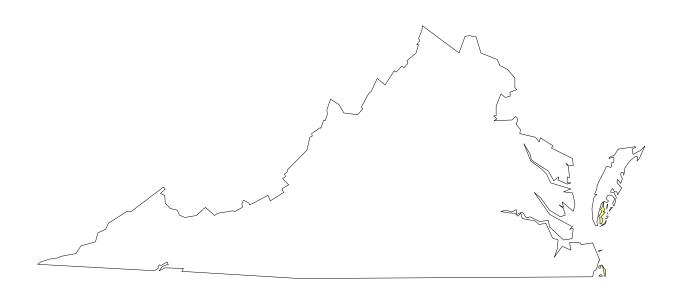
THE 1999 VIRGINIA ASSESSMENT/SALES RATIO STUDY



Virginia Department of Taxation P.O. Box 1880 Richmond, Virginia 23218-1880 August 2001

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THE 1999 VIRGINIA ASSESSMENT/SALES RATIO STUDY

Introduction

In accordance with Section 207 of Title 58.1 of the <u>Code of Virginia</u>, 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 1999 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 1999 assessment/sales ratios are calculated from a statistical sample of all fair market real estate sales in 1999, 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 109,000 sales, or 3.3 percent of the parcels in the State, are actually used in this study. For each selected parcel, its assessed value in 1999 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 1999 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 1999 median ratio ranges between 80 and 100 percent for 68 of Virginia's 95 counties and 24 of its 40 cities. Figure 2 indicates that the coefficient of dispersion is in the range of 10 percent to 30 percent for 68 counties, and is under 20 percent in 38 cities.

In addition to those localities that undertake annual reassessments, 20 other localities (11 counties and 9 cities) conducted reassessments in 1999. 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 <u>Code of Virginia</u> 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 109,594 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 66,484 urban and 37,187 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 Policy and Administration, (804) 367-8391.

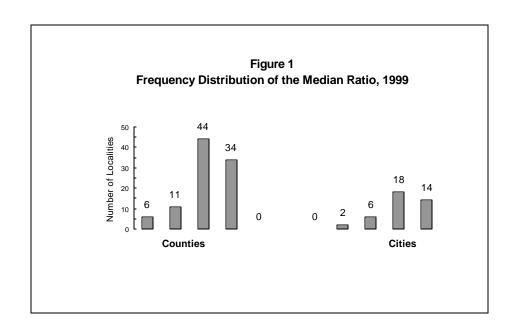
Nominal and Effective Tax Rate

Table 3 provides the nominal and effective true tax rates for 1998 and 1999 for each locality. The median assessment/sales ratio for the State in 1999 was 88.9%, down from 91.1% in 1998. The steps in the computation of the State median ratio are detailed in Appendix 3. The statewide nominal tax rate for 1999 was equal to \$1.04 per \$100 of assessed value, while the estimated effective tax rate for the State was \$0.92 per \$100 of assessed value. Figure 3 shows that the nominal tax rate for 50 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 25 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 55 of the 95 counties, and were at or above \$1.00 per \$100 of assessed value for just 21 of the 40 cities.

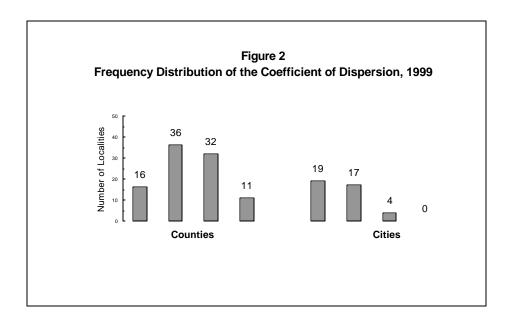
Estimated True Value of Property

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 \$460.3 billion in 1999, which is approximately 7.6 percent higher than the figure for 1998. 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 \$432.5 billion, which is 8.0 percent higher than in 1998. Total estimated true value for public service corporations was \$27.8 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 1999. 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 1998 and 1999 in many counties and cities (Figure 6).

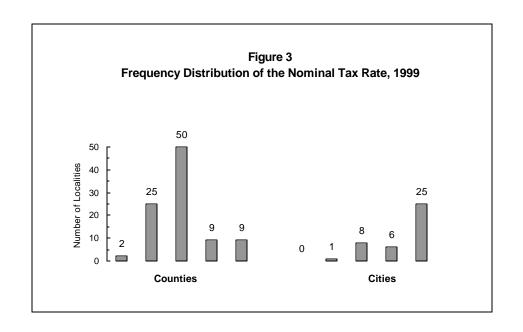
Table 5 provides the per capita estimated true full value of locally taxed property for real estate and public service corporations. Across the State, total estimated true value averaged almost \$67,000 per capita. Estimated true value per capita was less than \$60,000 in 49 of the 95 counties and 32 of the 40 cities. While estimated population in the State increased by about 1.2 percent from 1998 to 1999, the estimated true value per capita increased 6.3 percent.



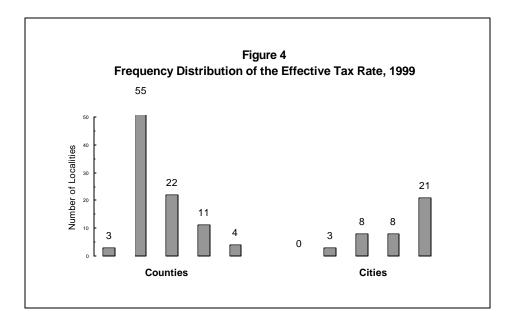
	Counties	Cities
Less than 70%	6	0
70% to 79.9%	11	2
80% to 89.9%	44	6
90% to 100%	34	18
Over 100%	0	14



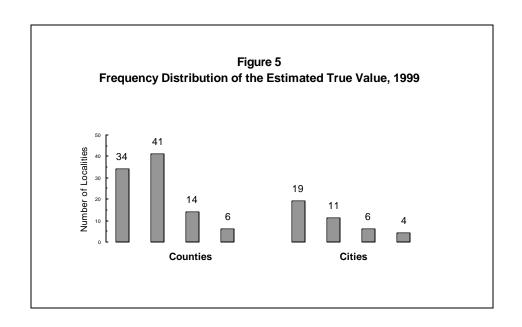
	Counties	Cities
Less than 10%	16	19
10% to 19.9%	36	17
20% to 30%	32	4
Over 30%	11	0



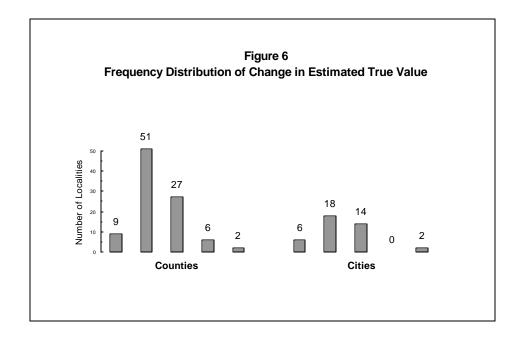
	Counties	Cities
Less than \$0.40	2	0
\$0.40 to \$0.59	25	1
\$0.60 to \$0.79	50	8
\$0.80 to \$0.99	9	6
\$1.00 and Over	9	25



	Counties	Cities
Less than \$0.40	3	0
\$0.40 to \$0.59	55	3
\$0.60 to \$0.79	22	8
\$0.80 to \$0.99	11	8
\$1.00 and Over	4	21



	Counties	Cities
Less than \$1 billion	34	19
\$1.0 to \$2.9 billion	41	11
\$3.0 to \$9.9 billion	14	6
Over \$10 billion	6	4



	Counties	Cities
Over +10%	9	6
5% to 9.9%	51	18
1% to 4.9%	27	14
-0.9% to +0.9%	6	0
Reductions below -1%	2	2

TABLE 1

LATEST EFFECTIVE REASSESSMENT, NUMBER OF SALES,
MEDIAN ASSESSMENT/SALES RATIO, COEFFICIENT OF DISPERSION, AND
TOTAL FAIR MARKET VALUE FOR VIRGINIA LOCALITIES, 1999

Locality	Latest	Number of	Median	Coefficient of	Total Fair
	Reassessment	Sales	Ratio (%)	Dispersion (%)	Market Value (\$)
Counties:					
Accomack	Annual	317	78.24	21.38	\$1,287,231,878
Albemarle	1999	1,951	92.23	7.37	6,482,712,140
Alleghany	1998	102	80.25	14.23	498,374,900
Amelia	1994	133	73.75	17.66	455,394,345
Amherst	1996	261	82.29	13.87	1,053,549,100
Appomattox	1996	204	75.39	23.24	477,707,150
Arlington	Annual	3,477	86.87	10.36	19,987,442,600
Augusta	1997	820	88.88	9.83	3,206,702,200
Bath	1999	110	97.04	36.48	422,808,500
Bedford	1999	1,251	91.82	12.48	3,369,397,880
Bland	1996	88	73.97	27.96	201,358,100
Botetourt	1998	487	94.13	11.07	1,725,820,271
Brunswick	1994	134	68.71	34.54	499,899,439
Buchanan	1995	114	86.31	27.96	932,092,956
Buckingham	1998	187	82.90	27.30	512,412,700
Campbell	1997	409	92.77	10.66	1,787,879,013
Caroline	1998	274	93.33	19.08	990,939,233
Carroll	1998	454	70.84	28.86	982,817,600
Charles City	1997	89	75.60	21.05	324,117,536
Charlotte	1997	129	85.04	29.57	450,570,560
Chesterfield	Annual	7,038	92.16	6.96	13,022,254,154
Clarke	1998	196	87.42	18.66	939,896,179
Craig	1994	107	65.26	30.16	175,725,700
Culpeper	1998	371	94.85	10.48	1,803,944,800
Cumberland	1998	116	87.44	23.78	386,627,272
Dickenson	1994	96	68.12	35.67	564,794,433
Dinwiddie	1997	234	89.86	31.82	985,754,106
Essex	1997	127	98.29	14.84	654,582,870
Fairfax	Annual	18,551	85.50	6.84	80,684,424,585
Fauquier	1998	920	88.43	11.63	4,547,658,400
Floyd	1995	172	69.77	25.86	513,740,100
Fluvanna	1998	360	90.18	16.72	969,226,700
Franklin	1995	450	83.52	17.20	2,341,581,795
Frederick	1997	1,529	93.56	14.67	3,177,252,000
Giles	1999	215	94.86	21.93	576,223,000

