates on similar properties in different taxing jurisdictions. The study also serves as an element in the determination of assessment levels of public service corporation property in each locality of the State. Finally, the study evaluates the level of uniformity in the assessment of real property within and across jurisdictions of the State.

The 1998 assessment/sales ratios are calculated from a statistical sample of all fair market real estate sales in 1998, with all bona fide sales used in the case of smaller localities. The Department of Taxation allows localities to file all of their real estate transactions directly with the Department on diskettes in a prescribed format. Approximately 96,000 sales, or 3.6 percent of the parcels in the State, are actually used in this study. For each selected parcel, its assessed value in 1998 is compared to its sale price to calculate an assessment/sales ratio. The best indicator of a locality's overall assessment/sales ratio is the median, or midpoint of the ratios when ordered by value. The median ratio captures the performance of the real estate market; a low median ratio indicates a strong market. However, a median ratio close to 100 percent (where assessed values closely approximate sales prices) may indicate that a reassessment has been undertaken recently.

The study uses standard statistical measures, such as the coefficient of dispersion and the regression index, to examine the level of uniformity in the assessment of real property within and across jurisdictions in Virginia. The coefficient of dispersion is based on the average absolute deviation as recommended by the International Association of Assessing Officers (IAAO). It measures how closely individual ratios are grouped around the median; the smaller the measure of dispersion, the greater the uniformity of the ratios. The regression index compares the treatment of less expensive property with that of more expensive property. It evaluates the relative tax burdens of owners of low and high valued properties. The statistical terms, methodology used for computation, and the sources of data are detailed in the appendices.

## Results of the 1998 Study

### Median Ratio and Coefficient of Dispersion

Table 1 contains the median assessment/sales ratio, and the coefficient of dispersion for every county and city. Table 1 also shows the total fair market value of real estate, the number of sales in the sample, and the latest year of assessment, which are among the several factors that affect the median ratio and the coefficient of dispersion. Figure 1 indicates that the 1998 median ratio ranges between 80 and 100 percent for 81 of Virginia's 95 counties and 39 of its 40 cities. Figure 2 indicates that the coefficient of dispersion is in the range of 10 percent to 30 percent for 71 counties, and is under 20 percent in 38 cities.

In addition to those localities that undertake annual reassessments, 34 other localities (30 counties and 4 cities) conducted reassessments in 1998. Reassessments typically result in higher median ratios as assessed values are brought into line with selling prices. Title 58.1, Sections 3201 and 3259 of the Code of Virginia require that any real estate reassessment effective on or after January 1, 1977 must be at 100 percent of fair market value. Effective July 1, 1981, any locality that fails to comply in a reassessment year will have its share of the net profits of the operation of the Alcoholic Beverage Control system withheld. This study indicates that no net profits need to be withheld from any of the reassessing localities.

The sample used in this study consists of 95,984 sales, covering six classes of property. Table 2 examines the variation in median ratios across localities for all six classes: (1) single-family residential urban, (2) single-family residential suburban, (3) multi-family residential, (4) commercial/industrial, (5) agricultural/undeveloped 20-100 acres, (6) agricultural/undeveloped over 100 acres. Sales in the single-family residential urban and suburban classes dominate the total sample, with 56,082 urban and 34,498 suburban property sales. A breakdown of sample points, by locality and property class, is given in Appendix 2. Data for a locality are suppressed in Table 2 when the sample size is less than twenty (four for commercial or industrial properties). Statistics for counties and cities with a sample size between four and twenty may be obtained from the Office of Fiscal Research, (804) 367-8391.

## **Nominal and Effective Tax Rate**

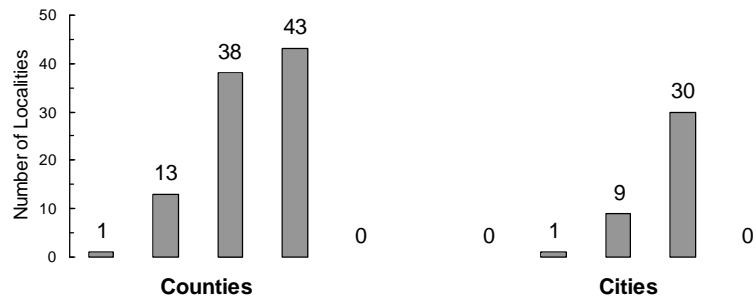
Table 3 provides the nominal and effective true tax rates for 1997 and 1998 for each locality. The median assessment/sales ratio for the State in 1998 was 91.1% , down from 91.7% in 1997. The steps in the computation of the State median ratio are detailed in Appendix 3. The statewide nominal tax rate for 1998 was equal to \$1.04 per \$100 of assessed value, while the estimated effective tax rate for the State was \$0.94 per \$100 of assessed value. Figure 3 shows that the nominal tax rate for 52 of Virginia's 95 counties fell between \$0.60 and \$0.79 per \$100 of assessed value. The nominal rate was equal to, or in excess of, \$1.00 per \$100 of assessed value in 26 of the State's 40 cities. Localities' effective true tax rates tend to be somewhat lower than their nominal rates. Effective rates fell between \$0.40 and \$0.59 per \$100 of assessed value for 53 of the 95 counties, and were at or above \$1.00 per \$100 of assessed value for just 20 of the 40 cities.

## **Estimated True Value of Property**

Table 4 provides the total estimated true full value of locally taxed property for real estate and public service corporations. The total estimated true value for the State was \$427.6 billion in 1998, which is approximately 5.5 percent higher than the figure for 1997. The estimated true value of real estate excluding public service corporations (the total fair market value reported in the local land book, divided by the median assessment/sales ratio for the locality), was \$400.5 billion, which is 5.7 percent higher than in 1997. Total estimated true value for public service corporations was \$27.1 billion; that figure includes the value reported by the State Corporation Commission as well as the estimated true value of railroad and pipeline property. Figure 5 gives a frequency distribution of total estimated true value for 1998. For the majority of both counties (75 out of 95) and cities (30 out of 40), total estimated true value was at or below \$2.9 billion. Total estimated true value increased strongly between 1997 and 1998 in many counties and cities (Figure 6).

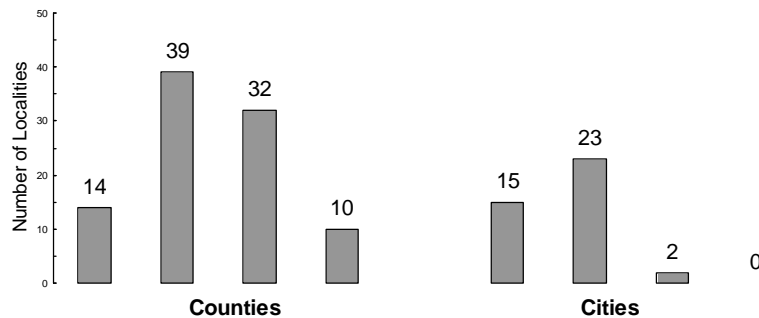
Table 5 provides the per capita estimated true full value of locally taxed property for real estate and public service corporations. Across the State, total estimated true value averaged \$63,000 per capita. Estimated true value per capita was less than \$60,000 in 59 of the 95 counties and 33 of the 40 cities. While estimated population in the State increased by about 0.8 percent from 1997 to 1998, the estimated true value per capita increased 4.7 percent.

**Figure 1**  
**Frequency Distribution of the Median Ratio, 1998**



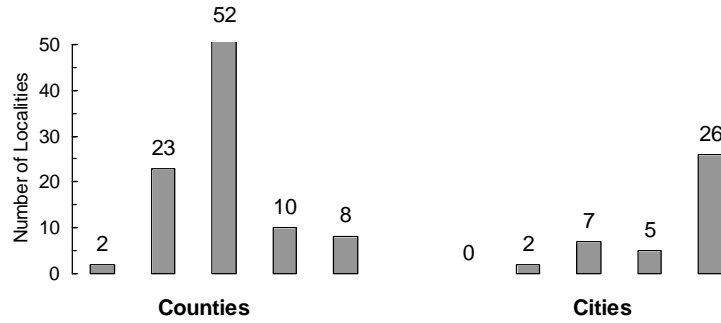
	Counties	Cities
Less than 70%	1	0
70% to 79.9%	13	1
80% to 89.9%	38	9
90% to 100%	43	30
Over 100%	0	0

**Figure 2**  
**Frequency Distribution of the Coefficient of Dispersion 1998**



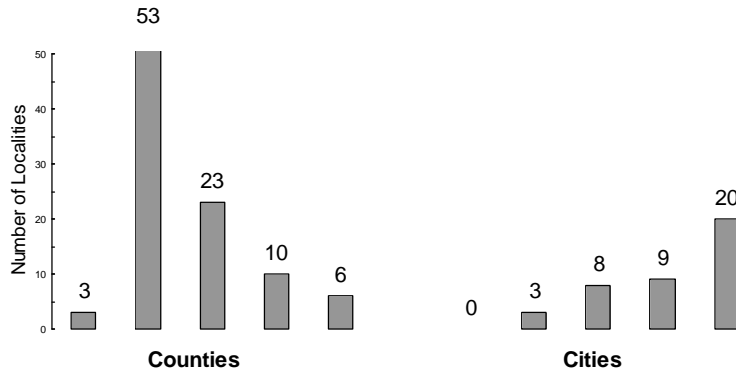
	Counties	Cities
Less than 10%	14	15
10% to 19.9%	39	23
20% to 30%	32	2
Over 30%	10	0

**Figure 3**  
**Frequency Distribution of the Nominal Tax Rate, 1998**



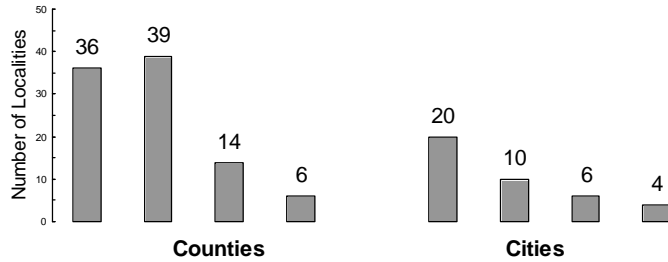
	Counties	Cities
Less than \$0.40	2	0
\$0.40 to \$0.59	23	2
\$0.60 to \$0.79	52	7
\$0.80 to \$0.99	10	5
\$1.00 and Over	8	26

**Figure 4**  
**Frequency Distribution of the Effective Tax Rate, 1998**



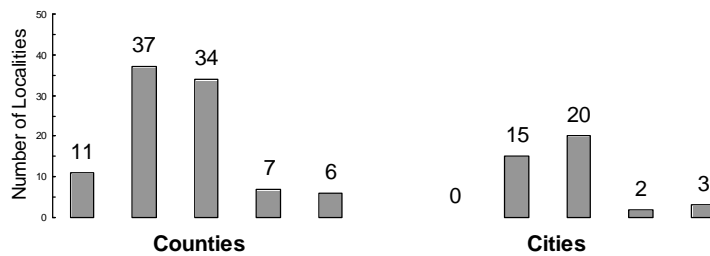
	Counties	Cities
Less than \$0.40	3	0
\$0.40 to \$0.59	53	3
\$0.60 to \$0.79	23	8
\$0.80 to \$0.99	10	9
\$1.00 and Over	6	20

**Figure 5**  
**Frequency Distribution of the Estimated True Value, 1998**



	<b>Counties</b>	<b>Cities</b>
Less than \$1 billion	36	20
\$1.0 to \$2.9 billion	39	10
\$3.0 to \$9.9 billion	14	6
Over \$10 billion	6	4

**Figure 6**  
**Frequency Distribution of Change in Estimated True Value**



	<b>Counties</b>	<b>Cities</b>
Over +10%	11	0
5% to 9.9%	37	15
1% to 4.9%	34	20
-0.9% to +0.9%	7	2
Reductions below -1%	6	3