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MEDIAN ASSESSMENT/SALES RATIO, COEFFICIENT OF DISPERSION, AND
TOTAL FAIR MARKET VALUE FOR VIRGINIA LOCALITIES, 1999

Locality	Latest	Number of	Median	Coefficient of	Total Fair
	Reassessment	Sales	Ratio (%)	Dispersion (%)	Market Value (\$)
Counties:					
Gloucester	1998	376	93.49	8.88	\$1,720,150,040
Goochland	1997	319	81.76	19.70	1,521,203,683
Grayson	1998	280	62.16	34.09	458,057,066
Greene	1999	235	93.08	10.82	696,858,800
Greensville	1996	68	90.00	31.88	315,348,040
Halifax	1998	383	91.58	23.14	1,449,530,258
Hanover	Annual	1,640	86.87	9.96	5,471,429,900
Henrico	Annual	5,948	87.30	7.64	14,271,377,200
Henry	1997	362	79.79	14.22	1,774,002,300
Highland	1994	43	62.95	30.99	196,379,000
Isle of Wight *	1998	357	96.87	9.10	1,573,781,309
James City *	Annual	735	93.83	5.93	3,957,911,100
King and Queen	1996	73	83.95	25.64	328,427,800
King George	1996	207	88.32	28.96	860,102,700
King William	1997	179	89.96	11.73	668,474,900
Lancaster	1994	209	96.81	14.89	1,072,412,481
Lee	1998	317	83.33	35.51	538,651,815
Loudoun	Annual	4,265	89.57	7.60	14,147,307,100
Louisa	1999	523	96.72	18.21	1,469,597,600
Lunenburg	1998	156	82.34	25.62	379,501,100
Madison	1996	157	85.71	16.73	705,708,300
Mathews	1999	137	92.00	19.10	671,694,499
Mecklenburg	1998	199	89.23	20.22	1,477,786,962
Middlesex	1995	179	88.37	18.49	842,647,000
Montgomery	1999	578	89.49	9.61	3,002,758,100
Nelson	1997	306	97.31	19.94	1,157,546,858
New Kent	1996	249	82.38	18.88	789,727,080
Northampton	1999	264	88.27	23.09	743,990,400
Northumberland	1994	447	86.56	26.07	1,041,582,691
Nottoway	1994	128	76.70	30.26	393,438,601
Orange	1998	203	92.35	10.18	1,480,243,174
Page	1997	333	91.43	27.80	944,366,200
Patrick	1997	155	81.88	22.78	646,385,600
Pittsylvania	1998	500	89.56	17.92	1,996,548,600
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TABLE 1

LATEST EFFECTIVE REASSESSMENT, NUMBER OF SALES,
MEDIAN ASSESSMENT/SALES RATIO, COEFFICIENT OF DISPERSION, AND
TOTAL FAIR MARKET VALUE FOR VIRGINIA LOCALITIES, 1999

Locality	Latest	Number of	Median	Coefficient of	Total Fair
	Reassessment	Sales	Ratio (%)	Dispersion (%)	Market Value (\$)
Counties:					
Prince Edward	1997	226	83.77	24.77	\$614,518,549
Prince George	Annual	227	89.56	10.78	1,129,366,000
Prince William	Annual	5,141	92.98	7.06	14,469,056,300
Pulaski	1998	340	84.83	16.84	1,234,184,700
Rappahannock	1998	132	90.46	20.74	816,399,600
Richmond	1997	137	86.73	27.12	387,208,310
Roanoke	Annual	1,511	90.75	7.41	4,255,439,100
Rockbridge	1996	263	79.33	20.19	1,043,718,362
Rockingham	1998	1,070	90.95	14.00	3,185,500,904
Russell	1995	218	76.83	25.91	722,140,102
Scott	1998	186	82.30	27.33	611,869,554
Shenandoah	1996	639	93.75	24.03	1,904,570,900
Smyth	1998	300	84.74	23.60	914,459,562
Southampton	1996	171	86.88	22.12	732,026,100
Spotsylvania	1998	1,466	91.06	8.63	4,665,486,800
Stafford	1998	1,373	91.79	7.96	4,847,842,700
Surry	1999	74	92.35	17.51	392,199,223
Sussex	1994	125	85.45	41.91	384,148,815
Tazewell	1994	350	79.42	22.06	1,254,558,600
Warren	1997	668	89.62	14.72	1,588,849,000
Washington	1997	350	82.80	17.19	1,870,517,106
Westmoreland	1995	357	90.92	28.59	941,269,790
Wise	1997	249	86.00	24.06	1,034,494,169
Wythe	1997	250	81.17	19.08	957,994,600
York	1998	421	94.62	5.12	3,344,379,800
Cities:					
Alexandria	Annual	2,399	92.80	8.19	\$11,541,376,000
Bedford *	1998	83	96.00	13.45	265,868,700
Bristol	1997	271	82.20	20.64	580,057,600
Buena Vista *	1998	85	90.75	16.95	200,324,900
Charlottesville	Annual	530	90.88	12.21	1,986,085,000
Chesapeake	Annual	4,910	95.27	3.94	9,302,371,434
Clifton Forge *	1997	60	94.66	20.83	96,473,280
Colonial Heights	1998	288	88.93	7.45	841,784,780
Covington *	1999	77	78.59	15.49	191,753,865
Danville*	1998	565	88.56	13.48	1,508,331,800

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TABLE 1

LATEST EFFECTIVE REASSESSMENT, NUMBER OF SALES,
MEDIAN ASSESSMENT/SALES RATIO, COEFFICIENT OF DISPERSION, AND
TOTAL FAIR MARKET VALUE FOR VIRGINIA LOCALITIES, 1999

Locality	Latest	Number of	Median	Coefficient of	Total Fair
	Reassessment	Sales	Ratio (%)	Dispersion (%)	Market Value (\$)
Cities:					
Emporia	1998	54	93.71	24.69	\$207,647,400
Fairfax	Annual	356	91.38	7.86	2,021,637,153
Falls Church	Annual	135	94.51	8.05	1,153,405,700
Franklin *	1998	77	94.00	11.46	326,693,200
Fredericksburg *	1999	209	94.44	13.45	1,158,659,600
Galax	1996	116	77.99	22.05	225,661,916
Hampton *	Annual	724	95.41	7.06	4,960,996,860
Harrisonburg	1999	396	92.18	7.49	1,623,062,940
Hopewell	1999	259	93.58	9.23	776,843,500
Lexington *	1998	86	87.71	14.48	264,565,900
Lynchburg	1999	943	91.68	10.69	2,457,188,025
Manassas	Annual	614	93.75	7.19	2,049,324,800
Manassas Park	Annual	129	92.76	6.81	418,947,500
Martinsville	1998	126	91.66	12.86	492,377,750
Newport News *	Annual	521	94.95	4.05	6,599,589,108
Norfolk *	Annual	1,928	93.24	9.12	7,250,380,520
Norton	1996	26	98.48	14.99	128,882,600
Petersburg *	1998	340	91.37	14.42	869,989,700
Poquoson *	1998	124	96.10	6.42	634,147,446
Portsmouth	Annual	1,126	93.51	7.84	2,877,729,650
Radford	1996	218	78.03	15.70	417,438,300
Richmond	Annual	1,071	84.91	15.29	9,005,312,222
Roanoke	Annual	1,285	92.93	8.09	3,726,525,100
Salem	1999	327	85.46	8.95	1,129,380,000
Staunton	1999	407	95.49	9.17	884,969,935
Suffolk *	Annual	1,022	91.47	14.74	2,653,234,900
Virginia Beach *	Annual	8,461	92.09	7.05	20,105,493,603
Waynesboro	1999	269	88.78	10.80	779,448,700
Williamsburg *	Annual	114	91.43	9.42	792,641,200
Winchester	1999	282	94.33	11.25	1,406,749,700

^{*} Localities with fiscal year re-assessments: Fair Market Value is reported for fiscal year 1998-99.

The following counties conduct biennial re-assessment of property: Albemarle, Grayson, Henry, Louisa, Spotsylvania, Stafford, and York.

The following cities conduct biennial re-assessment: 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.

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
Class 1: Single Famil	y Residential Urba	<u>an</u>		
Counties:				
Accomack	108	78.32	17.70	1.02
Albemarle	1,312	92.63	5.41	1.01
Amherst	24	87.99	9.87	0.98
Appomattox	21	77.16	22.68	1.06
Arlington	3,425	86.80	10.26	1.03
Augusta	25	90.78	6.30	1.00
Campbell	181	92.38	9.66	1.02
Carroll	21	85.37	18.23	1.06
Chesterfield	972	91.22	6.95	1.01
Clarke	49	92.62	11.95	1.01
Culpeper	106	97.15	8.63	1.01
Dickenson	20	69.54	32.68	1.03
Fairfax	13,550	85.63	6.75	1.01
Fauquier	170	92.43	10.60	1.02
Franklin	422	83.78	17.06	1.06
Giles	69	95.22	15.99	0.99
Halifax	106	96.90	15.15	1.00
Hanover	1,015	87.60	7.66	1.01
Henrico	5,642	87.32	7.27	1.01
King William	39	93.80	13.06	1.02
Lancaster	51	96.44	13.99	1.06
Lee	38	79.78	26.84	1.04
Loudoun	3,569	90.12	6.53	1.02
Lunenburg	42	79.64	24.70	1.06
Mecklenburg	43	94.01	14.94	1.00
Montgomery	377	89.43	8.40	1.00
Nelson	72	107.57	16.23	1.05
Northampton	67	92.56	22.37	1.06
Nottoway	65	77.22	26.08	1.10
Page	117	95.22	20.67	0.95
Patrick	124	82.98	21.42	1.05
Pittsylvania	32	82.84	19.71	1.01
Prince Edward	47	86.43	21.89	1.04
Prince William	4,260	93.39	5.91	1.01
Pulaski	84	86.23	16.50	1.04
Richmond	27	90.36	16.71	1.00
Roanoke	1,067	90.60	6.83	1.00
Rockingham	252	90.91	10.92	1.02
Russell	32	76.14	24.38	0.98
Scott	32	84.42	18.46	1.01
Shenandoah	198	94.57	16.87	1.05

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
Locality	Oi Gales	110 (70)	Dispersion (70)	шасх
Class 1: Single Family	/ Residential Urba	<u>an</u>		
Counties:				
Smyth	92	85.12	23.10	0.99
Spotsylvania	670	92.21	6.57	1.01
Sussex	33	83.74	29.68	1.09
Tazewell	146	79.03	20.29	1.07
Warren	208	92.99	11.52	1.01
Washington	52	82.01	16.08	1.02
Westmoreland	97	90.92	20.40	1.08
Wise	99	87.00	21.12	1.08
Wythe	93	82.58	13.75	1.03
Cities:				
Alexandria	2,339	92.84	8.04	1.03
Bedford	74	97.41	12.14	1.01
Bristol	243	81.65	19.70	1.03
Buena Vista	75	91.48	13.87	1.02
Charlottesville	505	91.14	11.94	1.04
Chesapeake	4,199	95.36	3.72	1.00
Clifton Forge	56	93.90	21.62	1.06
Colonial Heights	277	88.97	7.41	0.99
Covington	73	78.59	14.54	1.02
Danville	514	89.38	12.76	1.01
Emporia	46	89.82	24.60	1.07
Fairfax	319	92.65	6.81	1.02
Falls Church	126	95.16	8.12	1.02
Franklin	72	95.28	10.86	1.03
Fredericksburg	180	94.68	12.16	1.05
Galax	99	79.67	20.04	1.04
Hampton	709	95.35	7.06	1.01
Harrisonburg	357	92.14	7.33	1.00
Hopewell	231	93.55	8.68	1.01
Lexington	70	89.18	15.28	1.07
Lynchburg	845	91.68	10.25	1.02
Manassas	540	93.17	6.54	1.02
Manassas Park	116	92.75	6.64	1.01
Martinsville	103	89.96	12.23	1.04
Norfolk	1,616	93.18	8.81	1.02
Norton	22	96.82	16.28	1.03
Petersburg	164	91.22	11.76	1.00
Poquoson	124	96.10	6.42	1.01

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
Class 1: Single Fami	ily Residential Urba	an_		
Cities:				
Portsmouth	1,059	93.31	7.60	1.01
Radford	187	77.04	14.16	1.00
Richmond	941	85.29	14.45	1.06
Roanoke	1,121	92.91	7.65	1.00
Salem	306	85.59	8.33	1.01
Staunton	376	95.48	9.22	1.02
Suffolk	102	87.93	29.43	1.14
Virginia Beach	8,114	92.20	6.50	1.02
Waynesboro	258	89.23	10.26	1.01
Williamsburg	100	90.73	9.51	1.01
Winchester	219	94.02	10.57	1.02
Class 2: Single Fami	ily Residential Sub	<u>urban</u>		
Counties				
Accomack	189	78.12	23.42	1.05
Albemarle	513	90.22	11.02	1.03
Alleghany	87	80.50	12.91	0.97
Amelia	110	74.00	17.28	1.04
Amherst	222	81.88	13.74	1.02
Appomattox	143	76.00	22.41	0.96
Augusta	750	89.05	9.31	1.00
Bath	95	97.86	30.92	1.18
Bedford	1,184	92.33	12.04	1.00
Bland	68	74.18	29.05	0.96
Botetourt	438	94.47	10.15	1.01
Brunswick	93	70.00	31.60	1.09
Buchanan	86	85.06	27.36	1.02
Buckingham	140	84.62	26.85	1.03
Campbell	196	93.10	11.63	1.04
Caroline	236	94.61	17.59	1.06
Carroll	338	71.25	28.94	1.00
Charles City	70	76.86	22.04	1.06
Charlotte	77	88.73	26.97	1.05
Chesterfield	5,905	92.35	6.77	1.00
Clarke	116	82.67	19.27	1.03
Craig	83	65.26	30.09	1.04
Culpeper	230	94.35	8.95	1.01
Cumberland	85	90.29	24.07	1.06
Dickenson	61	67.44	37.08	0.98

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
Class 2: Single Family			-1	
Counties:	Residential Sur	<u>burbari</u>		
Dinwiddie	208	89.86	30.62	1.14
Essex	91	98.09	16.74	1.08
Fairfax	4,766	85.08	6.89	1.02
Fauquier	644	87.19	10.64	1.01
Floyd	121	70.33	25.93	1.06
Fluvanna	329	90.16	16.33	1.02
Frederick	1,398	93.30	14.27	1.02
Giles	116	94.78	23.13	1.08
Gloucester	357	93.22	8.82	1.01
Goochland	291	82.19	17.57	1.01
Grayson	230	64.96	32.79	1.03
Greene	227	93.14	10.74	1.01
Greensville	49	89.00	30.26	1.08
Halifax	184	91.34	26.66	1.01
Hanover	540	84.48	11.83	1.01
Henrico	198	85.30	12.34	1.03
Henry	320	80.54	13.02	1.03
Highland	22	71.60	25.47	1.04
Isle of Wight	346	96.89	8.72	1.00
James City	708	93.94	5.77	1.00
King and Queen	708 59	83.95	24.63	1.08
King George	188	88.37	21.57	1.03
King George King William	134	88.21	10.84	1.03
•	148	97.26	15.09	1.05
Lancaster	206	97.26 85.57	35.26	1.05
Lee Loudoun	511	83.38	11.58	1.03
Louisa	499	96.67	17.67	1.03
	499 58	88.41	21.07	1.07
Lunenburg Madison	129	86.27		1.02
	118	92.34	17.11 17.29	1.04
Mathews				
Mecklenburg	129	88.33	21.83	1.07
Middlesex	148	89.52	18.74	1.06
Montgomery	160	89.93	10.38	1.01
Nelson	190	96.59	19.73	1.05
New Kent	230	82.76	18.09	1.00
Northampton	162	86.52	21.40	1.07
Northumberland	425	86.22	26.14	1.11
Nottoway	40	79.85	32.48	1.15
Orange	180	92.12	10.47	1.01
Page	197	88.07	31.91	1.05

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
Class 2: Single Famil		· · · · ·	. \\-'-/	
Counties:				
Pittsylvania	425	89.07	17.37	1.03
Powhatan	328	90.49	15.13	1.02
Prince Edward	141	85.47	22.68	0.99
Prince George	211	89.94	9.16	1.10
Prince William	779	88.71	10.72	1.02
Pulaski	211	84.38	15.50	1.03
Rappahannock	77	89.93	22.74	1.01
Richmond	81	85.03	32.03	1.05
Roanoke	373	91.79	8.07	0.99
Rockbridge	217	80.00	18.67	1.04
Rockingham	718	91.17	14.52	1.04
Russell	150	76.82	24.29	1.03
Scott	108	78.70	29.82	1.02
Shenandoah	389	93.70	27.69	1.10
Smyth	170	84.74	21.39	0.98
Southampton	125	86.00	20.45	1.02
Spotsylvania	747	89.79	9.85	1.02
Stafford	1,327	91.78	7.51	1.01
Surry	49	91.85	18.57	1.03
Sussex	54	80.17	46.40	1.13
Tazewell	154	80.00	21.20	1.02
Warren	419	87.86	15.41	1.02
Washington	266	84.50	16.33	0.99
Westmoreland	229	91.96	32.53	1.17
Wise	121	83.23	25.17	1.03
Wythe	125	76.75	22.95	0.98
York	419	94.62	5.05	1.01
Cities:				
Chesapeake	600	94.39	4.68	1.01
Newport News	515	94.92	4.00	1.00
Petersburg	102	91.29	9.44	1.01
Suffolk	862	91.62	12.04	1.02
Virginia Beach	102	84.16	20.51	1.06
Class 3: Multi Family	<u>Residential</u>			
Counties:	<u>-</u>			
Albemarle	25	92.47	6.40	1.01
Arlington	21	87.00	16.07	1.11
Fauquier	21	102.62	6.39	1.00
Frederick	63	101.37	6.27	1.01
Roanoke	39	87.32	8.52	0.97
	23	JJ2	5.52	5.01

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
Class 3: Multi Family Re		. (70)	2.000.0.011 (70)	III GOA
Cities:				
Danville	24	88.02	16.88	1.01
Lynchburg	42	94.56	12.18	0.99
Manassas	53	98.91	3.96	1.00
Norfolk	256	92.68	9.63	1.01
Petersburg	35	90.98	18.37	1.03
Portsmouth	46	96.89	11.32	1.02
Radford	23	91.53	17.76	1.17
Richmond	66	80.26	18.69	1.02
Roanoke	114	92.91	10.19	0.95
Staunton	21	95.47	8.94	1.04
Winchester	39	96.28	10.65	1.01
Class 4: Commercial/Inc		00.20	10.00	1.01
Counties:	uustriai			
Accomack	7	97.85	17.42	1.12
Albemarle	29	94.38	13.25	1.12
Arlington	31	90.21	16.76	1.07
Augusta	4	98.21	12.38	1.04
Bedford	10	83.85	10.69	0.95
Botetourt	10	81.59	24.19	1.01
Brunswick	5	65.38	63.73	1.22
Buchanan	4	66.85	3.35	0.98
Buckingham	4	67.63	18.40	1.03
Campbell	8	99.59	10.25	0.92
Caroline	7	97.22	30.87	0.96
Carroll	6	75.75	23.16	1.04
Charlotte	5	116.86	27.27	1.30
Chesterfield	91	90.74	17.16	0.98
Clarke	7	105.32	16.39	1.09
Culpeper	13	91.46	21.49	0.95
Dickenson	5	45.74	44.26	0.96
Essex	5	105.35	19.47	1.17
Fairfax	228	88.77	9.73	1.01
Fauquier	19	93.87	12.46	1.02
Frederick	17	93.27	33.69	1.07
Giles	10	103.43	17.81	0.85
Gloucester	6	96.45	4.78	1.00
Goochland	5	81.04	17.46	1.07
Halifax	13	98.94	23.29	0.98
Hanover	55	89.71	24.77	0.99
Henrico	98	89.44	18.57	0.98