**TABLE 1**  
**LATEST EFFECTIVE REASSESSMENT, NUMBER OF SALES,**  
**MEDIAN ASSESSMENT/SALES RATIO, COEFFICIENT OF DISPERSION, AND**  
**TOTAL FAIR MARKET VALUE FOR VIRGINIA LOCALITIES, 1998**

Locality	Latest Reassessment	Number of Sales	Median Ratio (%)	Coefficient of Dispersion (%)	Total Fair Market Value (\$)
<b>Counties:</b>					
Accomack	Annual	300	79.76	24.24	\$1,270,294,578
Albemarle	1998	1,849	97.65	5.61	6,093,101,193
Alleghany	1998	127	81.62	17.13	491,047,700
Amelia	1994	138	74.93	23.74	444,592,809
Amherst	1998	377	85.88	16.02	1,039,262,300
Appomattox	1996	198	81.53	18.99	467,810,650
Arlington	Annual	3,194	91.33	10.44	19,049,629,300
Augusta	1997	698	91.11	8.93	3,110,639,600
Bath	1997	81	87.29	29.88	338,491,100
Bedford	1995	1,537	86.86	18.63	2,823,640,462
Bland	1996	87	75.00	25.68	198,589,900
Botetourt	1998	520	96.21	9.83	1,690,912,329
Brunswick	1994	159	70.97	33.76	488,326,241
Buchanan	1995	80	88.13	28.72	923,737,200
Buckingham	1998	222	88.25	30.34	501,247,270
Campbell	1997	453	94.00	11.14	1,742,878,969
Caroline	1998	274	94.02	19.48	967,712,393
Carroll	1998	300	75.73	31.12	955,806,400
Charles City	1997	78	80.73	23.39	316,415,176
Charlotte	1997	150	89.92	36.15	441,964,170
Chesterfield	Annual	6,096	93.62	6.34	12,303,104,591
Clarke	1998	205	94.65	14.62	927,768,846
Craig	1994	82	69.35	27.37	172,724,800
Culpeper	1998	355	97.78	10.94	1,755,100,700
Cumberland	1998	105	94.30	22.87	376,181,752
Dickenson	1994	82	78.44	30.19	534,458,840
Dinwiddie	1997	262	88.04	18.33	922,188,400
Essex	1997	168	97.31	17.38	643,264,825
Fairfax	Annual	9,999	88.53	6.57	75,889,799,800
Fauquier	1998	769	93.32	10.63	4,464,778,600
Floyd	1995	167	72.27	18.28	499,911,700
Fluvanna	1998	389	94.39	15.78	930,887,100
Franklin	1995	500	86.24	17.21	2,267,445,039
Frederick	1997	1,263	96.76	13.75	3,093,790,995
Giles	1994	205	75.74	23.09	463,389,000

**TABLE 1**  
**LATEST EFFECTIVE REASSESSMENT, NUMBER OF SALES,**  
**MEDIAN ASSESSMENT/SALES RATIO, COEFFICIENT OF DISPERSION, AND**  
**TOTAL FAIR MARKET VALUE FOR VIRGINIA LOCALITIES, 1998**

Locality	Latest Reassessment	Number of Sales	Median Ratio (%)	Coefficient of Dispersion (%)	Total Fair Market Value (\$)
<b>Counties:</b>					
Gloucester	1998	438	97.30	10.05	\$1,693,450,074
Goochland	1997	358	87.13	13.90	1,483,154,968
Grayson	1998	308	70.00	31.55	445,213,240
Greene	1997	231	91.48	16.63	640,630,700
Greensville	1995	58	90.25	29.00	311,164,210
Halifax	1998	350	97.63	19.66	1,400,646,370
Hanover	Annual	1,754	89.15	11.03	5,033,996,100
Henrico	Annual	6,130	89.27	7.58	13,365,559,000
Henry	1997	414	83.92	13.15	1,735,479,500
Highland	1994	46	75.24	40.13	194,203,900
Isle of Wight *	1995	260	89.95	10.99	1,424,837,254
James City	Annual	451	93.99	5.76	3,957,911,100
King and Queen	1996	78	86.65	25.20	324,028,000
King George	1996	261	90.91	22.61	836,097,900
King William	1997	207	94.04	14.10	653,298,855
Lancaster	1994	297	96.96	20.27	1,056,390,255
Lee	1998	221	80.75	34.74	536,981,195
Loudoun	Annual	3,425	93.43	7.50	12,588,960,200
Louisa	1997	485	94.74	18.15	1,337,031,600
Lunenburg	1998	171	80.61	26.06	372,839,600
Madison	1996	126	92.38	19.40	691,888,100
Mathews	1993	137	89.26	16.24	611,760,880
Mecklenburg	1998	328	93.39	20.24	1,434,563,348
Middlesex	1995	340	92.01	23.69	828,886,400
Montgomery	1995	625	75.60	12.49	2,319,517,000
Nelson	1997	415	96.00	26.81	1,136,385,500
New Kent	1996	273	83.43	18.37	772,327,614
Northampton	1998	246	79.67	25.59	632,458,400
Northumberland	1994	419	87.48	28.67	1,026,205,784
Nottoway	1994	153	80.00	25.31	384,394,544
Orange	1998	227	95.93	9.90	1,446,389,715
Page	1997	323	93.67	31.02	932,641,300
Patrick	1997	170	82.16	24.73	637,582,900
Pittsylvania	1998	400	91.85	17.73	1,946,101,300
Powhatan	1998	320	94.44	12.80	1,132,883,200

**TABLE 1**  
**LATEST EFFECTIVE REASSESSMENT, NUMBER OF SALES,**  
**MEDIAN ASSESSMENT/SALES RATIO, COEFFICIENT OF DISPERSION, AND**  
**TOTAL FAIR MARKET VALUE FOR VIRGINIA LOCALITIES, 1998**

Locality	Latest Reassessment	Number of Sales	Median Ratio (%)	Coefficient of Dispersion (%)	Total Fair Market Value (\$)
<b>Counties:</b>					
Prince Edward	1997	217	85.73	24.72	\$595,892,009
Prince George	Annual	244	89.11	10.81	1,051,894,000
Prince William	Annual	3,985	94.44	7.50	13,698,696,500
Pulaski	1998	462	88.25	12.83	1,208,682,000
Rappahannock	1998	122	99.22	23.75	806,651,600
Richmond	1997	105	89.58	29.94	378,482,837
Roanoke	Annual	1,747	91.30	7.51	4,048,509,100
Rockbridge	1996	204	82.42	17.33	1,017,723,853
Rockingham	1998	1,036	91.96	14.02	3,099,765,400
Russell	1995	232	77.94	25.36	712,532,365
Scott	1998	250	89.53	30.15	610,167,075
Shenandoah	1996	844	96.80	23.17	1,861,481,000
Smyth	1998	300	89.88	25.54	902,768,598
Southampton	1996	204	84.94	20.77	720,095,600
Spotsylvania	1998	1,463	93.53	8.75	4,441,134,500
Stafford	1998	1,293	94.22	8.47	4,669,850,700
Surry	1996	64	99.14	14.14	343,631,300
Sussex	1994	105	82.86	29.85	384,226,515
Tazewell	1994	350	81.41	18.26	1,231,472,300
Warren	1997	659	93.05	18.62	1,560,276,900
Washington	1997	350	86.06	17.82	1,819,438,306
Westmoreland	1995	356	91.11	25.39	929,833,820
Wise	1997	255	88.89	20.38	1,029,560,765
Wythe	1997	250	80.54	22.30	933,340,000
York	1998	625	97.12	4.11	3,200,330,900
<b>Cities:</b>					
Alexandria	Annual	1,928	97.39	7.88	\$10,984,596,300
Bedford *	1995	87	84.98	13.44	222,488,800
Bristol	1997	294	86.72	16.95	568,887,400
Buena Vista *	1995	59	78.86	19.15	152,723,105
Charlottesville	Annual	452	92.57	13.76	1,879,322,000
Chesapeake	Annual	3,427	95.77	3.96	8,981,779,000
Clifton Forge *	1998	68	96.74	20.55	95,384,700
Colonial Heights	1998	275	90.91	8.78	826,130,780
Covington *	1995	82	82.34	12.77	181,977,130
Danville*	1998	509	89.58	15.46	1,508,331,800

**TABLE 1**  
**LATEST EFFECTIVE REASSESSMENT, NUMBER OF SALES,**  
**MEDIAN ASSESSMENT/SALES RATIO, COEFFICIENT OF DISPERSION, AND**  
**TOTAL FAIR MARKET VALUE FOR VIRGINIA LOCALITIES, 1998**

Locality	Latest Reassessment	Number of Sales	Median Ratio (%)	Coefficient of Dispersion (%)	Total Fair Market Value (\$)
<b>Cities:</b>					
Emporia	1998	49	90.51	17.02	\$206,969,200
Fairfax	Annual	295	94.80	8.62	1,918,845,067
Falls Church	Annual	190	97.40	8.73	1,115,428,000
Franklin *	1995	77	91.11	14.79	298,601,000
Fredericksburg *	1995	212	99.05	15.03	1,143,681,600
Galax	1996	90	88.46	20.93	223,835,620
Hampton *	Annual	842	98.00	9.56	4,836,763,000
Harrisonburg	1997	356	90.89	7.72	1,530,717,600
Hopewell	1997	236	92.59	10.48	743,360,600
Lexington *	1997	85	97.57	16.00	261,779,100
Lynchburg	1997	500	91.64	10.55	2,347,542,075
Manassas	Annual	540	96.17	6.94	1,975,223,000
Manassas Park	Annual	144	96.75	7.08	386,423,000
Martinsville	1997	139	94.03	11.39	483,149,200
Newport News *	Annual	677	96.28	4.56	6,400,990,427
Norfolk *	Annual	1,645	93.97	10.45	7,008,307,530
Norton	1996	32	90.47	16.07	126,674,600
Petersburg *	Annual	313	94.12	11.85	849,579,200
Poquoson *	1997	137	94.57	5.06	590,969,508
Portsmouth *	Annual	1,236	93.87	10.19	2,714,457,740
Radford	1996	173	81.27	14.43	414,703,250
Richmond	Annual	2,641	92.17	15.43	8,799,955,175
Roanoke	Annual	1,347	94.03	7.57	3,572,205,000
Salem	1997	305	83.00	7.90	1,035,946,400
Staunton	1997	475	89.38	13.27	818,057,615
Suffolk	Annual	608	92.52	11.81	2,653,234,900
Virginia Beach *	Annual	7,214	92.03	7.44	19,220,645,104
Waynesboro	1997	255	89.10	11.29	746,988,775
Williamsburg *	Annual	111	92.53	7.27	742,773,900
Winchester	1995	243	95.92	12.01	1,316,109,100

\* Localities with fiscal year re-assessments: Fair Market Value is reported for fiscal year 1997-98

The following counties conduct biennial reassessment of property: Albemarle, Grayson, Henry, Louisa, Stafford, and York.

The following cities conduct biennial reassessment: Colonial Heights, Danville, Lynchburg, Martinsville,

Poquoson, Salem, Staunton, and Waynesboro.

The coefficient of dispersion measures the average absolute percentage deviation of the ratios from the median ratio.

The coefficient of dispersion is affected by sample size, as well as other factors.