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
Locality	UI Sales	Nau (70)	Disheraion (20)	IIIUEX
Class 4: Commercial/II	ndustrial			
Counties:				
Henry	17	81.00	23.50	0.76
Isle of Wight	4	77.16	5.84	1.00
James City	17	91.90	7.59	0.99
King George	8	70.66	42.42	1.28
Lancaster	6	92.97	16.86	1.05
Lee	12	86.15	44.31	1.33
Loudoun	108	87.23	12.53	1.02
Lunenburg	6	118.00	25.42	0.94
Mecklenburg	6	89.59	21.16	1.07
Middlesex	5	91.39	4.87	1.02
Montgomery	21	90.00	15.15	0.91
Northampton	15	100.80	29.31	0.79
Northumberland	4	97.29	37.29	0.99
Nottoway	7	101.09	29.21	0.98
Page	7	91.43	46.21	1.02
Pittsylvania	6	79.62	15.20	0.96
Powhatan	6	75.88	30.65	1.05
Prince George	6	68.90	35.19	1.14
Prince William	90	91.72	24.88	1.07
Pulaski	13	85.16	22.84	0.99
Richmond	12	87.98	19.44	1.03
Roanoke	22	86.23	14.77	0.99
Rockbridge	4	85.99	24.68	1.23
Rockingham	27	89.02	24.43	1.05
Russell	5	105.20	21.46	0.98
Shenandoah	8	101.80	13.92	1.04
Smyth	17	89.26	34.23	0.95
Southampton	9	97.78	22.91	1.08
Spotsylvania	27	92.13	17.33	0.97
Stafford	30	92.48	20.59	0.96
Sussex	7	83.80	40.77	1.78
Tazewell	22	89.56	31.13	0.88
Warren	13	91.47	19.69	1.16
Washington	8	81.07	24.47	1.01
Westmoreland	7	90.78	27.26	1.08
Wise	19	93.68	33.57	1.57
Wythe	13	86.21	24.45	1.03
-				

Locality	Number Of Sales	Median Ratio (%)	Coefficient Of Dispersion (%)	Regression Index
Class 4: Commercial/Ir	ndustrial	, ,		
Cities:				
Alexandria	50	91.87	14.79	1.07
Bedford	5	72.29	21.13	1.15
Bristol	19	82.50	22.05	1.07
Buena Vista	7	55.20	54.36	1.24
Charlottesville	24	82.67	18.56	1.03
Chesapeake	99	95.10	7.91	1.03
Clifton Forge	4	99.97	9.63	0.99
Colonial Heights	10	88.33	8.68	1.06
Danville	27	76.43	19.79	1.08
Emporia	8	111.55	19.71	1.05
Fairfax	37	77.37	11.09	0.92
Falls Church	7	88.63	2.04	0.98
Fredericksburg	19	90.21	21.53	1.07
Galax	16	69.52	28.64	1.07
Hampton	14	98.08	6.33	0.95
Harrisonburg	13	89.36	10.39	0.98
Hopewell	18	89.90	15.16	0.97
Lynchburg	56	90.86	15.89	1.02
Manassas	21	104.73	22.27	1.01
Manassas Park	7	90.98	7.81	1.09
Martinsville	15	103.75	13.71	1.00
Newport News	4	94.70	6.68	0.97
Norfolk	56	96.82	15.03	1.02
Norton	4	104.72	7.18	1.02
Petersburg	39	93.07	34.46	1.36
Portsmouth	21	100.00	8.41	1.03
Radford	8	76.68	27.75	1.08
Richmond	62	81.82	24.55	1.08
Roanoke	50	97.56	12.20	0.92
Salem	20	84.89	18.41	1.03
Staunton	10	97.69	7.19	1.02
Suffolk	37	94.40	28.50	1.01
Virginia Beach	229	83.06	19.61	1.03
Waynesboro	6	71.61	18.54	1.00
Winchester	24	95.74	17.54	1.17
Class 5: Agricultural U				
Counties:		<u>_</u>		
Albemarle	62	90.54	13.54	1.01
Appomattox	36	70.34	24.61	1.07
Augusta	31	75.81	18.43	1.05
Augusia	31	75.01	10.43	1.03

	Number	Median	Coefficient Of	Regression
Locality	Of Sales	Ratio (%)	Dispersion (%)	Index
Class 5: Agricultural L	<u> Jndeveloped 20-</u>	<u>100 acres</u>		
Counties:				
Bedford	44	76.36	19.00	1.06
Buckingham	32	77.85	27.84	1.04
Carroll	74	60.12	30.08	1.15
Charlotte	25	70.20	21.07	1.06
Chesterfield	38	89.70	9.39	0.98
Fauquier	58	90.43	19.47	1.05
Floyd	38	58.28	21.75	1.01
Fluvanna	21	90.00	22.25	1.12
Franklin	21	75.30	21.05	0.96
Frederick	44	82.65	28.68	1.04
Grayson	45	44.25	31.71	1.11
Halifax	62	82.16	22.96	1.10
Hanover	25	75.42	21.53	1.04
Lee	51	74.86	42.04	1.27
Loudoun	59	81.63	17.44	1.03
Lunenburg	36	76.18	28.83	1.12
Madison	20	74.61	18.55	1.10
Nelson	24	89.89	17.87	1.05
Patrick	27	76.92	28.88	1.16
Pittsylvania	28	99.32	21.73	1.13
Prince Edward	21	72.78	40.70	1.15
Pulaski	20	77.78	27.16	1.02
Rappahannock	44	89.49	16.55	1.10
Rockbridge	23	63.00	25.97	0.99
Rockingham	50	84.35	18.73	1.04
Russell	25	88.40	29.45	1.13
Scott	36	84.13	29.11	1.06
Shenandoah	39	83.70	25.23	1.06
Spotsylvania	22	91.32	15.46	1.12
Tazewell	25	67.26	24.03	1.00
Washington	20	64.25	22.51	1.07
Class 6: Agricultural U	ndeveloped 100-	+ acres		
Counties:				
Chesterfield	20	91.43	4.32	1.00

TABLE 3

NOMINAL AND EFFECTIVE TRUE REAL PROPERTY TAX RATES

IN VIRGINIA COUNTIES AND CITIES, 1998 AND 1999

	Median Ratio		Nominal	Tax Rate	Effective	Tax Rate
Locality	1998	1999	1998	1999	1998	1999
Counties:						
Accomack	79.8%	78.2%	\$0.74	\$0.74	\$0.59	\$0.58
Albemarle	97.7%	92.2%	0.72	0.72	0.70	0.66
Alleghany	81.6%	80.3%	0.71	0.76	0.58	0.61
Amelia	74.9%	73.8%	0.60	0.60	0.45	0.44
Amherst	85.9%	82.3%	0.55	0.55	0.47	0.45
Appomattox	81.5%	75.4%	0.55	0.55	0.45	0.41
Arlington	91.3%	86.9%	1.00	1.00	0.91	0.87
Augusta	91.1%	88.9%	0.58	0.58	0.53	0.52
Bath	87.3%	97.0%	0.50	0.50	0.44	0.49
Bedford	86.9%	91.8%	0.64	0.59	0.56	0.54
Bland	75.0%	74.0%	0.69	0.69	0.52	0.51
Botetourt	96.2%	94.1%	0.70	0.70	0.67	0.66
Brunswick	71.0%	68.7%	0.59	0.59	0.42	0.41
Buchanan	88.1%	86.3%	0.59	0.59	0.52	0.51
Buckingham	88.3%	82.9%	0.48	0.48	0.42	0.40
Campbell	94.0%	92.8%	0.51	0.51	0.48	0.47
Caroline	94.0%	93.3%	0.71	0.71	0.67	0.66
Carroll	75.7%	70.8%	0.62	0.62	0.47	0.44
Charles City	80.7%	75.6%	0.72	0.78	0.58	0.59
Charlotte	89.9%	85.0%	0.65	0.65	0.58	0.55
Chesterfield	93.6%	92.2%	1.08	1.08	1.01	1.00
Clarke	94.7%	87.4%	0.87	0.92	0.82	0.80
Craig	69.4%	65.3%	0.62	0.62	0.43	0.40
Culpeper	97.8%	94.9%	0.74	0.74	0.72	0.70
Cumberland	94.3%	87.4%	0.47	0.56	0.44	0.49
Dickenson	78.4%	68.1%	0.65	0.65	0.51	0.44
Dinwiddie	88.0%	89.9%	0.74	0.74	0.65	0.67
Essex	97.3%	98.3%	0.52	0.52	0.51	0.51
Fairfax	88.5%	85.5%	1.25	1.27	1.11	1.08
Fauquier	93.3%	88.4%	1.06	1.06	0.99	0.94
Floyd	72.3%	69.8%	0.70	0.70	0.50	0.49
Fluvanna	94.4%	90.2%	0.64	0.64	0.60	0.58
Franklin	86.2%	83.5%	0.55	0.55	0.47	0.46
Frederick	96.8%	93.6%	0.59	0.59	0.57	0.55
Giles	75.7%	94.9%	0.68	0.59	0.51	0.56