**TABLE 2**  
**RATIO OF 1998 ASSESSED VALUATIONS**  
**TO 1998 SELLING PRICES OF REAL ESTATE**  
**FOR SELECTED CLASSIFICATIONS OF PROPERTY**

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
<b><u>Class 1: Single Family Residential Urban</u></b>				
<b>Counties:</b>				
Accomack	107	78.40	21.57	1.01
Albemarle	1,160	97.67	4.22	1.00
Amherst	27	88.15	11.22	1.05
Arlington	2,929	90.72	10.58	1.03
Augusta	27	93.16	7.12	0.99
Botetourt	20	94.21	11.14	1.01
Brunswick	21	70.97	31.77	1.30
Campbell	201	93.20	8.71	1.01
Carroll	22	88.96	18.18	1.06
Charlotte	23	104.58	46.58	1.27
Chesterfield	912	93.22	6.35	1.01
Clarke	40	98.01	10.83	1.02
Craig	22	77.19	19.94	1.04
Culpeper	99	100.37	10.07	1.00
Essex	29	99.88	13.04	0.97
Fairfax	6,328	88.70	6.71	1.01
Fauquier	149	95.46	10.48	1.03
Franklin	468	86.14	16.93	1.04
Giles	95	78.29	19.87	1.02
Halifax	106	100.38	13.85	1.02
Hanover	1,065	90.27	7.91	1.01
Henrico	5,848	89.32	7.24	1.01
King William	30	92.40	16.37	1.02
Lancaster	58	98.82	17.55	1.10
Lee	31	83.33	23.39	1.05
Loudoun	2,781	94.08	6.02	1.01
Luenburg	36	87.40	21.57	1.02
Mecklenburg	73	94.84	17.28	1.04
Montgomery	410	76.62	10.40	1.01
Nelson	88	100.39	15.10	1.03
Northampton	57	70.67	31.91	1.13
Nottoway	74	79.32	26.04	1.10
Organe	33	92.41	7.26	0.99
Page	119	98.24	22.62	1.08
Patrick	134	82.83	24.65	1.03
Prince Edward	32	78.72	24.39	1.07
Prince William	3,170	95.20	5.98	1.01
Pulaski	144	88.44	13.19	1.02
Roanoke	1,201	91.11	6.87	1.00
Rockingham	223	89.30	12.54	1.01

**TABLE 2**  
**RATIO OF 1998 ASSESSED VALUATIONS**  
**TO 1998 SELLING PRICES OF REAL ESTATE**  
**FOR SELECTED CLASSIFICATIONS OF PROPERTY**

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
<b><u>Class 1: Single Family Residential Urban</u></b>				
<b>Counties:</b>				
Russell	30	77.45	26.81	1.05
Scott	50	91.85	23.02	1.00
Shenandoah	242	97.14	13.24	1.00
Smyth	108	92.50	21.00	1.03
Southampton	24	85.82	20.30	1.06
Spotsylvania	677	94.76	7.31	1.02
Sussex	36	87.74	34.92	1.10
Tazewell	137	80.00	16.70	1.01
Warren	201	99.64	13.39	1.00
Washington	51	89.16	15.35	1.01
Westmoreland	82	87.90	24.09	1.05
Wise	111	86.75	18.03	1.05
Wythe	110	81.07	20.70	1.04
<b>Cities:</b>				
Alexandria	1,871	97.39	7.71	1.03
Bedford	76	84.59	13.63	1.00
Bristol	260	86.86	16.45	1.02
Buena Vista	52	80.08	19.06	1.06
Charlottesville	388	92.51	12.46	1.05
Chesapeake	2,935	95.81	3.66	1.00
Clifton Forge	64	96.74	20.64	1.05
Colonial Heights	262	90.97	8.34	1.01
Covington	77	82.34	12.21	1.01
Danville	465	89.58	15.15	1.05
Emporia	41	89.83	14.04	0.98
Fairfax	262	95.56	6.61	1.01
Falls Church	179	97.11	8.67	1.02
Franklin	68	91.10	13.15	1.04
Fredericksburg	169	98.87	13.06	1.04
Galax	77	88.24	20.82	1.29
Hampton	825	98.00	8.74	1.02
Harrisonburg	319	90.91	7.23	1.00
Hopewell	216	92.51	10.30	1.02
Lexington	69	97.39	14.81	1.04
Lynchburg	499	91.67	10.55	1.00
Manassas	477	95.79	6.50	1.02
Manassas Park	121	96.35	6.46	1.01
Martinsville	130	94.17	11.45	1.05

**TABLE 2**  
**RATIO OF 1998 ASSESSED VALUATIONS**  
**TO 1998 SELLING PRICES OF REAL ESTATE**  
**FOR SELECTED CLASSIFICATIONS OF PROPERTY**

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
<b><u>Class 1: Single Family Residential Urban</u></b>				
<b>Cities:</b>				
Newport News	673	96.27	4.51	1.01
Norfolk	1,541	93.81	9.46	1.02
Norton	32	90.47	16.07	1.08
Petersburg	86	94.64	11.70	1.00
Poquoson	137	94.57	5.06	1.00
Portsmouth	1,140	93.65	9.67	1.02
Radford	148	80.19	13.40	0.99
Richmond	2,539	92.19	14.97	1.05
Roanoke	1,259	93.64	7.16	1.00
Salem	276	82.40	7.25	1.00
Staunton	426	89.42	12.74	1.03
Suffolk	57	89.71	17.20	1.08
Virginia Beach	6,913	92.16	6.86	1.02
Waynesboro	239	89.30	11.04	1.01
Williamsburg	94	91.55	7.76	1.02
Winchester	188	95.75	10.73	1.00
<b><u>Class 2: Single Family Residential Suburban</u></b>				
<b>Counties</b>				
Accomack	168	80.26	26.13	1.07
Albemarle	565	97.45	8.05	1.02
Alleghany	112	81.92	16.95	0.99
Amelia	109	76.16	21.26	1.02
Amherst	312	86.04	15.43	1.03
Appomattox	134	81.53	19.83	1.02
Augusta	633	91.49	8.79	1.00
Bath	72	87.58	30.54	1.00
Bedford	1,448	87.00	18.19	1.00
Bland	57	77.00	24.51	1.00
Botetourt	471	96.54	9.18	0.99
Brunswick	103	68.23	34.74	1.16
Buchanan	59	87.25	30.53	1.02
Buckingham	155	88.65	30.82	1.06
Campbell	220	94.38	13.00	1.05
Caroline	220	96.38	17.57	1.04
Carroll	225	76.27	32.35	1.01
Charles City	69	80.83	23.91	1.13
Charlotte	83	98.48	31.16	1.16
Chesterfield	5,106	93.65	6.27	1.00
Clarke	129	91.42	14.65	1.00

**TABLE 2**  
**RATIO OF 1998 ASSESSED VALUATIONS**  
**TO 1998 SELLING PRICES OF REAL ESTATE**  
**FOR SELECTED CLASSIFICATIONS OF PROPERTY**

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
<b><u>Class 2: Single Family Residential Suburban</u></b>				
<b>Counties:</b>				
Craig	44	69.35	31.01	1.03
Culpeper	233	97.55	10.26	1.01
Cumberland	74	95.06	21.72	1.04
Dickenson	57	79.44	28.30	1.01
Dinwiddie	241	88.54	16.78	1.05
Essex	116	96.53	18.27	1.08
Fairfax	3,563	88.16	6.18	1.02
Fauquier	545	93.01	9.41	1.02
Floyd	125	76.38	16.76	1.00
Fluvanna	352	94.59	15.46	1.02
Frederick	1,146	96.73	12.92	1.02
Giles	88	76.66	24.90	1.07
Gloucester	419	97.29	9.82	1.01
Goochland	340	87.78	13.14	0.99
Grayson	246	74.39	28.16	1.06
Green	222	91.52	16.41	1.02
Greensville	38	88.12	30.56	1.05
Halifax	158	95.50	22.77	1.03
Hanover	627	85.63	14.50	1.01
Henrico	175	87.30	13.40	1.02
Henry	383	84.14	12.82	1.01
Highland	24	83.32	47.95	1.38
Isle of Wight	248	89.86	10.95	1.00
James City	447	93.88	5.76	1.01
King and Queen	61	87.71	25.30	1.11
King George	243	91.36	22.01	1.04
King William	165	94.00	12.49	1.02
Lancaster	219	97.08	20.61	1.07
Lee	139	82.50	34.61	1.02
Loudoun	460	86.75	11.70	1.01
Louisa	435	94.80	18.33	1.05
Lunenburg	58	89.85	22.64	1.04
Madison	109	92.61	19.64	1.02
Mathews	134	89.32	16.27	1.02
Mecklenburg	218	92.73	20.99	1.08
Middlesex	304	92.25	24.04	1.09
Montgomery	179	71.14	15.91	0.99
Nelson	255	95.83	27.91	1.08
New Kent	257	84.48	17.32	0.96
Northampton	159	82.68	20.56	1.00



**TABLE 2**  
**RATIO OF 1998 ASSESSED VALUATIONS**  
**TO 1998 SELLING PRICES OF REAL ESTATE**  
**FOR SELECTED CLASSIFICATIONS OF PROPERTY**

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
<b><u>Class 2: Single Family Residential Suburban</u></b>				
<b>Counties:</b>				
Northumberland	392	87.58	29.24	1.14
Nottoway	50	80.24	22.13	1.07
Orange	176	96.94	9.96	1.01
Page	177	89.83	36.71	1.10
Pittsylvania	330	91.25	18.07	1.05
Powhatan	306	94.73	12.42	1.02
Prince Edward	133	88.75	22.17	1.02
Prince George	235	89.11	10.22	1.00
Prince William	733	89.90	10.41	1.02
Pulaski	293	87.94	11.95	1.00
Rappahannock	72	96.36	20.51	1.03
Richmond	71	87.33	28.63	1.07
Roanoke	456	92.60	8.14	0.99
Rockbridge	175	83.03	16.38	1.00
Rockingham	720	92.31	14.12	1.01
Russell	177	77.42	24.38	1.02
Scott	133	89.47	33.84	1.05
Shenandoah	506	96.77	25.73	1.07
Smyth	156	87.45	27.87	1.01
Southampton	147	86.95	19.29	0.99
Spotsylvania	752	92.68	9.68	1.02
Stafford	1,246	94.28	7.60	1.01
Surry	38	98.48	14.36	0.98
Sussex	51	77.67	24.01	1.00
Tazewell	181	85.41	17.46	1.02
Warren	420	89.55	19.93	0.98
Washington	268	85.61	17.68	0.99
Westmoreland	240	92.26	25.73	1.06
Wise	119	90.32	22.84	1.04
Wythe	103	80.29	23.78	1.09
York	625	97.12	4.11	1.00
<b>Cities:</b>				
Chesapeake	402	95.53	4.05	1.01
Fredericksburg	25	101.63	12.58	0.99
Norfolk	21	91.38	46.52	1.25
Petersburg	173	93.87	9.54	0.99
Suffolk	517	92.98	9.55	1.02
Virginia Beach	92	85.55	18.33	0.99

**TABLE 2**  
**RATIO OF 1998 ASSESSED VALUATIONS**  
**TO 1998 SELLING PRICES OF REAL ESTATE**  
**FOR SELECTED CLASSIFICATIONS OF PROPERTY**

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
<b><u>Class 3: Multi Family Residential</u></b>				
<b>Counties:</b>				
Albemarle	34	97.89	3.53	1.01
Arlington	30	94.81	13.22	1.16
Frederick	45	102.63	10.95	1.02
Roanoke	45	86.88	8.80	1.00
Rockingham	27	96.61	10.40	1.02
<b>Cities:</b>				
Danville	20	96.21	14.67	1.06
Manassas	37	99.50	5.69	1.05
Norfolk	20	99.83	14.71	1.07
Petersburg	23	94.70	13.93	1.04
Portsmouth	62	98.91	15.57	1.07
Richmond	78	89.37	24.12	1.11
Roanoke	30	97.83	6.12	0.99
Winchester	29	96.82	14.69	0.92
<b><u>Class 4: Commercial/Industrial</u></b>				
<b>Counties:</b>				
Accomack	12	80.91	26.83	0.97
Albemarle	25	100.67	7.37	1.01
Amelia	4	71.74	25.52	1.64
Amherst	9	89.59	21.49	1.01
Arlington	235	95.31	7.25	1.12
Augusta	8	99.38	9.20	1.02
Bedford	11	103.86	20.75	0.93
Botetourt	4	98.50	7.86	1.01
Brunswick	4	99.29	21.68	0.95
Campbell	11	104.46	11.33	0.90
Caroline	15	61.78	45.74	1.59
Carroll	6	75.33	27.67	0.94
Charlotte	5	105.96	32.47	1.35
Chesterfield	68	93.45	11.55	1.11
Clarke	5	102.80	39.98	1.16
Culpeper	4	79.13	9.31	0.99
Dickenson	5	66.57	16.52	1.11
Fairfax	102	88.64	11.40	1.08
Fauquier	18	87.09	23.83	1.03
Frederick	22	91.61	31.34	1.13
Giles	7	76.14	16.50	1.07
Gloucester	8	93.26	18.98	1.11
Halifax	12	97.47	17.48	1.13
Hanover	37	87.90	28.93	0.92