TABLE 3

NOMINAL AND EFFECTIVE TRUE REAL PROPERTY TAX RATES

IN VIRGINIA COUNTIES AND CITIES, 1998 AND 1999

	Median Ratio		Nominal Tax Rate		Effective	Tax Rate
Locality	1998	1999	1998	1999	1998	1999
Counties:						
Gloucester	97.3%	93.5%	\$0.91	\$0.91	\$0.89	\$0.85
Goochland	87.1%	81.8%	0.90	0.90	0.78	0.74
Grayson	70.0%	62.2%	0.71	0.71	0.50	0.44
Greene	91.5%	93.1%	0.76	0.76	0.70	0.71
Greensville	90.3%	90.0%	0.61	0.61	0.55	0.55
Halifax	97.6%	91.6%	0.31	0.31	0.30	0.28
Hanover	89.2%	86.9%	0.73	0.73	0.65	0.63
Henrico	89.3%	87.3%	0.94	0.94	0.84	0.82
Henry	83.9%	79.8%	0.60	0.60	0.50	0.48
Highland	75.2%	63.0%	0.60	0.60	0.45	0.38
Isle of Wight *	90.0%	96.9%	0.72	0.72	0.65	0.70
James City *	94.0%	93.8%	0.87	0.87	0.82	0.82
King and Queen	86.7%	84.0%	0.70	0.70	0.61	0.59
King George	90.9%	88.3%	0.75	0.75	0.68	0.66
King William	94.0%	90.0%	0.61	0.64	0.58	0.57
Lancaster	97.0%	96.8%	0.51	0.51	0.49	0.49
Lee	80.8%	83.3%	0.65	0.65	0.53	0.54
Loudoun	93.4%	89.6%	1.11	1.11	1.04	0.99
Louisa	94.7%	96.7%	0.67	0.67	0.63	0.65
Lunenburg	80.6%	82.3%	0.50	0.50	0.40	0.41
Madison	92.4%	85.7%	0.65	0.65	0.60	0.56
Mathews	89.3%	92.0%	0.68	0.73	0.61	0.67
Mecklenburg	93.4%	89.2%	0.31	0.35	0.29	0.31
Middlesex	92.0%	88.4%	0.52	0.52	0.48	0.46
Montgomery	75.6%	89.5%	0.76	0.63	0.57	0.56
Nelson	96.0%	97.3%	0.67	0.67	0.64	0.65
New Kent	83.4%	82.4%	0.82	0.82	0.68	0.68
Northampton	79.7%	88.3%	0.68	0.61	0.54	0.54
Northumberland	87.5%	86.6%	0.56	0.56	0.49	0.48
Nottoway	80.0%	76.7%	0.66	0.66	0.53	0.51
Orange	95.9%	92.4%	0.68	0.70	0.65	0.65
Page	93.7%	91.4%	0.54	0.54	0.51	0.49
Patrick	82.2%	81.9%	0.52	0.52	0.43	0.43
Pittsylvania	91.9%	89.6%	0.48	0.48	0.44	0.43
Powhatan	94.4%	89.8%	0.79	0.79	0.75	0.71

TABLE 3

NOMINAL AND EFFECTIVE TRUE REAL PROPERTY TAX RATES

IN VIRGINIA COUNTIES AND CITIES, 1998 AND 1999

	Media	n Ratio	Nominal	Tax Rate	Effective	Tax Rate
Locality	1998	1999	1998	1999	1998	1999
Counties:						
Prince Edward	85.7%	83.8%	\$0.43	\$0.59	\$0.37	\$0.49
Prince George	89.1%	89.6%	0.90	0.90	0.80	0.81
Prince William	94.4%	93.0%	1.36	1.36	1.28	1.26
Pulaski	88.3%	84.8%	0.63	0.62	0.55	0.52
Rappahannock	99.2%	90.5%	0.82	0.82	0.82	0.74
Richmond	89.6%	86.7%	0.50	0.50	0.45	0.43
Roanoke	91.3%	90.8%	1.13	1.13	1.03	1.03
Rockbridge	82.4%	79.3%	0.60	0.63	0.49	0.50
Rockingham	92.0%	91.0%	0.68	0.68	0.63	0.62
Russell	77.9%	76.8%	0.64	0.64	0.50	0.49
Coott	00 F0/	02.20/	0.60	0.60	0.54	0.49
Scott Shenandoah	89.5% 96.8%	82.3% 93.8%	0.60	0.60 0.61	0.54 0.59	0.49 0.57
	89.9%	93.6% 84.7%	0.75	0.61	0.59	0.57
Smyth Southampton	84.9%	86.9%	0.75	0.75	0.67	0.64
Spotsylvania	93.5%	91.1%	0.01	1.02	0.32	0.53
Spoisylvania	93.5%	91.176	0.94	1.02	0.00	0.93
Stafford	94.2%	91.8%	1.08	1.08	1.02	0.99
Surry	99.1%	92.4%	0.66	0.68	0.65	0.63
Sussex	82.9%	85.5%	0.60	0.60	0.50	0.51
Tazewell	81.4%	79.4%	0.56	0.56	0.46	0.44
Warren	93.1%	89.6%	0.68	0.73	0.63	0.66
Washington	86.1%	82.8%	0.66	0.66	0.57	0.54
Westmoreland	91.1%	90.9%	0.64	0.64	0.58	0.58
Wise	88.9%	86.0%	0.52	0.52	0.46	0.45
Wythe	80.5%	81.2%	0.65	0.65	0.52	0.53
York	97.1%	94.6%	0.86	0.86	0.84	0.81
Cities:						
Alexandria	97.4%	92.8%	\$1.11	\$1.11	\$1.08	\$1.03
Bedford *	85.0%	96.0%	0.76	0.76	0.65	0.73
Bristol	86.7%	82.2%	1.10	1.11	0.95	0.91
Buena Vista *	78.9%	90.8%	1.14	0.92	0.90	0.84
Charlottesville	92.6%	90.9%	1.11	1.11	1.03	1.01
Chesapeake	95.8%	95.3%	1.29	1.27	1.24	1.21
Clifton Forge *	96.7%	94.7%	1.13	1.13	1.09	1.07
Colonial Heights	90.9%	88.9%	1.20	1.20	1.09	1.07
Covington *	82.3%	78.6%	0.80	0.80	0.66	0.63
Danville*	89.6%	88.6%	0.79	0.79	0.71	0.70

TABLE 3

NOMINAL AND EFFECTIVE TRUE REAL PROPERTY TAX RATES
IN VIRGINIA COUNTIES AND CITIES, 1998 AND 1999

	Media	n Ratio	Nominal	Tax Rate	Effective Tax Rate	
Locality	1998	1999	1998	1999	1998	1999
ities:						
Emporia	90.5%	93.7%	\$0.84	\$0.84	\$0.76	\$0.79
Fairfax	94.8%	91.4%	1.00	1.00	0.95	0.91
Falls Church	97.4%	94.5%	1.11	1.10	1.08	1.04
Franklin *	91.1%	94.0%	0.91	0.91	0.83	0.86
Fredericksburg *	99.1%	94.4%	1.16	1.16	1.15	1.10
Galax	88.5%	78.0%	0.79	0.79	0.70	0.62
Hampton *	98.0%	95.4%	1.25	1.23	1.23	1.18
Harrisonburg	90.9%	92.2%	0.62	0.62	0.56	0.57
Hopewell	92.6%	93.6%	1.14	1.14	1.06	1.07
Lexington *	97.6%	87.7%	0.69	0.72	0.67	0.63
Lynchburg	91.6%	91.7%	1.11	1.11	1.02	1.02
Manassas	96.2%	93.8%	1.24	1.24	1.19	1.16
Manassas Park	96.8%	92.8%	1.44	1.44	1.39	1.34
Martinsville	94.0%	91.7%	0.94	0.94	0.88	0.86
Newport News *	96.3%	95.0%	1.20	1.20	1.16	1.14
Norfolk *	94.0%	93.2%	1.40	1.40	1.32	1.30
Norton	90.5%	98.5%	0.70	0.70	0.63	0.69
Petersburg *	94.1%	91.4%	1.43	1.43	1.35	1.31
Poquoson *	94.6%	96.1%	1.12	1.12	1.06	1.08
Portsmouth *	93.9%	93.5%	1.36	1.36	1.28	1.27
Radford	81.3%	78.0%	0.74	0.74	0.60	0.58
Richmond	92.2%	84.9%	1.43	1.43	1.32	1.21
Roanoke	94.0%	92.9%	1.22	1.22	1.15	1.13
Salem	83.0%	85.5%	1.18	1.18	0.98	1.01
Staunton	89.4%	95.5%	1.00	1.00	0.89	0.96
Suffolk *	92.5%	91.5%	1.05	1.05	0.97	0.96
Virginia Beach *	92.0%	92.1%	1.22	1.22	1.12	1.12
Waynesboro	89.1%	88.8%	0.97	0.97	0.86	0.86
Williamsburg *	92.5%	91.4%	0.54	0.53	0.50	0.49
Winchester	95.9%	94.3%	0.59	0.64	0.57	0.60
rginia Total**	91.1%	88.9%	\$1.04	\$1.04	\$0.94	\$0.92

^{*} Based on fiscal years 1997-98 and 1998-99.

Commissioners of the Revenue.