**TABLE 2**  
**RATIO OF 1998 ASSESSED VALUATIONS**  
**TO 1998 SELLING PRICES OF REAL ESTATE**  
**FOR SELECTED CLASSIFICATIONS OF PROPERTY**

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
<b><u>Class 4: Commercial/Industrial</u></b>				
<b>Counties:</b>				
Henrico	93	86.93	18.74	1.04
Henry	7	81.39	20.39	0.92
Isle of Wight	4	92.27	5.49	1.00
King George	9	58.37	38.02	0.80
Lancaster	11	94.13	23.91	1.20
Lee	11	77.09	40.86	1.63
Loudoun	115	89.15	18.37	1.01
Mecklenburg	11	96.57	24.61	0.98
Middlesex	13	93.50	19.59	0.97
Montgomery	13	82.58	15.23	1.06
Nelson	7	88.40	56.98	0.94
New Kent	5	74.08	31.09	1.00
Northampton	15	78.80	35.69	0.69
Northumberland	6	74.15	29.51	1.06
Nottoway	6	96.26	32.33	1.05
Page	7	108.13	31.57	0.77
Pittsylvania	4	81.40	21.54	0.78
Powhatan	5	88.22	15.92	0.99
Prince Edward	8	90.87	27.47	1.22
Prince George	4	117.16	34.55	1.59
Prince William	74	90.01	28.13	1.25
Pulaski	8	92.14	18.16	1.03
Richmond	6	109.67	26.87	0.91
Roanoke	31	89.07	12.66	1.04
Rockingham	13	84.02	16.16	1.08
Russell	7	108.83	25.00	0.79
Shenandoah	35	96.29	38.17	1.15
Smyth	16	90.54	21.52	0.95
Southampton	8	101.63	14.47	1.14
Spotsylvania	13	95.31	14.00	1.05
Stafford	39	90.63	31.47	1.12
Sussex	7	91.53	11.80	0.96
Tazewell	20	81.94	23.17	0.94
Warren	16	97.65	22.14	0.93
Washington	11	90.00	17.29	1.03
Westmoreland	13	79.72	28.57	1.06
Wise	15	97.33	21.22	1.06
Wythe	13	86.20	29.99	1.19

**TABLE 2**  
**RATIO OF 1998 ASSESSED VALUATIONS**  
**TO 1998 SELLING PRICES OF REAL ESTATE**  
**FOR SELECTED CLASSIFICATIONS OF PROPERTY**

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
<b><u>Class 4: Commercial/Industrial</u></b>				
<b>Cities:</b>				
Alexandria	44	97.28	13.35	1.02
Bedford	6	86.68	8.01	0.96
Bristol	20	77.88	25.95	0.97
Buena Vista	6	63.93	16.43	0.89
Charlottesville	42	93.02	19.66	1.27
Chesapeake	90	94.46	13.31	1.00
Colonial Heights	11	94.84	19.00	1.06
Danville	24	83.08	19.08	1.02
Emporia	8	93.62	31.40	1.12
Fairfax	33	85.53	25.10	0.89
Falls Church	10	97.76	10.35	0.99
Franklin	5	87.45	20.65	1.13
Fredericksburg	17	109.26	33.66	1.07
Galax	13	93.60	20.28	0.96
Hampton	16	93.56	53.30	1.74
Harrisonburg	12	85.53	12.74	1.08
Hopewell	10	84.23	13.81	0.95
Manassas	26	85.21	15.12	1.02
Manassas Park	8	100.41	12.47	1.02
Martinsville	7	95.67	11.44	1.02
Newport News	4	103.79	10.31	0.90
Norfolk	63	98.52	20.49	1.13
Petersburg	29	100.00	21.61	0.94
Portsmouth	34	97.93	13.52	1.03
Radford	6	60.63	27.73	0.98
Richmond	24	97.12	34.48	1.23
Roanoke	58	101.02	13.71	1.00
Salem	21	92.60	13.26	0.93
Staunton	30	86.85	24.66	1.08
Suffolk	24	81.88	44.96	2.07
Virginia Beach	198	80.35	21.23	1.05
Waynesboro	8	78.05	12.99	1.01
Winchester	26	99.33	14.93	1.05
<b><u>Class 5: Agricultural Undeveloped 20-100 acres</u></b>				
<b>Counties:</b>				
Albemarle	60	98.31	8.71	1.00
Appomattox	39	78.31	19.62	1.03
Augusta	23	84.87	8.38	0.99
Bedford	62	75.64	24.34	1.05

**TABLE 2**  
**RATIO OF 1998 ASSESSED VALUATIONS**  
**TO 1998 SELLING PRICES OF REAL ESTATE**  
**FOR SELECTED CLASSIFICATIONS OF PROPERTY**

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
----------	--------------------	---------------------	----------------------------------	---------------------

**Class 5: Agricultural Undeveloped 20-100 acres**

**Counties:**

Bland	20	61.14	36.77	1.00
Brunswick	28	72.04	33.87	1.14
Buckingham	46	95.53	26.40	1.05
Carroll	41	60.92	29.54	1.10
Charlotte	28	77.03	24.18	1.06
Clarke	27	100.27	11.59	1.05
Cumberland	25	88.90	28.96	1.11
Fauquier	45	94.17	19.16	1.09
Floyd	32	66.46	18.40	0.97
Fluvanna	25	89.47	18.08	1.10
Franklin	22	95.06	21.67	1.09
Frederick	40	87.46	26.74	1.00
Grayson	56	51.14	32.61	1.03
Halifax	58	89.97	22.93	1.03
Hanover	21	69.07	21.95	1.13
Lee	35	71.63	43.82	1.19
Loudoun	57	93.66	14.12	1.06
Louisa	27	89.17	16.84	1.07
Lunenburg	60	78.07	27.31	1.06
Nelson	43	89.87	36.64	1.16
Patrick	32	78.51	23.67	1.09
Pittsylvania	34	96.56	19.39	1.06
Prince Edward	31	75.48	28.27	1.03
Rappahannock	42	107.75	26.37	1.07
Rockingham	47	88.15	21.42	1.06
Scott	54	87.09	28.81	1.18
Shenandoah	44	85.81	30.41	1.08

**Class 6: Agricultural Undeveloped 100+ acres**

None

**TABLE 3**  
**NOMINAL AND EFFECTIVE TRUE REAL PROPERTY TAX RATES**  
**IN VIRGINIA COUNTIES AND CITIES, 1997 AND 1998**  
**(Exclusive of Town Taxes Imposed by Incorporated Towns for Town Purposes)**

Locality	Median Ratio		Nominal Tax Rate		Effective Tax Rate	
	1997	1998	1997	1998	1997	1998
<b>Counties:</b>						
Accomack	82.0%	79.8%	\$0.74	\$0.74	\$0.61	\$0.59
Albemarle	96.9%	97.7%	0.72	0.72	0.70	0.70
Alleghany	75.4%	81.6%	0.71	0.71	0.54	0.58
Amelia	76.7%	74.9%	0.60	0.60	0.46	0.45
Amherst	86.9%	85.9%	0.51	0.55	0.44	0.47
Appomattox	76.9%	81.5%	0.52	0.55	0.40	0.45
Arlington	94.7%	91.3%	0.99	1.00	0.93	0.91
Augusta	94.4%	91.1%	0.58	0.58	0.55	0.53
Bath	73.4%	87.3%	0.50	0.50	0.37	0.44
Bedford	88.3%	86.9%	0.58	0.64	0.51	0.56
Bland	81.5%	75.0%	0.69	0.69	0.56	0.52
Botetourt	79.7%	96.2%	0.75	0.70	0.60	0.67
Brunswick	72.7%	71.0%	0.59	0.59	0.43	0.42
Buchanan	92.1%	88.1%	0.59	0.59	0.54	0.52
Buckingham	74.1%	88.3%	0.48	0.48	0.36	0.42
Campbell	95.0%	94.0%	0.51	0.51	0.48	0.48
Caroline	92.9%	94.0%	0.71	0.71	0.66	0.67
Carroll	71.2%	75.7%	0.53	0.62	0.38	0.47
Charles City	91.3%	80.7%	0.70	0.72	0.64	0.58
Charlotte	94.0%	89.9%	0.65	0.65	0.61	0.58
Chesterfield	93.6%	93.6%	1.09	1.08	1.02	1.01
Clarke	91.2%	94.7%	0.87	0.87	0.79	0.82
Craig	73.7%	69.4%	0.60	0.62	0.44	0.43
Culpeper	95.7%	97.8%	0.74	0.74	0.71	0.72
Cumberland	79.9%	94.3%	0.53	0.47	0.42	0.44
Dickenson	77.2%	78.4%	0.65	0.65	0.50	0.51
Dinwiddie	92.5%	88.0%	0.74	0.74	0.68	0.65
Essex	98.7%	97.3%	0.52	0.52	0.51	0.51
Fairfax	90.7%	88.5%	1.25	1.25	1.13	1.11
Fauquier	91.2%	93.3%	1.03	1.06	0.94	0.99
Floyd	76.2%	72.3%	0.70	0.70	0.53	0.50
Fluvanna	86.9%	94.4%	0.68	0.64	0.59	0.60
Franklin	88.7%	86.2%	0.55	0.55	0.49	0.47
Frederick	99.2%	96.8%	0.59	0.59	0.59	0.57
Giles	79.9%	75.7%	0.68	0.68	0.54	0.51

**TABLE 3**  
**NOMINAL AND EFFECTIVE TRUE REAL PROPERTY TAX RATES**  
**IN VIRGINIA COUNTIES AND CITIES, 1997 AND 1998**  
**(Exclusive of Town Taxes Imposed by Incorporated Towns for Town Purposes)**