^{**} 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 levie:

Nominal Tax Rate is the rate of assessed levy to total taxable fair market value as reported by the loc

TABLE 4
ESTIMATED TRUE FULL VALUE OF LOCALLY TAXED PROPERTY
IN VIRGINIA COUNTIES AND CITIES, 1999
REAL ESTATE AND PUBLIC SERVICE CORPORATIONS

	True Value of	True Value Public Service	Total Estimated	True Value Public Service Corporations as a Percent of
Locality	Real Estate	Corporations	True Value	of Total Estimated True Value
Counties:				
Accomack	\$1,646,076,570	\$92,237,105	\$1,738,313,675	5.31%
Albemarle	7,031,141,150	231,311,389	7,262,452,539	3.19%
Alleghany	620,641,220	61,123,613	681,764,833	8.97%
Amelia	617,065,508	28,355,492	645,421,000	4.39%
Amherst	1,280,132,564	89,816,275	1,369,948,839	6.56%
Appomattox	633,563,859	55,513,292	689,077,152	8.06%
Arlington	23,000,509,321	996,729,260	23,997,238,581	4.15%
Augusta	3,607,089,089	190,031,648	3,797,120,737	5.00%
Bath	435,885,052	1,693,468,059	2,129,353,110	79.53%
Bedford	3,670,368,061	207,490,611	3,877,858,672	5.35%
Bland	272,105,541	17,269,440	289,374,981	5.97%
Botetourt	1,834,027,918	140,730,342	1,974,758,260	7.13%
Brunswick	727,655,661	50,959,143	778,614,804	6.54%
Buchanan	1,080,061,363	81,182,171	1,161,243,534	6.99%
Buckingham	618,109,409	74,835,215	692,944,624	10.80%
Campbell	1,926,593,764	174,357,760	2,100,951,524	8.30%
Caroline	1,062,099,928	106,110,599	1,168,210,527	9.08%
Carroll	1,388,160,452	84,618,338	1,472,778,790	5.75%
Charles City	428,726,899	35,813,254	464,540,154	7.71%
Charlotte	530,083,012	52,639,731	582,722,743	9.03%
Chesterfield	14,123,919,907	1,250,195,864	15,374,115,771	8.13%
Clarke	1,075,396,086	36,034,984	1,111,431,070	3.24%
Craig	269,105,207	13,567,096	282,672,303	4.80%
Culpeper	1,900,890,200	112,227,829	2,013,118,030	5.57%
Cumberland	442,365,300	58,584,739	500,950,039	11.69%
Dickenson	829,360,401	67,265,275	896,625,676	7.50%
Dinwiddie	1,096,500,674	99,765,243	1,196,265,917	8.34%
Essex	665,903,225	31,322,373	697,225,598	4.49%
Fairfax	94,367,748,053	2,848,902,349	97,216,650,402	2.93%
Fauquier	5,144,409,955	192,737,093	5,337,147,048	3.61%
Floyd	736,017,335	40,095,229	776,112,564	5.17%
Fluvanna	1,074,530,710	152,025,225	1,226,555,935	12.39%
Franklin	2,804,289,575	118,233,364	2,922,522,939	4.05%
Frederick	3,394,500,000	197,675,548	3,592,175,548	5.50%
Giles	607,189,673	162,140,453	769,330,127	21.08%
Ciloo	307, 103,073	102, 170,700	700,000,127	21.0070

TABLE 4
ESTIMATED TRUE FULL VALUE OF LOCALLY TAXED PROPERTY
IN VIRGINIA COUNTIES AND CITIES, 1999
REAL ESTATE AND PUBLIC SERVICE CORPORATIONS

	True Value of	True Value Public Service	Total Estimated	True Value Public Service Corporations as a Percent of
Locality	Real Estate	Corporations	True Value	of Total Estimated True Value
Counties:				
Gloucester	\$1,839,732,663	\$77,560,525	\$1,917,293,188	4.05%
Goochland	1,859,662,204	79,434,426	1,939,096,630	4.10%
Grayson	736,426,151	35,263,078	771,689,229	4.57%
Greene	748,505,693	36,609,794	785,115,487	4.66%
Greensville	350,386,711	34,463,354	384,850,065	8.96%
Halifax	1,582,456,614	1,088,043,734	2,670,500,347	40.74%
Hanover	6,296,236,939	285,733,805	6,581,970,744	4.34%
Henrico	16,347,511,111	826,091,452	17,173,602,563	4.81%
Henry	2,223,060,526	123,167,113	2,346,227,640	5.25%
Highland	311,712,698	19,327,975	331,040,673	5.84%
Isle of Wight	1,624,129,318	93,458,536	1,717,587,854	5.44%
James City	4,219,521,429	156,009,329	4,375,530,757	3.57%
King and Queen	390,985,476	22,520,328	413,505,804	5.45%
King George	974,068,743	47,381,729	1,021,450,472	4.64%
King William	742,749,889	36,440,290	779,190,179	4.68%
Lancaster	1,107,864,133	36,590,795	1,144,454,928	3.20%
Lee	646,640,834	62,950,109	709,590,943	8.87%
Loudoun	15,789,405,246	451,135,198	16,240,540,443	2.78%
Louisa	1,519,749,328	1,985,965,403	3,505,714,731	56.65%
Lunenburg	461,119,198	39,762,080	500,881,278	7.94%
Madison	823,463,594	32,921,386	856,384,980	3.84%
Mathews	730,102,716	22,024,164	752,126,880	2.93%
Mecklenburg	1,656,711,841	104,940,208	1,761,652,049	5.96%
Middlesex	953,220,588	36,701,857	989,922,445	3.71%
Montgomery	3,355,036,983	145,667,943	3,500,704,926	4.16%
Nelson	1,189,667,891	66,343,009	1,256,010,900	5.28%
New Kent	958,406,650	60,248,935	1,018,655,585	5.91%
Northampton	842,571,234	37,335,983	879,907,217	4.24%
Northumberland	1,202,751,375	34,382,268	1,237,133,643	2.78%
Nottoway	512,957,759	56,964,656	569,922,414	10.00%
Orange	1,601,994,777	106,379,984	1,708,374,761	6.23%
Page	1,033,223,414	64,693,965	1,097,917,378	5.89%
Patrick	789,237,607	45,259,610	834,497,217	5.42%
Pittsylvania	2,228,290,848	211,207,925	2,439,498,774	8.66%
Powhatan	1,305,175,390	60,877,562	1,366,052,951	4.46%

TABLE 4
ESTIMATED TRUE FULL VALUE OF LOCALLY TAXED PROPERTY
IN VIRGINIA COUNTIES AND CITIES, 1999
REAL ESTATE AND PUBLIC SERVICE CORPORATIONS

	True	True Value	Total	True Value Public Service
,	Value of	Public Service	Estimated	Corporations as a Percent of
Locality	Real Estate	Corporations	True Value	of Total Estimated True Value
Counties:				
Prince Edward	\$733,315,691	\$59,827,422	\$793,143,113	7.54%
Prince George	1,260,453,125	64,835,562	1,325,288,687	4.89%
Prince William	15,558,125,054	918,044,495	16,476,169,549	5.57%
Pulaski	1,455,406,486	99,259,404	1,554,665,890	6.38%
Rappahannock	902,099,006	23,237,336	925,336,342	2.51%
Richmond	446,607,047	50,542,115	497,149,162	10.17%
Roanoke	4,686,606,938	206,101,187	4,892,708,125	4.21%
Rockbridge	1,316,164,391	105,661,860	1,421,826,251	7.43%
Rockingham	3,500,550,444	151,646,826	3,652,197,270	4.15%
Russell	940,286,591	268,785,111	1,209,071,702	22.23%
Scott	743,462,399	64,553,507	808,015,906	7.99%
Shenandoah	2,030,459,382	130,970,102	2,161,429,484	6.06%
Smyth	1,079,645,292	101,368,926	1,181,014,218	8.58%
Southampton	842,377,560	54,051,763	896,429,323	6.03%
Spotsylvania	5,121,280,790	206,193,208	5,327,473,998	3.87%
Stafford	5,280,874,401	179,427,980	5,460,302,381	3.29%
Surry	424,458,034	1,504,208,324	1,928,666,358	77.99%
Sussex	449,296,860	53,509,812	502,806,672	10.64%
Tazewell	1,580,048,615	94,362,994	1,674,411,609	5.64%
Warren	1,773,268,973	60,828,712	1,834,097,685	3.32%
Washington	2,259,078,630	117,582,925	2,376,661,556	4.95%
Westmoreland	1,035,500,319	45,195,382	1,080,695,701	4.18%
Wise	1,202,900,197	87,884,281	1,290,784,478	6.81%
Wythe	1,179,796,305	99,421,733	1,279,218,038	7.77%
York	3,535,285,201	455,592,858	3,990,878,059	11.42%
Counties Total	\$319,234,307,942	\$21,672,317,740	\$340,906,625,682	6.36%
Cities:				
Alexandria	\$12,436,827,586	\$647,618,745	\$13,084,446,331	4.95%
Bedford	276,946,563	11,695,188	288,641,751	4.05%
Bristol	705,666,180	14,803,415	720,469,595	2.05%
Buena Vista	220,622,137	10,811,515	231,433,651	4.67%
Charlottesville	2,184,911,991	128,184,787	2,313,096,779	5.54%
Chesapeake	9,761,145,261	745,260,100	10,506,405,361	7.09%
Clifton Forge	101,872,524	12,594,670	114,467,194	11.00%
Colonial Heights	946,889,516	32,794,765	979,684,282	3.35%
Covington	243,961,660	18,544,816	262,506,476	7.06%
Danville	1,702,406,095	56,861,827	1,759,267,922	3.23%

TABLE 4
ESTIMATED TRUE FULL VALUE OF LOCALLY TAXED PROPERTY
IN VIRGINIA COUNTIES AND CITIES, 1999
REAL ESTATE AND PUBLIC SERVICE CORPORATIONS