Locality	Median Ratio		Nominal Tax Rate		Effective Tax Rate	
	1997	1998	1997	1998	1997	1998
<b>Counties:</b>						
Gloucester	87.1%	97.3%	\$0.93	\$0.91	\$0.81	0.89
Goochland	90.3%	87.1%	0.70	0.90	0.63	0.78
Grayson	69.1%	70.0%	0.71	0.71	0.49	0.50
Greene	90.8%	91.5%	0.76	0.76	0.69	0.70
Greensville	79.5%	90.3%	0.61	0.61	0.48	0.55
Halifax	78.0%	97.6%	0.38	0.31	0.30	0.30
Hanover	90.5%	89.2%	0.73	0.73	0.66	0.65
Henrico	90.3%	89.3%	0.94	0.94	0.85	0.84
Henry	86.4%	83.9%	0.60	0.60	0.52	0.50
Highland	84.9%	75.2%	0.60	0.60	0.51	0.45
Isle of Wight *	92.9%	90.0%	0.72	0.72	0.67	0.65
James City	94.4%	94.0%	0.87	0.87	0.82	0.82
King and Queen	85.0%	86.7%	0.65	0.70	0.55	0.61
King George	96.4%	90.9%	0.75	0.75	0.72	0.68
King William	94.3%	94.0%	0.61	0.61	0.58	0.58
Lancaster	98.8%	97.0%	0.51	0.51	0.50	0.49
Lee	80.5%	80.8%	0.74	0.65	0.60	0.53
Loudoun	94.7%	93.4%	1.06	1.11	1.00	1.04
Louisa	96.4%	94.7%	0.67	0.67	0.65	0.63
Lunenburg	77.5%	80.6%	0.55	0.50	0.43	0.40
Madison	92.7%	92.4%	0.65	0.65	0.60	0.60
Mathews	88.6%	89.3%	0.68	0.68	0.60	0.61
Mecklenburg	77.7%	93.4%	0.35	0.31	0.27	0.29
Middlesex	93.1%	92.0%	0.50	0.52	0.47	0.48
Montgomery	81.9%	75.6%	0.72	0.76	0.59	0.57
Nelson	100.4%	96.0%	0.67	0.67	0.67	0.64
New Kent	89.8%	83.4%	0.82	0.82	0.74	0.68
Northampton	85.6%	79.7%	0.69	0.68	0.59	0.54
Northumberland	88.4%	87.5%	0.56	0.56	0.50	0.49
Nottoway	77.4%	80.0%	0.63	0.66	0.49	0.53
Orange	92.3%	95.9%	0.68	0.68	0.63	0.65
Page	97.3%	93.7%	0.54	0.54	0.52	0.51
Patrick	87.5%	82.2%	0.47	0.52	0.41	0.43
Pittsylvania	80.0%	91.9%	0.59	0.48	0.47	0.44
Powhatan	85.5%	94.4%	0.77	0.79	0.66	0.75

**TABLE 3**  
**NOMINAL AND EFFECTIVE TRUE REAL PROPERTY TAX RATES**  
**IN VIRGINIA COUNTIES AND CITIES, 1997 AND 1998**  
**(Exclusive of Town Taxes Imposed by Incorporated Towns for Town Purposes)**

Locality	Median Ratio		Nominal Tax Rate		Effective Tax Rate	
	1997	1998	1997	1998	1997	1998
<b>Counties:</b>						
Prince Edward	86.1%	85.7%	\$0.50	\$0.43	\$0.43	\$0.37
Prince George	91.8%	89.1%	0.90	0.90	0.83	0.80
Prince William	94.9%	94.4%	1.36	1.36	1.29	1.28
Pulaski	76.2%	88.3%	0.70	0.63	0.53	0.55
Rappahannock	92.6%	99.2%	0.80	0.82	0.74	0.82
Richmond	89.8%	89.6%	0.50	0.50	0.45	0.45
Roanoke	94.1%	91.3%	1.13	1.13	1.06	1.03
Rockbridge	84.0%	82.4%	0.57	0.60	0.48	0.49
Rockingham	84.2%	92.0%	0.67	0.68	0.57	0.63
Russell	78.5%	77.9%	0.64	0.64	0.50	0.50
Scott	75.0%	89.5%	0.72	0.60	0.54	0.54
Shenandoah	94.7%	96.8%	0.61	0.61	0.58	0.59
Smyth	77.5%	89.9%	0.75	0.75	0.58	0.67
Southampton	85.9%	84.9%	0.58	0.61	0.50	0.52
Spotsylvania	93.2%	93.5%	0.92	0.94	0.86	0.88
Stafford	93.6%	94.2%	1.08	1.08	1.01	1.02
Surry	88.4%	99.1%	0.66	0.66	0.58	0.65
Sussex	90.0%	82.9%	0.59	0.60	0.53	0.50
Tazewell	82.3%	81.4%	0.56	0.56	0.46	0.46
Warren	95.7%	93.1%	0.68	0.68	0.65	0.63
Washington	86.3%	86.1%	0.66	0.66	0.57	0.57
Westmoreland	92.3%	91.1%	0.64	0.64	0.59	0.58
Wise	92.0%	88.9%	0.45	0.52	0.41	0.46
Wythe	83.3%	80.5%	0.60	0.65	0.50	0.52
York	96.2%	97.1%	0.86	0.86	0.83	0.84
<b>Cities:</b>						
Alexandria	99.0%	97.4%	\$1.07	\$1.11	\$1.06	\$1.08
Bedford *	86.2%	85.0%	0.71	0.76	0.61	0.65
Bristol	89.6%	86.7%	1.10	1.10	0.99	0.95
Buena Vista *	78.2%	78.9%	0.96	1.14	0.75	0.90
Charlottesville	97.6%	92.6%	1.11	1.11	1.08	1.03
Chesapeake	95.6%	95.8%	1.26	1.29	1.20	1.24
Clifton Forge *	81.4%	96.7%	1.20	1.13	0.98	1.09
Colonial Heights	87.2%	90.9%	1.25	1.20	1.09	1.09
Covington *	80.1%	82.3%	0.80	0.80	0.64	0.66
Danville*	90.9%	89.6%	0.71	0.79	0.65	0.71



**TABLE 3**  
**NOMINAL AND EFFECTIVE TRUE REAL PROPERTY TAX RATES**  
**IN VIRGINIA COUNTIES AND CITIES, 1997 AND 1998**  
**(Exclusive of Town Taxes Imposed by Incorporated Towns for Town Purposes)**

Locality	Median Ratio		Nominal Tax Rate		Effective Tax Rate	
	1997	1998	1997	1998	1997	1998
<b>Cities:</b>						
Emporia	89.8%	90.5%	\$0.84	\$0.84	\$0.75	\$0.76
Fairfax	96.1%	94.8%	0.99	1.00	0.95	0.95
Falls Church	100.9%	97.4%	1.11	1.11	1.12	1.08
Franklin *	96.0%	91.1%	0.86	0.91	0.83	0.83
Fredericksburg *	98.4%	99.1%	1.16	1.16	1.14	1.15
Galax	88.6%	88.5%	0.79	0.79	0.70	0.70
Hampton *	98.1%	98.0%	1.23	1.25	1.21	1.23
Harrisonburg	94.9%	90.9%	0.62	0.62	0.59	0.56
Hopewell	94.9%	92.6%	1.14	1.14	1.08	1.06
Lexington *	75.8%	97.6%	0.85	0.69	0.64	0.67
Lynchburg	94.4%	91.6%	1.11	1.11	1.05	1.02
Manassas	97.5%	96.2%	1.24	1.24	1.21	1.19
Manassas Park	98.8%	96.8%	1.44	1.44	1.42	1.39
Martinsville	91.5%	94.0%	0.94	0.94	0.86	0.88
Newport News *	96.6%	96.3%	1.20	1.20	1.16	1.16
Norfolk *	95.4%	94.0%	1.40	1.40	1.34	1.32
Norton	98.9%	90.5%	0.70	0.70	0.69	0.63
Petersburg *	94.4%	94.1%	1.43	1.43	1.35	1.35
Poquoson *	96.0%	94.6%	1.12	1.12	1.08	1.06
Portsmouth *	94.1%	93.9%	1.36	1.36	1.28	1.28
Radford	87.4%	81.3%	0.70	0.74	0.61	0.60
Richmond	91.8%	92.2%	1.43	1.43	1.31	1.32
Roanoke	93.0%	94.0%	1.22	1.22	1.13	1.15
Salem	85.8%	83.0%	1.18	1.18	1.01	0.98
Staunton	90.6%	89.4%	1.00	1.00	0.91	0.89
Suffolk	91.0%	92.5%	1.02	1.05	0.93	0.97
Virginia Beach *	91.7%	92.0%	1.22	1.22	1.12	1.12
Waynesboro	91.2%	89.1%	0.97	0.97	0.88	0.86
Williamsburg *	93.2%	92.5%	0.54	0.54	0.50	0.50
Winchester	98.5%	95.9%	0.59	0.59	0.58	0.57
<b>Virginia Total**</b>	<b>91.7%</b>	<b>91.1%</b>	<b>\$1.03</b>	<b>\$1.04</b>	<b>\$0.95</b>	<b>\$0.94</b>

\* Based on fiscal years 1996-97 and 1997-98.

\*\* Appendix 3 describes the calculations for the state median ratio, state nominal rate, and state effective rate.

Tax rates for the Counties of Accomack, Fairfax County, Henrico, King William, Prince William, and the Cities of Chesapeake and Suffolk reflect the additional district levies.

Nominal Tax Rate is the rate of assessed levy to total taxable fair market value as reported by the local Commissioners of the Revenue.

**TABLE 4**  
**ESTIMATED TRUE FULL VALUE OF LOCALLY TAXED PROPERTY**  
**IN VIRGINIA COUNTIES AND CITIES, 1998**  
**REAL ESTATE AND PUBLIC SERVICE CORPORATIONS**

Locality	True Value of Real Estate	True Value Public Service Corporations	Total Estimated True Value	True Value Public Service Corporations as a Percent of Total Estimated True Value
<b>Counties:</b>				
Accomack	\$1,591,847,842	\$89,809,590	\$1,681,657,432	5.34%
Albemarle	6,236,541,651	224,525,841	6,461,067,492	3.48%
Alleghany	601,774,142	63,891,599	665,665,741	9.60%
Amelia	593,581,854	27,614,609	621,196,463	4.45%
Amherst	1,209,851,339	85,870,479	1,295,721,818	6.63%
Appomattox	574,000,798	54,975,411	628,976,209	8.74%
Arlington	20,864,873,275	964,260,140	21,829,133,415	4.42%
Augusta	3,414,533,041	181,946,736	3,596,479,777	5.06%
Bath	387,733,219	1,692,190,328	2,079,923,547	81.36%
Bedford	3,249,298,575	197,855,998	3,447,154,573	5.74%
Bland	264,786,533	16,258,354	281,044,887	5.78%
Botetourt	1,757,705,124	134,161,818	1,891,866,942	7.09%
Brunswick	687,783,438	49,351,999	737,135,437	6.70%
Buchanan	1,048,509,875	80,586,374	1,129,096,249	7.14%
Buckingham	567,663,952	72,885,292	640,549,244	11.38%
Campbell	1,854,126,563	172,770,965	2,026,897,528	8.52%
Caroline	1,029,481,269	105,217,370	1,134,698,639	9.27%
Carroll	1,262,624,042	74,218,514	1,336,842,556	5.55%
Charles City	392,088,198	35,650,675	427,738,873	8.33%
Charlotte	491,617,542	51,562,840	543,180,382	9.49%
Chesterfield	13,144,342,512	1,202,465,350	14,346,807,862	8.38%
Clarke	979,692,551	34,661,369	1,014,353,920	3.42%
Craig	248,882,997	13,117,596	262,000,593	5.01%
Culpeper	1,794,581,493	108,519,015	1,903,100,508	5.70%
Cumberland	398,920,204	58,556,441	457,476,645	12.80%
Dickenson	681,707,704	64,701,488	746,409,192	8.67%
Dinwiddie	1,047,941,364	92,743,999	1,140,685,363	8.13%
Essex	661,114,928	30,985,469	692,100,397	4.48%
Fairfax	85,751,186,215	2,720,908,157	88,472,094,372	3.08%
Fauquier	4,785,400,429	186,891,095	4,972,291,524	3.76%
Floyd	691,440,802	38,660,613	730,101,415	5.30%
Fluvanna	986,109,216	151,196,945	1,137,306,161	13.29%
Franklin	2,630,446,681	114,395,700	2,744,842,381	4.17%
Frederick	3,196,065,077	184,558,218	3,380,623,295	5.46%
Giles	612,138,705	160,959,403	773,098,108	20.82%

**TABLE 4**  
**ESTIMATED TRUE FULL VALUE OF LOCALLY TAXED PROPERTY**  
**IN VIRGINIA COUNTIES AND CITIES, 1998**  
**REAL ESTATE AND PUBLIC SERVICE CORPORATIONS**

Locality	True Value of Real Estate	True Value Public Service Corporations	Total Estimated True Value	True Value Public Service Corporations as a Percent of Total Estimated True Value
<b>Counties:</b>				
Gloucester	\$1,740,442,008	\$75,207,152	\$1,815,649,160	4.14%
Goochland	1,702,818,563	70,699,552	1,773,518,115	3.99%
Grayson	636,018,914	33,562,109	669,581,023	5.01%
Greene	700,142,842	34,995,044	735,137,886	4.76%
Greensville	344,589,380	32,273,932	376,863,312	8.56%
Halifax	1,435,088,494	1,090,735,591	2,525,824,085	43.18%
Hanover	5,643,493,386	276,976,418	5,920,469,804	4.68%
Henrico	14,967,031,355	805,280,308	15,772,311,663	5.11%
Henry	2,068,509,535	118,018,538	2,186,528,073	5.40%
Highland	258,249,867	19,155,247	277,405,114	6.91%
Isle of Wight *	1,583,152,504	91,801,479	1,674,953,983	5.48%
James City	4,210,543,723	149,584,137	4,360,127,860	3.43%
King and Queen	373,734,717	21,860,396	395,595,113	5.53%
King George	919,799,670	46,177,968	965,977,638	4.78%
King William	694,998,782	35,486,058	730,484,840	4.86%
Lancaster	1,089,062,119	36,311,151	1,125,373,270	3.23%
Lee	664,580,687	61,386,176	725,966,863	8.46%
Loudoun	13,478,544,111	433,564,056	13,912,108,167	3.12%
Louisa	1,411,860,190	1,974,102,791	3,385,962,981	58.30%
Lunenburg	462,580,149	33,226,035	495,806,184	6.70%
Madison	748,796,645	32,290,276	781,086,921	4.13%
Mathews	685,062,576	21,392,539	706,455,115	3.03%
Mecklenburg	1,535,935,062	101,267,273	1,637,202,335	6.19%
Middlesex	900,963,478	35,444,681	936,408,159	3.79%
Montgomery	3,068,144,180	135,159,490	3,203,303,670	4.22%
Nelson	1,183,734,896	60,101,132	1,243,836,028	4.83%
New Kent	926,052,295	59,524,048	985,576,343	6.04%
Northampton	793,548,808	36,908,151	830,456,959	4.44%
Northumberland	1,172,806,610	33,592,081	1,206,398,691	2.78%
Nottoway	480,493,180	54,517,182	535,010,362	10.19%
Orange	1,508,227,023	106,446,672	1,614,673,695	6.59%
Page	995,348,239	63,225,046	1,058,573,285	5.97%
Patrick	775,648,297	43,272,473	818,920,770	5.28%
Pittsylvania	2,117,629,271	193,370,127	2,310,999,398	8.37%
Powhatan	1,200,088,136	57,784,559	1,257,872,695	4.59%

**TABLE 4**  
**ESTIMATED TRUE FULL VALUE OF LOCALLY TAXED PROPERTY**  
**IN VIRGINIA COUNTIES AND CITIES, 1998**  
**REAL ESTATE AND PUBLIC SERVICE CORPORATIONS**

Locality	True Value of Real Estate	True Value Public Service Corporations	Total Estimated True Value	True Value Public Service Corporations as a Percent of Total Estimated True Value
<b>Counties:</b>				
Prince Edward	\$695,323,231	\$58,551,900	\$753,875,131	7.77%
Prince George	1,180,576,880	61,212,368	1,241,789,248	4.93%
Prince William	14,511,331,038	911,726,775	15,423,057,813	5.91%
Pulaski	1,368,835,787	96,172,716	1,465,008,503	6.56%
Rappahannock	813,156,855	22,731,767	835,888,622	2.72%
Richmond	422,413,881	52,013,718	474,427,599	10.96%
Roanoke	4,434,292,552	192,771,690	4,627,064,242	4.17%
Rockbridge	1,235,101,763	101,929,336	1,337,031,099	7.62%
Rockingham	3,369,310,217	146,872,224	3,516,182,441	4.18%
Russell	914,675,693	260,898,490	1,175,574,183	22.19%
Scott	681,750,922	61,135,365	742,886,287	8.23%
Shenandoah	1,923,017,562	128,142,520	2,051,160,082	6.25%
Smyth	1,004,191,989	90,731,439	1,094,923,428	8.29%
Southampton	848,169,140	51,550,925	899,720,065	5.73%
Spotsylvania	4,749,876,471	198,696,116	4,948,572,587	4.02%
Stafford	4,957,378,662	173,041,092	5,130,419,754	3.37%
Surry	346,752,069	1,564,420,284	1,911,172,353	81.86%
Sussex	463,481,924	50,333,250	513,815,174	9.80%
Tazewell	1,512,865,233	93,012,483	1,605,877,716	5.79%
Warren	1,675,915,038	58,726,527	1,734,641,565	3.39%
Washington	2,113,168,764	109,491,254	2,222,660,018	4.93%
Westmoreland	1,020,673,787	44,800,171	1,065,473,958	4.20%
Wise	1,158,111,097	86,069,472	1,244,180,569	6.92%
Wythe	1,159,428,571	92,255,413	1,251,683,984	7.37%
York	3,295,912,358	460,941,914	3,756,854,272	12.27%
<b>Counties Total</b>	<b>\$294,023,824,327</b>	<b>\$21,181,854,867</b>	<b>\$315,205,679,194</b>	<b>6.72%</b>
<b>Cities:</b>				
Alexandria	\$11,277,819,610	\$641,540,093	\$11,919,359,703	5.38%
Bedford *	261,751,529	11,440,168	273,191,697	4.19%
Bristol	656,156,171	15,143,289	671,299,460	2.26%
Buena Vista *	193,565,406	10,661,742	204,227,148	5.22%
Charlottesville	2,029,505,400	117,922,913	2,147,428,313	5.49%
Chesapeake	9,375,552,192	731,599,456	10,107,151,648	7.24%
Clifton Forge *	98,639,814	12,257,223	110,897,037	11.05%
Colonial Heights	908,834,741	30,317,564	939,152,305	3.23%
Covington *	221,114,374	18,221,711	239,336,085	7.61%
Danville	1,683,406,027	55,309,497	1,738,715,524	3.18%

**TABLE 4**  
**ESTIMATED TRUE FULL VALUE OF LOCALLY TAXED PROPERTY**  
**IN VIRGINIA COUNTIES AND CITIES, 1998**  
**REAL ESTATE AND PUBLIC SERVICE CORPORATIONS**

Locality	True Value of Real Estate	True Value Public Service Corporations	Total Estimated True Value	True Value Public Service Corporations as a Percent of Total Estimated True Value
<b>Cities:</b>				
Emporia	\$228,695,249	\$19,229,023	\$247,924,272	7.76%
Fairfax	2,024,098,172	102,732,895	2,126,831,067	4.83%
Falls Church	1,145,203,285	20,884,534	1,166,087,819	1.79%
Franklin *	327,772,777	9,995,653	337,768,430	2.96%
Fredericksburg *	1,154,068,214	61,001,468	1,215,069,682	5.02%
Galax	252,921,605	12,792,164	265,713,769	4.81%
Hampton *	4,935,472,449	234,083,749	5,169,556,198	4.53%
Harrisonburg	1,683,957,756	52,929,246	1,736,887,002	3.05%
Hopewell	802,765,227	72,103,407	874,868,634	8.24%
Lexington *	268,216,291	13,667,251	281,883,542	4.85%
Lynchburg	2,562,818,859	172,159,938	2,734,978,797	6.29%
Manassas	2,053,246,362	59,131,670	2,112,378,032	2.80%
Manassas Park	399,197,314	11,967,726	411,165,040	2.91%
Martinsville	513,988,511	25,853,979	539,842,490	4.79%
Newport News *	6,646,926,715	355,990,655	7,002,917,370	5.08%
Norfolk *	7,455,646,309	632,189,353	8,087,835,662	7.82%
Norton	139,971,934	28,922,067	168,894,001	17.12%
Petersburg *	902,847,184	93,696,814	996,543,998	9.40%
Poquoson *	624,703,497	12,987,006	637,690,503	2.04%
Portsmouth *	2,890,796,315	184,713,182	3,075,509,497	6.01%
Radford	510,090,098	20,214,593	530,304,691	3.81%
Richmond	9,544,419,930	675,857,795	10,220,277,725	6.61%
Roanoke	3,800,218,085	288,388,688	4,088,606,773	7.05%
Salem	1,248,128,193	35,947,701	1,284,075,894	2.80%
Staunton	915,053,261	56,723,140	971,776,401	5.84%
Suffolk	2,868,362,054	161,304,837	3,029,666,891	5.32%
Virginia Beach	20,892,005,548	696,340,602	21,588,346,150	3.23%
Waynesboro	838,371,240	64,415,849	902,787,089	7.14%
Williamsburg	802,998,811	44,001,410	847,000,221	5.19%
Winchester	1,372,376,538	49,894,791	1,422,271,329	3.51%
<b>Cities Total</b>	<b>\$106,511,683,044</b>	<b>\$5,914,534,842</b>	<b>\$112,426,217,886</b>	<b>5.26%</b>
<b>Virginia Total</b>	<b>\$400,535,507,371</b>	<b>\$27,096,389,709</b>	<b>\$427,631,897,080</b>	<b>6.34%</b>

The estimated true value of real estate for a locality is the total fair market value divided by the local median ratio.  
The estimated true value for public service corporations is the value reported by the State Corporation Commission plus the estimated true value of railroads and pipelines reported by the Railroad and Pipeline Appraisal Section of the Department of Taxation.

**TABLE 5**  
**ESTIMATED TRUE VALUE PER CAPITA OF LOCALLY TAXED PROPERTY**  
**IN VIRGINIA COUNTIES AND CITIES, 1998**  
**REAL ESTATE AND PUBLIC SERVICE CORPORATIONS**

Locality	Estimated 1998 Population	Per Capita Estimated True Value of		
		Real Estate	Public Service Corporations	Total Per Capita
<b>Counties:</b>				
Accomack	32,700	\$48,680	\$2,746	\$51,426
Albemarle	80,700	77,281	2,782	80,063
Alleghany	12,600	47,760	5,071	52,831
Amelia	10,400	57,075	2,655	59,730
Amherst	30,200	40,061	2,843	42,904
Appomattox	13,200	43,485	4,165	47,650
Arlington	180,400	115,659	5,345	121,004
Augusta	61,600	55,431	2,954	58,385
Bath	5,000	77,547	338,438	415,985
Bedford	56,300	57,714	3,514	61,228
Bland	6,900	38,375	2,356	40,731
Botetourt	29,000	60,611	4,626	65,237
Brunswick	17,300	39,756	2,853	42,609
Buchanan	28,700	36,533	2,808	39,341
Buckingham	14,700	38,617	4,958	43,575
Campbell	49,600	37,382	3,483	40,865
Caroline	21,500	47,883	4,894	52,777
Carroll	28,000	45,094	2,651	47,745
Charles City	7,000	56,013	5,093	61,106
Charlotte	12,700	38,710	4,060	42,770
Chesterfield	248,300	52,937	4,843	57,780
Clarke	12,700	77,141	2,729	79,870
Craig	5,000	49,777	2,624	52,401
Culpeper	32,700	54,880	3,319	58,199
Cumberland	8,300	48,063	7,055	55,118
Dickenson	16,900	40,338	3,828	44,166
Dinwiddie	25,200	41,585	3,680	45,265
Essex	9,200	71,860	3,368	75,228
Fairfax	929,200	92,285	2,928	95,213
Fauquier	52,500	91,150	3,560	94,710
Floyd	13,200	52,382	2,929	55,311
Fluvanna	18,600	53,017	8,129	61,146
Franklin	45,200	58,196	2,531	60,727
Frederick	55,900	57,175	3,302	60,477
Giles	16,600	36,876	9,696	46,572
<b>Counties:</b>				
Gloucester	33,900	\$51,340	\$2,219	\$53,559