	True Value of	True Value Public Service	Total Estimated	True Value Public Service Corporations as a Percent of
Locality	Real Estate	Corporations	True Value	of Total Estimated True Value
Cities:				
Emporia	\$221,608,751	\$19,071,110	\$240,679,861	7.92%
Fairfax	2,211,856,841	114,763,539	2,326,620,380	4.93%
Falls Church	1,220,535,132	26,384,233	1,246,919,365	2.12%
Franklin	347,545,957	10,354,419	357,900,377	2.89%
Fredericksburg	1,227,393,644	68,579,665	1,295,973,309	5.29%
Galax	289,310,149	13,171,289	302,481,438	4.35%
Hampton	5,200,206,352	242,339,477	5,442,545,830	4.45%
Harrisonburg	1,760,371,952	53,431,976	1,813,803,928	2.95%
Hopewell	829,961,004	73,495,127	903,456,132	8.13%
Lexington	301,671,494	14,424,185	316,095,679	4.56%
Lynchburg	2,679,594,357	184,699,091	2,864,293,447	6.45%
Manassas	2,184,781,237	63,126,477	2,247,907,714	2.81%
Manassas Park	451,452,047	13,503,659	464,955,706	2.90%
Martinsville	536,944,111	28,107,345	565,051,456	4.97%
Newport News	6,946,935,903	363,023,186	7,309,959,089	4.97%
Norfolk	7,779,378,240	661,994,800	8,441,373,041	7.84%
Norton	130,845,279	28,951,740	159,797,019	18.12%
Petersburg	951,848,687	98,486,470	1,050,335,157	9.38%
Poquoson	659,882,878	14,383,980	674,266,858	2.13%
Portsmouth	3,077,785,722	200,838,963	3,278,624,685	6.13%
Radford	535,177,308	21,434,746	556,612,054	3.85%
Richmond	10,606,963,748	712,501,875	11,319,465,623	6.29%
Roanoke	4,011,329,494	306,381,416	4,317,710,910	7.10%
Salem	1,320,912,281	38,226,759	1,359,139,040	2.81%
Staunton	926,670,089	59,267,999	985,938,088	6.01%
Suffolk	2,899,710,273	166,221,208	3,065,931,481	5.42%
Virginia Beach	21,830,069,059	722,289,749	22,552,358,808	3.20%
Waynesboro	877,757,545	64,471,312	942,228,857	6.84%
Williamsburg	867,222,319	47,379,843	914,602,163	5.18%
Winchester	1,491,781,230	53,055,047	1,544,836,278	3.43%
Cities Total	\$112,958,752,598	\$6,163,530,516	\$119,122,283,114	5.17%
Virginia Total	\$432,193,060,540	\$27,835,848,256	\$460,028,908,796	6.05%

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, 1999
REAL ESTATE AND PUBLIC SERVICE CORPORATIONS

Estimated Per Capita Estimated True Value of				
Locality	1999		Public Service	Total
	Population	Real Estate	Corporations	Per Capita
Counties:				
Accomack	32,800	\$50,185	\$2,812	\$52,997
Albemarle	81,600	86,166	2,835	89,001
Alleghany	12,500	49,651	4,890	54,541
Amelia	10,600	58,214	2,675	60,889
Amherst	30,400	42,110	2,954	45,064
Appomattox	13,400	47,281	4,143	51,424
Arlington	180,900	127,145	5,510	132,655
Augusta	62,400	57,806	3,045	60,851
Bath	5,000	87,177	338,694	425,871
Bedford	57,500	63,832	3,609	67,441
Bland	6,900	39,436	2,503	41,939
Botetourt	29,500	62,170	4,771	66,941
Brunswick	18,200	39,981	2,800	42,781
Buchanan	28,400	38,030	2,859	40,889
Buckingham	14,800	41,764	5,056	46,820
Campbell	49,800	38,687	3,501	42,188
Caroline	21,700	48,945	4,890	53,835
Carroll	28,000	49,577	3,022	52,599
Charles City	7,100	60,384	5,044	65,428
Charlotte	12,900	41,092	4,081	45,173
Chesterfield	252,200	56,003	4,957	60,960
Clarke	12,700	84,677	2,837	87,514
Craig	5,000	53,821	2,713	56,534
Culpeper	33,400	56,913	3,360	60,273
Cumberland	8,400	52,663	6,974	59,637
Dickenson	16,800	49,367	4,004	53,371
Dinwiddie	25,400	43,169	3,928	47,097
Essex	9,300	71,602	3,368	74,970
Fairfax	942,200	100,157	3,024	103,181
Fauquier	53,500	96,157	3,603	99,760
Floyd	13,300	55,340	3,015	58,355
Fluvanna	19,600	54,823	7,756	62,579
Franklin	46,000	60,963	2,570	63,533
Frederick	57,000	59,553	3,468	63,021
Giles	16,600	36,578	9,767	46,345

TABLE 5
ESTIMATED TRUE VALUE PER CAPITA OF LOCALLY TAXED PROPERTY
IN VIRGINIA COUNTIES AND CITIES, 1999
REAL ESTATE AND PUBLIC SERVICE CORPORATIONS

	Estimated	ed Per Capita Estimated True Value of			
Locality	1999		Public Service	Total	
	Population	Real Estate	Corporations	Per Capita	
Counties:					
Gloucester	34,500	\$53,326	\$2,248	\$55,574	
Goochland	17,500	106,266	4,539	110,805	
Grayson	16,800	43,835	2,099	45,934	
Greene	14,700	50,919	2,490	53,409	
Greensville	11,600	30,206	2,971	33,177	
Halifax	37,100	42,654	29,327	71,981	
Hanover	84,500	74,512	3,381	77,893	
Henrico	249,200	65,600	3,315	68,915	
Henry	56,000	39,698	2,199	41,897	
Highland	2,500	124,685	7,731	132,416	
Isle of Wight *	29,600	54,869	3,157	58,026	
James City *	46,100	91,530	3,384	94,914	
King and Queen	6,500	60,152	3,465	63,617	
King George	17,000	57,298	2,787	60,085	
King William	13,100	56,698	2,782	59,480	
Lancaster	11,300	98,041	3,238	101,279	
Lee	24,400	26,502	2,580	29,082	
Loudoun	155,900	101,279	2,894	104,173	
Louisa	25,100	60,548	79,122	139,670	
Lunenburg	12,200	37,797	3,259	41,056	
Madison	12,700	64,840	2,592	67,432	
Mathews	9,200	79,359	2,394	81,753	
Mecklenburg	31,200	53,100	3,363	56,463	
Middlesex	9,600	99,294	3,823	103,117	
Montgomery	78,400	42,794	1,858	44,652	
Nelson	14,400	82,616	4,607	87,223	
New Kent	13,200	72,607	4,564	77,171	
Northampton	12,900	65,316	2,894	68,210	
Northumberland	11,700	102,799	2,939	105,738	
Nottoway	15,200	33,747	3,748	37,495	
,	.5,255	33,1	5,7.15	3.,100	
Orange	25,300	63,320	4,205	67,525	
Page	23,300	44,344	2,777	47,121	
Patrick	18,600	42,432	2,433	44,865	
Pittsylvania	59,000	37,768	3,580	41,348	
Powhatan	22,300	58,528	2,730	61,258	

TABLE 5 ESTIMATED TRUE VALUE PER CAPITA OF LOCALLY TAXED PROPERTY IN VIRGINIA COUNTIES AND CITIES, 1999 REAL ESTATE AND PUBLIC SERVICE CORPORATIONS

Estimated Per Capita Estimated True Value of				
Locality	1999		Public Service	Total
	Population	Real Estate	Corporations	Per Capita
Counties:				
Prince Edward	19,100	\$38,393	\$3,132	\$41,525
Prince George	29,800	42,297	2,176	44,473
Prince William	267,800	58,096	3,428	61,524
Pulaski	34,700	41,943	2,861	44,804
Rappahannock	7,600	118,697	3,058	121,755
Richmond	8,700	51,334	5,809	57,143
Roanoke	83,700	55,993	2,462	58,455
Rockbridge	20,200	65,157	5,231	70,388
Rockingham	64,400	54,356	2,355	56,711
Russell	28,900	32,536	9,301	41,837
Scott	23,300	31,908	2,771	34,679
Shenandoah	36,300	55,936	3,608	59,544
Smyth	32,700	33,017	3,100	36,117
Southampton	17,800	47,325	3,037	50,362
Spotsylvania	87,100	58,798	2,367	61,165
Stafford	92,700	56,967	1,936	58,903
Surry	6,400	66,322	235,033	301,355
Sussex	12,400	36,234	4,315	40,549
Tazewell	45,900	34,424	2,056	36,480
Warren	29,600	59,908	2,055	61,963
Washington	50,500	44,734	2,328	47,062
Westmoreland	16,000	64,719	2,825	67,544
Wise	40,000	30,073	2,197	32,270
Wythe	26,800	44,022	3,710	47,732
York	57,500	61,483	7,923	69,406
Counties Total	4,578,300	\$69,728	\$4,734	\$74,462
Cities:				
Alexandria	119,900	\$103,727	\$5,401	\$109,128
Bedford *	6,400	43,273	1,827	45,100
Bristol	17,200	41,027	861	41,888
Buena Vista *	6,500	33,942	1,663	35,605
Charlottesville	37,700	57,955	3,400	61,355
Chesapeake	197,000	49,549	3,783	53,332
Clifton Forge *	4,300	23,691	2,929	26,620
Colonial Heights	16,600	57,042	1,976	59,018
Covington *	6,900	35,357	2,688	38,045

TABLE 5
ESTIMATED TRUE VALUE PER CAPITA OF LOCALLY TAXED PROPERTY
IN VIRGINIA COUNTIES AND CITIES, 1999
REAL ESTATE AND PUBLIC SERVICE CORPORATIONS

	Estimated	Per Capita Estimated True Value of				
Locality	1999	Public Service Total				
	Population	Real Estate	Corporations	Per Capita		
Cities:						
Danville*	50,200	\$33,912	\$1,133	\$35,045		
Emporia	5,700	38,879	3,346	42,225		
Fairfax	20,600	107,372	5,571	112,943		
Falls Church	9,800	124,544	2,692	127,236		
Franklin *	8,200	42,384	1,263	43,647		
Fredericksburg *	18,700	65,636	3,667	69,303		
Galax	6,700	43,181	1,966	45,147		
Hampton *	136,200	38,181	1,779	39,960		
Harrisonburg	34,800	50,585	1,535	52,120		
Hopewell	22,200	37,386	3,311	40,697		
Lexington *	7,100	42,489	2,032	44,521		
Lynchburg	64,600	41,480	2,859	44,339		
Manassas	33,400	65,413	1,890	67,303		
Manassas Park	8,500	53,112	1,589	54,701		
Martinsville	15,300	35,094	1,837	36,931		
Newport News *	179,900	38,616	2,018	40,634		
Norfolk *	225,700	34,468	2,933	37,401		
Norton	4,000	32,711	7,238	39,949		
Petersburg *	34,000	27,996	2,897	30,893		
Poquoson *	11,400	57,884	1,262	59,146		
Portsmouth	97,200	31,664	2,066	33,730		
Radford	16,100	33,241	1,331	34,572		
Richmond	191,300	55,447	3,725	59,172		
Roanoke	93,800	42,765	3,266	46,031		
Salem	24,400	54,136	1,567	55,703		
Staunton	24,300	38,135	2,439	40,574		
Suffolk *	63,500	45,665	2,618	48,283		
Virginia Beach *	421,000	51,853	1,716	53,569		
Waynesboro	19,200	45,717	3,358	49,075		
Williamsburg *	12,200	71,084	3,884	74,968		
Winchester	22,400	66,597	2,369	68,966		
Cities Total	2,294,900	\$49,222	\$2,686	\$51,908		
Virginia Total	6,873,200	\$62,881	\$4,050	\$66,931		

^{*}Based on fiscal year 1998-99.