**TABLE 5**  
**ESTIMATED TRUE VALUE PER CAPITA OF LOCALLY TAXED PROPERTY**  
**IN VIRGINIA COUNTIES AND CITIES, 1998**  
**REAL ESTATE AND PUBLIC SERVICE CORPORATIONS**

Locality	Estimated 1998 Population	Per Capita Estimated True Value of		
		Real Estate	Public Service Corporations	Total Per Capita
Goochland	17,300	98,429	4,087	102,516
Grayson	16,600	38,314	2,022	40,336
Greene	14,200	49,306	2,464	51,770
Greensville	11,200	30,767	2,882	33,649
Halifax	36,900	38,891	29,559	68,450
Hanover	81,800	68,991	3,386	72,377
Henrico	245,600	60,941	3,279	64,220
Henry	56,000	36,938	2,107	39,045
Highland	2,500	103,300	7,662	110,962
Isle of Wight *	29,000	54,591	3,166	57,757
James City	44,800	93,985	3,339	97,324
King and Queen	6,500	57,498	3,363	60,861
King George	16,600	55,410	2,782	58,192
King William	12,800	54,297	2,772	57,069
Lancaster	11,200	97,238	3,242	100,480
Lee	24,300	27,349	2,526	29,875
Loudoun	145,100	92,891	2,988	95,879
Louisa	24,600	57,393	80,248	137,641
Lunenburg	12,300	37,608	2,701	40,309
Madison	12,600	59,428	2,563	61,991
Mathews	9,200	74,463	2,325	76,788
Mecklenburg	31,000	49,546	3,267	52,813
Middlesex	9,500	94,838	3,731	98,569
Montgomery	77,900	39,386	1,735	41,121
Nelson	14,000	84,552	4,293	88,845
New Kent	13,000	71,235	4,579	75,814
Northampton	12,900	61,515	2,861	64,376
Northumberland	11,500	101,983	2,921	104,904
Nottoway	15,100	31,821	3,610	35,431
Orange	24,900	60,571	4,275	64,846
Page	23,200	42,903	2,725	45,628
Patrick	18,500	41,927	2,339	44,266
Pittsylvania	58,400	36,261	3,311	39,572
Powhatan	21,500	55,818	2,688	58,506
<b>Counties:</b>				
Prince Edward	19,000	\$36,596	\$3,082	\$39,678
Prince George	29,200	40,431	2,096	42,527
Prince William	260,600	55,684	3,499	59,183

**TABLE 5**  
**ESTIMATED TRUE VALUE PER CAPITA OF LOCALLY TAXED PROPERTY**  
**IN VIRGINIA COUNTIES AND CITIES, 1998**  
**REAL ESTATE AND PUBLIC SERVICE CORPORATIONS**

Locality	Estimated	Per Capita Estimated True Value of		
	1998 Population	Real Estate	Public Service Corporations	Total Per Capita
Pulaski	34,600	39,562	2,780	42,342
Rappahannock	7,300	111,391	3,114	114,505
Richmond	8,700	48,553	5,979	54,532
Roanoke	83,200	53,297	2,317	55,614
Rockbridge	19,900	62,065	5,122	67,187
Rockingham	64,200	52,481	2,288	54,769
Russell	28,900	31,650	9,028	40,678
Scott	23,200	29,386	2,635	32,021
Shenandoah	35,800	53,716	3,579	57,295
Smyth	32,700	30,709	2,775	33,484
Southampton	17,600	48,191	2,929	51,120
Spotsylvania	83,600	56,817	2,377	59,194
Stafford	89,200	55,576	1,940	57,516
Surry	6,400	54,180	244,441	298,621
Sussex	10,100	45,889	4,983	50,872
Tazewell	46,100	32,817	2,018	34,835
Warren	29,100	57,592	2,018	59,610
Washington	49,900	42,348	2,194	44,542
Westmoreland	16,000	63,792	2,800	66,592
Wise	38,800	29,848	2,218	32,066
Wythe	26,600	43,588	3,468	47,056
York	56,600	58,232	8,144	66,376
<b>Counties Total</b>	<b>4,501,700</b>	<b>\$65,314</b>	<b>\$4,705</b>	<b>\$70,019</b>
<b>Cities:</b>				
Alexandria	117,900	\$95,656	\$5,441	\$101,097
Bedford *	6,500	40,269	1,760	42,029
Bristol	17,300	37,928	875	38,803
Buena Vista *	6,500	29,779	1,640	31,419
Charlottesville	37,600	53,976	3,136	57,112
Chesapeake	193,700	48,402	3,777	52,179
Clifton Forge *	4,400	22,418	2,786	25,204
Colonial Heights	16,600	54,749	1,826	56,575
Covington *	7,000	31,588	2,603	34,191



**TABLE 5**  
**ESTIMATED TRUE VALUE PER CAPITA OF LOCALLY TAXED PROPERTY**  
**IN VIRGINIA COUNTIES AND CITIES, 1998**  
**REAL ESTATE AND PUBLIC SERVICE CORPORATIONS**

Locality	Estimated	Per Capita Estimated True Value of		
	1998 Population	Real Estate	Public Service Corporations	Total Per Capita
<b>Cities:</b>				
Danville*	50,700	\$33,203	\$1,091	\$34,294
Emporia	5,700	40,122	3,374	43,496
Fairfax	20,600	98,257	4,987	103,244
Falls Church	9,700	118,062	2,153	120,215
Franklin *	8,500	38,562	1,176	39,738
Fredericksburg *	19,000	60,740	3,211	63,951
Galax	6,800	37,194	1,881	39,075
Hampton *	136,100	36,264	1,720	37,984
Harrisonburg	34,400	48,952	1,539	50,491
Hopewell	22,400	35,838	3,219	39,057
Lexington *	7,100	37,777	1,925	39,702
Lynchburg	65,000	39,428	2,649	42,077
Manassas	32,800	62,599	1,803	64,402
Manassas Park	8,300	48,096	1,442	49,538
Martinsville	15,400	33,376	1,679	35,055
Newport News *	179,000	37,134	1,989	39,123
Norfolk *	226,900	32,859	2,786	35,645
Norton	4,000	34,993	7,231	42,224
Petersburg *	34,300	26,322	2,732	29,054
Poquoson *	11,300	55,283	1,149	56,432
Portsmouth *	97,700	29,588	1,891	31,479
Radford	15,800	32,284	1,279	33,563
Richmond	192,500	49,581	3,511	53,092
Roanoke	94,000	40,428	3,068	43,496
Salem	24,400	51,153	1,473	52,626
Staunton	24,400	37,502	2,325	39,827
Suffolk	61,700	46,489	2,614	49,103
Virginia Beach *	418,300	49,945	1,665	51,610
Waynesboro	18,900	44,358	3,408	47,766
Williamsburg *	12,200	65,820	3,607	69,427
Winchester	22,200	61,819	2,248	64,067
<b>Cities Total</b>	<b>2,287,600</b>	<b>\$46,560</b>	<b>\$2,585</b>	<b>\$49,145</b>
<b>Virginia Total</b>	<b>6,789,300</b>	<b>\$58,995</b>	<b>\$3,991</b>	<b>\$62,986</b>

\*Based on fiscal year 1997-98.

The estimated true value per capita is the true value of property divided by the 1998 estimates for population reported by the University of Virginia, Weldon Cooper Center for Public Service.

Sum of counties and cities may not equal state total due to rounding.

## Appendix 1

### Methodology and Terms

The Department of Taxation adopted a new method of collecting data on diskette in a prescribed format. Localities may now include their entire qualifying ("arm's length") population in the Study with minimal cost of data collection to the Department.

The data are derived from the recordation tax receipts that the law requires the Clerk of the Court in each locality to file with the Virginia Department of Taxation. The Department obtains the data on sales values from the computerized listing of the Supreme Court of Virginia. The listing indicates each transfer, the date of the deed, the name of the grantor and the grantee, the address of the grantee, the quantity of land conveyed, the specified sales value, and a description of the parcel. Personnel from the Department of Taxation collect information from the field on the assessed value of the property in each of these transactions.

The number of sales selected in the study are determined by the assessors of the Property Tax Unit in consultation with the localities. Only fair market sales may be selected from the total number of transfers reported in the land records of a locality.

Fair market sales are defined as "arm's length" transactions where there is a willing buyer and a willing seller, neither of which is under pressure to sell or buy. This excludes transfers such as sales within a family, foreclosures, or sales to a government unit.

The assessed value for each sale is divided by its selling price to produce an assessment/sales ratio. The ratios for each locality are arrayed by numerical value, and the median ratio is selected as the best indicator of that locality's existing assessment/sales ratio. The median ratio is defined as the ratio value where half the ratio values are higher and half the ratio values are lower. The median ratio is unaffected by distortions caused by large sales or "extreme" ratios at either end of the spectrum, particularly those at the higher end. The national Association of Tax Administrators, the U.S. Department of Commerce, and a special committee of the International Association of Assessing Officers (IAAO) recognizes the accuracy of the median ratio. The median ratio for the state is calculated by dividing the state effective tax rate by the nominal tax rate for the state.

The coefficient of dispersion in this report is based on the measure recommended by the IAAO. It is calculated by:

- (1) subtracting the median ratio from each ratio in the sample,
- (2) taking the absolute value of the calculated differences,
- (3) summing the absolute differences,
- (4) dividing by the number of ratios to obtain the "average absolute deviation,"
- (5) dividing by the median ratio, and
- (6) multiplying by 100.

This measure represents the mean percentage deviation from the median ratio. Mathematically, if  $X_i$  represents the assessment/sales ratio for the  $i$ th sale in a sample of size  $n$ , and  $X_m$  represents the median ratio of the sample,

$$\text{Coefficient of Dispersion} = \left( \frac{\sum \text{Abs}(X_i - X_m)}{n} \right) / X_m * 100$$

The coefficient of dispersion calculated by this method is affected by the size of the sample ( $n$ ), that is, the number of sales of property used in the study for a locality. Comparing two localities with the same median ratio and similar spread, the coefficient of one may be larger if it has a smaller sample size. This average absolute deviation method based on all sample data has been used beginning with the 1993 study.

A small coefficient of dispersion indicates that the ratios are grouped relatively close to the median and that assessment of property is more equitable. A large coefficient indicates that there is a wide spread in the ratios around the median, reflecting a less uniform assessment of property. The acceptable level for the coefficient of dispersion depends on the type of property considered and the size of the sample. The IAAO notes that a low coefficient (15 percent or less) tends to be associated with good appraisal uniformity. A coefficient of 15 percent indicates a good distribution of assessments for single-family residential properties. Similarly, a coefficient of 20 percent or less indicates a good distribution for more diverse classes of property. A less uniform assessment translates into inequality in actual tax burdens. As market activity decreases or the complexity of properties increases, the coefficient of dispersion often rises, even though appraisal procedures may be valid. Variation in assessments may be a result, among other things, of the length of period between reassessments, difficulty of obtaining fair market value for different types of parcels, and the unique characteristics of different properties.

Total fair market value includes the value of land, buildings, and improvements, and minerals under the surface, as well as standing timber (trees) not owned by the owners of the land/lot. This information is based on landbook records and reported every year to the Department of Taxation by the local Commissioners of the Revenue and assessors. The fair market value for localities refers to 1998, except for counties and cities that conduct fiscal year reassessments, where the 1997-98 values are reported.

The regression index is defined as the mean ratio divided by the sales-weighted ratio. The sales-weighted ratio is the total of the assessed values divided by the total of the selling prices of all sales in the classification. It allows transfers with a larger selling price to have a greater impact on the ratio than those with smaller selling prices. A value of 1.00 indicates a uniform relationship between assessed values and selling prices of properties with different prices. An index above 1.00 indicates that less expensive property has a higher assessment/sales ratio than more expensive property. A reasonable index may be in the range of 0.95 to 1.05 percent, but tax experts have not reached a consensus regarding this level.