The estimated true value per capita is the true value of property divided by the 1999 estimates for population reported 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 <u>data</u> 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 <u>number of sales</u> 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.

<u>Fair market sales</u> 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 Xi represents the assessment/sales ratio for the ith sale in a sample of size n, and Xm represents the median ratio of the sample,

Coefficient of Dispersion=[({Sum[Abs(Xi-Xm)]}/n)/Xm]*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 1999, except for counties and cities that conduct fiscal year reassessments, where the 1998-99 values are reported.

The <u>regression index</u> 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 <u>nominal tax rate</u> 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 <u>Virginia Local Tax Rates</u> <u>Bulletin</u>. 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 <u>effective tax rate</u> 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 <u>true value per capita</u> of locally taxed property is defined as the true value of property divided by the 1999 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 1999 Ratio Study

Locality	Total	Single Family Residential Urban Class 1	Single Family Residential Suburban Class 2	Multi- Family Class 3	Commercial/ Industrial Class 4	Agricultural Less Than 100 Acres Class 5	Agricultural More Than 100 Acres Class 6
Counties:							
Accomack	317	108	189	1	7	12	0
Albemarle	1,951	1,312	513	25	29	62	10
Alleghany	102	3	87	0	3	7	2
Amelia	133	7	110	0	1	12	3
Amherst	261	24	222	3	1	10	1
Appomattox	204	21	143	0	2	36	
Arlington	3,477	3,425	0	21	31	0	
Augusta	820	25	750	1	4	31	9
Bath	110	1	95	0	2	8	4
Bedford	1,251	0	1,184	4	10	44	9
Bland	88	0	68	0	2	15	3
Botetourt	487	17	438	0	10	18	
Brunswick	134	16	93	1	5	16	3
Buchanan	114	8	86	0	4	15	1
Buckingham	187	0	140	0	4	32	11
Campbell	409	181	196	10	8	12	
Caroline	274	9	236	0	7	11	11
Carroll	454	21	338	5	6	74	
Charles City	89	0	70	0	1	14	
Charlotte	129	18	77	0	5	25	4
Chesterfield	7,038	972	5,905	12	91	38	20
Clarke	196	49	116	0	7	18	
Craig	107	14	83	1	0	7	
Culpeper	371	106	230	2	13	15	5
Cumberland	116	7	85	0	1	16	7
Dickenson	96	20	61	0	5	10	
Dinwiddie	234	4	208	0	3	17	
Essex	127	19	91	1	5	8	3
Fairfax	18,551	13,550	4,766	6	228	1	0
Fauquier	920	170	644	21	19	58	8
Floyd	172	8	121	0	3	38	
Fluvanna	360	1	329	0	3	21	6
Franklin	450	422	0	0	0	21	7
Frederick	1,529	0	1,398	63	17	44	
Giles	215	69	116	1	10	15	4
Gloucester	376	1	357	11	6	1	0
Goochland	319	1	291	0	5	14	
Grayson	280	1	230	0	0	45	
Greene	235	5	227	0	0	3	
Greensville	68	8	49	1	0	8	2

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Number of Sales Included in the 1999 Ratio Study

Locality	Total	Single Family Residential Urban Class 1	Single Family Residential Suburban Class 2	Multi- Family Class 3	Commercial/ Industrial Class 4	Agricultural Less Than 100 Acres Class 5	Agricultural More Than 100 Acres Class 6
Halifax	383	106	184	1	13	62	17
Hanover	1,640	1,015	540	1	55	25	4
Henrico	5,948	5,642	198	7	98	3	0
Henry	362	3	320	3	17	17	2
Highland	43	0	22	0	2	13	6
Isle of Wight *	357	0	346	1	4	6	0
James City	735	0	708	5	17	5	0
King and Queen	73	2	59	0	1	7	4
King George	207	0	188	0	8	10	1
King William	169	6	156	0	1	6	0
Lancaster	209	51	148	0	6	4	0
Lee	317	38	206	2	12	51	8
Loudoun	4,265	3,569	511	6	108	59	12
Louisa	523	8	499	0	1	14	1
Lunenburg	156	42	58	0	6	36	14
Madison	157	7	129	0	0	20	1
Mathews	137	0	118	0	2	17	0
Mecklenburg	199	43	129	4	6	15	2
Middlesex	179	14	148	5	5	5	2
Montgomery	578	377	160	3	21	14	3
Nelson	306	72	190	5	2	24	13
New Kent	249	1	230	0	3	8	7
Northampton	264	67	162	3	15	11	6
Northumberland	447	1	425	0	4	14	3
Nottoway	128	65	40	0	7	9	7
Orange	203	16	180	0	1	5	1
Page	333	117	197	0	7	10	2
Patrick	155	124	0	0	1	27	3
Pittsylvania	500	32	425	3	6	28	6
Powhatan	354	0	328	0	6	13	7
Prince Edward	226	47	141	6	3	21	8
Prince George	227	1	211	1	6	6	2
Prince William	5,141	4,260	779	7	90	5	0
Pulaski	340	84	211	5	13	20	7
Rappahannock	132	2	77	1	2	44	6
Richmond	137	27	81	0	12	12	5
Roanoke	1,511	1,067	373	39	22	9	1
Rockbridge	263		217	0	4	23	5
Rockingham	1,070	252	718	16	27	50	7
Russell	218	32	150	0	5	25	6

Appendix 2
Number of Sales Included in the 1999 Ratio Study

Locality	Total	Single Family Residential Urban Class 1	Single Family Residential Suburban Class 2	Multi- Family Class 3	Commercial/ Industrial Class 4	Agricultural Less Than 100 Acres Class 5	Agricultural More Than 100 Acres Class 6
Scott	186	32	108	1	3	36	6
Shenandoah	639	198	389	3	8	39	2
Smyth	300	92	170	3	17	16	2
Southampton	171	17	125	0	9	13	7
Spotsylvania	1,466	670	747	0	27	22	0
Stafford	1,373	0	1,327	0	30	15	1
Surry	74	10	49	0	1	7	7
Sussex	125	33	54	1	7	18	12
Tazewell	350	146	154	0	22	25	3
Warren	668	208	419	8	13	16	4
Washington	350	52	266	3	8	20	1
Westmoreland	357	97	229	5	7	16	3
Wise	249	99	121	1	19	8	1
Wythe	250	93	125	3	13	13	3
York	421	0	419	0	2	0	0
Cities:							
Alexandria	2,399	2,339	0	10	50	0	0
Bedford *	83	74	0	3	5	1	0
Bristol	271	243	4	4	19	1	0
Buena Vista *	85	75	0	2	7	0	1
Charlottesville	530	505	0	0	24	1	0
Chesapeake	4,910	4,199	600	7	99	2	3
Clifton Forge *	60	56	0	0	4	0	0
Colonial Heights	288	277	0	1	10	0	0
Covington *	77	73	0	1	3	0	0
Danville	565	514	0	24	27	0	0
Emporia	54	46	0	0	8	0	0
Fairfax	356	319	0	0	37	0	0
Falls Church	135	126	0	2	7	0	0
Franklin *	77	72	2	2	1	0	0
Fredericksburg *	209	180	1	7	19	0	2
Galax	116	99	0	0	16	1	0
Hampton *	724	709	0	1	14	0	0
Harrisonburg	396	357	12	13	13	1	0
Hopewell	259	231	1	9	18	0	0
Lexington *	86	70	0	14	2	0	0
Lynchburg	943	845	0	42	56	0	0
Manassas	614	540	0	53	21	0	0
Manassas Park	129	116	0	6	7	0	0
Martinsville	126	103	0	8	15	0	0
Newport News *	521	0	515	2	4	0	0

Appendix 2
Number of Sales Included in the 1999 Ratio Study

Locality	Total	Single Family Residential Urban Class 1	Single Family Residential Suburban Class 2	Multi- Family Class 3	Commercial/ Industrial Class 4	Agricultural Less Than 100 Acres Class 5	Agricultural More Than 100 Acres Class 6
Norfolk *	1,928	1,616	0	256	56	0	0
Norton	26	22	0	0	4	0	0
Petersburg *	340	164	102	35	39	0	0
Poquoson *	124	124	0	0	0	0	0
Portsmouth *	1,126	1,059	0	46	21	0	0
Radford	218	187	0	23	8	0	0
Richmond	1,071	941	2	66	62	0	0
Roanoke	1,285	1,121	0	114	50	0	0
Salem	327	306	0	1	20	0	0
Staunton	407	376	0	21	10	0	0
Suffolk	1,022	102	862	0	37	16	5
Virginia Beach *	8,461	8,114	102	3	229	13	0
Waynesboro	269	258	0	5	6	0	0
Williamsburg *	114	100	0	12	2	0	0
Winchester	282	219	0	39	24	0	0
Total	109,584	66,451	37,209	1,174	2,417	1,905	428

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 1998-99 for the following localities which conduct fiscal year reassessments:

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

Data on taxable value and levies for the above localities for fiscal year 1998-99 are from the <u>Virginia Department of Taxation's</u>, <u>Annual Report</u>, <u>Fiscal Year 1999</u>. All other localities conduct calendar year reassessments and the data for those localities are taken from the Annual Report, Fiscal Year 2000.

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.

State Effective Rate = Total FMV * Nominal Tax Rate/Total True Value of Real Estate =(384,145,440,885*1.040)/432,193,060,540

=\$0.92

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

State Median Ratio = State Effective Tax Rate/State Nominal Tax Rate =88.9%