The nominal tax rate for a locality is the rate of tax per \$100 of assessed value levied for county/city and district purposes. The tax rate is calculated by dividing the real estate levies by the local real estate taxable value, as reported from the local land books by the local Commissioners of the Revenue. Some localities impose additional district levies, so that the rate is higher than the county levy reported in the Virginia Local Tax Rates Bulletin. The nominal tax rate for the state is obtained by dividing the total local real estate levies by the total taxable real estate value of all counties and cities.

The effective tax rate for a locality is calculated by multiplying the nominal tax rate by the median assessment/sales ratio. The effective tax rate for the state is computed by multiplying the total fair market value for all counties and cities by the state nominal tax rate and then dividing by the total true value of real estate for the state.

The total estimated true value of locally taxed property is composed of two components: real estate and public service corporation property. The estimated true value of real estate is computed as the total fair market value reported in the local landbook, divided by the median assessment/sales ratio for the locality. The public service corporation component includes the value reported for each locality annually by the State Corporation Commission plus the estimated true value of railroad and pipelines for each locality as reported by the Railroad and Pipeline Appraisal Section of the Department of Taxation.

The estimated true value per capita of locally taxed property is defined as the true value of property divided by the 1998 provisional estimates for population as reported to the Department of Taxation by the University of Virginia Weldon Cooper Center for Public Service.

**Appendix 2**  
**Number of Sales Included in the 1998 Ratio Study**

<b>Locality</b>	<b>Total</b>	<b>Single Family Residential Urban Class 1</b>	<b>Single Family Residential Suburban Class 2</b>	<b>Multi-Family Class 3</b>	<b>Commercial/Industrial Class 4</b>	<b>Agricultural Less Than 100 Acres Class 5</b>	<b>Agricultural More Than 100 Acres Class 6</b>
<b>Counties:</b>							
Accomack	300	107	168	0	12	11	2
Albemarle	1,849	1,160	565	34	25	60	5
Alleghany	127	6	112	0	1	7	1
Amelia	138	3	109	0	4	16	6
Amherst	377	27	312	3	9	17	9
Appomattox	198	18	134	0	2	39	5
Arlington	3,194	2,929	0	30	235	0	0
Augusta	698	27	633	0	8	23	7
Bath	81	0	72	0	1	7	1
Bedford	1,537	0	1,448	1	11	62	15
Bland	87	0	57	1	1	20	8
Botetourt	520	20	471	0	4	19	6
Brunswick	159	21	103	0	4	28	3
Buchanan	80	6	59	0	2	11	2
Buckingham	222	0	155	0	2	46	19
Campbell	453	201	220	6	11	10	5
Caroline	274	6	220	3	15	18	12
Carroll	300	22	225	2	6	41	4
Charles City	78	0	69	0	2	6	1
Charlotte	150	23	83	0	5	28	11
Chesterfield	6,096	912	5,106	2	68	7	1
Clarke	205	40	129	0	5	27	4
Craig	82	22	44	1	1	11	3
Culpeper	355	99	233	3	4	11	5
Cumberland	105	4	74	0	0	25	2
Dickenson	82	13	57	0	5	6	1
Dinwiddie	262	1	241	0	3	11	6
Essex	168	29	116	2	3	13	5
Fairfax	9,999	6,328	3,563	5	102	0	1
Fauquier	769	149	545	6	18	45	6
Floyd	167	4	125	0	1	32	5
Fluvanna	389	1	352	1	2	25	8
Franklin	500	468	0	0	1	22	9
Frederick	1,263	0	1,146	45	22	40	10
Giles	205	95	88	1	7	11	3
Gloucester	438	1	419	5	8	3	2
Goochland	358	0	340	0	3	9	6
Grayson	308	1	246	0	2	56	3
Greene	231	3	222	0	1	4	1
Greensville	58	5	38	0	3	10	2

**Appendix 2**  
**Number of Sales Included in the 1998 Ratio Study**

<b>Locality</b>	<b>Total</b>	<b>Single Family Residential Urban Class 1</b>	<b>Single Family Residential Suburban Class 2</b>	<b>Multi-Family Class 3</b>	<b>Commercial/Industrial Class 4</b>	<b>Agricultural Less Than 100 Acres Class 5</b>	<b>Agricultural More Than 100 Acres Class 6</b>
Halifax	350	106	158	3	12	58	13
Hanover	1,754	1,065	627	1	37	21	3
Henrico	6,130	5,848	175	11	93	3	0
Henry	414	9	383	5	7	8	2
Highland	46	1	24	1	3	9	8
Isle of Wight *	260	0	248	4	4	3	1
James City	451	0	447	0	3	1	0
King and Queen	78	0	61	0	2	13	2
King George	261	1	243	0	9	7	1
King William	207	30	165	0	3	9	0
Lancaster	297	58	219	0	11	9	0
Lee	221	31	139	0	11	35	5
Loudoun	3,425	2,781	460	2	115	57	10
Louisa	485	16	435	2	1	27	4
Lunenburg	171	36	58	1	1	60	15
Madison	126	0	109	0	1	13	3
Mathews	137	0	134	0	0	3	0
Mecklenburg	328	73	218	9	11	13	4
Middlesex	340	15	304	4	13	4	0
Montgomery	625	410	179	11	13	11	1
Nelson	415	88	255	4	7	43	18
New Kent	273	2	257	2	5	4	3
Northampton	246	57	159	9	15	4	2
Northumberland	419	0	392	0	6	16	5
Nottoway	153	74	50	1	6	18	4
Orange	227	33	176	1	2	11	4
Page	323	119	177	0	7	15	5
Patrick	170	134	0	0	0	32	4
Pittsylvania	400	19	330	1	4	34	12
Powhatan	320	0	306	0	5	8	1
Prince Edward	217	32	133	5	8	31	8
Prince George	244	0	235	1	4	4	0
Prince William	3,985	3,170	733	0	74	8	0
Pulaski	462	144	293	2	8	15	0
Rappahannock	122	4	72	0	2	42	2
Richmond	105	18	71	0	6	8	2
Roanoke	1,747	1,201	456	45	31	13	1
Rockbridge	204	5	175	0	2	18	4
Rockingham	1,036	223	720	27	13	47	6
Russell	232	30	177	0	7	13	5

**Appendix 2**  
**Number of Sales Included in the 1998 Ratio Study**

<b>Locality</b>	<b>Total</b>	<b>Single Family Residential Urban Class 1</b>	<b>Single Family Residential Suburban Class 2</b>	<b>Multi-Family Class 3</b>	<b>Commercial/Industrial Class 4</b>	<b>Agricultural Less Than 100 Acres Class 5</b>	<b>Agricultural More Than 100 Acres Class 6</b>
Scott	250	50	133	0	2	54	11
Shenandoah	844	242	506	3	35	44	14
Smyth	300	108	156	3	16	13	4
Southampton	204	24	147	0	8	14	11
Spotsylvania	1,463	677	752	2	13	17	2
Stafford	1,293	0	1,246	0	39	8	0
Surry	64	19	38	0	1	2	4
Sussex	105	36	51	0	7	11	0
Tazewell	350	137	181	3	20	8	1
Warren	659	201	420	6	16	15	1
Washington	350	51	268	2	11	15	3
Westmoreland	356	82	240	4	13	16	1
Wise	255	111	119	3	15	5	2
Wythe	250	110	103	1	13	14	9
York	625	0	625	0	0	0	0
<b>Cities:</b>							
Alexandria	1,928	1,871	0	13	44	0	0
Bedford *	87	76	0	5	6	0	0
Bristol	294	260	7	7	20	0	0
Buena Vista *	59	52	1	0	6	0	0
Charlottesville	452	388	8	14	42	0	0
Chesapeake	3,427	2,935	402	0	90	0	0
Clifton Forge *	68	64	0	1	3	0	0
Colonial Heights	275	262	0	2	11	0	0
Covington *	82	77	0	3	2	0	0
Danville	509	465	0	20	24	0	0
Emporia	49	41	0	0	8	0	0
Fairfax	295	262	0	0	33	0	0
Falls Church	190	179	0	1	10	0	0
Franklin *	77	68	0	3	5	1	0
Fredericksburg *	212	169	25	1	17	0	0
Galax	90	77	0	0	13	0	0
Hampton *	842	825	1	0	16	0	0
Harrisonburg	356	319	10	13	12	2	0
Hopewell	236	216	2	8	10	0	0
Lexington *	85	69	0	13	3	0	0
Lynchburg	500	499	0	0	1	0	0
Manassas	540	477	0	37	26	0	0
Manassas Park	144	121	0	15	8	0	0
Martinsville	139	130	0	2	7	0	0
Newport News *	677	673	0	0	4	0	0

**Appendix 2**  
**Number of Sales Included in the 1998 Ratio Study**

<b>Locality</b>	<b>Total</b>	<b>Single Family Residential Urban Class 1</b>	<b>Single Family Residential Suburban Class 2</b>	<b>Multi-Family Class 3</b>	<b>Commercial/Industrial Class 4</b>	<b>Agricultural Less Than 100 Acres Class 5</b>	<b>Agricultural More Than 100 Acres Class 6</b>
Norfolk *	1,645	1,541	21	20	63	0	0
Norton	32	32	0	0	0	0	0
Petersburg *	313	86	173	23	29	2	0
Poquoson *	137	137	0	0	0	0	0
Portsmouth *	1,236	1,140	0	62	34	0	0
Radford	173	148	0	18	6	1	0
Richmond	2,641	2,539	0	78	24	0	0
Roanoke	1,347	1,259	0	30	58	0	0
Salem	305	276	0	8	21	0	0
Staunton	475	426	0	19	30	0	0
Suffolk	608	57	517	0	24	10	0
Virginia Beach *	7,214	6,913	92	5	198	6	0
Waynesboro	255	239	2	6	8	0	0
Williamsburg *	111	94	0	17	0	0	0
Winchester	243	188	0	29	26	0	0
<b>Total</b>	<b>95,984</b>	<b>56,082</b>	<b>34,498</b>	<b>803</b>	<b>2,332</b>	<b>1,843</b>	<b>426</b>



### Appendix 3

#### Computations for State Median Ratio

1. The nominal tax rate for Virginia is obtained by dividing the total local real estate levies by the total taxable real estate value of all counties and cities.

The local levy and taxable value refer to fiscal year 1997-98 for the following localities which conduct fiscal year reassessments:

<u>County</u>	<u>City</u>	
Isle of Wight	Bedford	Newport News
	Buena Vista	Norfolk
	Clifton Forge	Petersburg
	Covington	Poquoson
	Danville	Portsmouth
	Franklin	Virginia Beach
	Fredericksburg	Williamsburg
	Hampton	
	Lexington	

Data on taxable value and levies for the above localities for fiscal year 1997-98 are from the Virginia Department of Taxation's, Annual Report, Fiscal Year 1998 . All other localities conduct calendar year reassessments and the data for those localities are taken from the Annual Report, Fiscal Year 1999 .

$$\begin{aligned}\text{State Nominal Tax Rate} &= \text{Total Local Levy/Total FMV Taxable} * 100 \\ &= (3,690,391,235/355,993,887,329)*100 \\ &= \$1.037\end{aligned}$$

2. The effective tax rate for the State is computed by multiplying the total fair market value for all counties and cities by the State Nominal Rate of tax and then dividing by the total estimated true value of real estate for the State.

$$\begin{aligned}\text{State Effective Rate} &= \text{Total FMV} * \text{Nominal Tax Rate/Total True Value of Real Estate} \\ &= (365,068,729,978*1.037)/400,535,507,371 \\ &= \$0.94\end{aligned}$$

3. The median ratio for the State is calculated by dividing the State Effective Rate by the State Nominal Rate.

$$\begin{aligned}\text{State Median Ratio} &= \text{State Effective Tax Rate/State Nominal Tax Rate} \\ &= 91.1\%\end{aligned}$$