

## V. Hampton City

Hampton City is a urban city in southeastern Virginia in the Hampton Roads geographical area. According to the LCI, Hampton City is a low fiscal capacity ( $LCI_{1996-98} = 0.2947$ ) school division. Hampton City encompasses an extensive military installation. Although its ADM experienced a ten percent decline during the initial Period of the study, it then rebounded to an ADM slightly higher than the original. Generally, except for one biennium (1988-90), its population has increased at about 2% biennially.

### Local to State Ratio Net Biennial Change Rate.

$(TPV/ADM)_{Hampton} / (TPV/ADM)_{State}$  (Table 4.51)

For the first five Periods the State Net Biennial Change Rate dampened, either completely (Periods III, IV, and V) or incompletely (Periods I and II), the magnitude of the corresponding Local Biennial Change Rate. Period I exhibited a Net Local Biennial Change Rate of 28.815%, which was much larger than the State Net Biennial Change Rate. By Period VI the Local Net Biennial Change Rate had dropped to 1.787% against a State rate of 5.672%. In Period VI the Local Net Biennial Change Rate was barely greater than zero (0.344%), but compared with the State Net Biennial Change Rate of -1.839 % the Local to State Ratio exhibited enhanced change.

$(TPV/POP)_{Hampton} / (TPV/POP)_{State}$  (Table 4.52)

Similar to the  $TPV/ADM_{Hampton}$  the volatility pattern first exhibited a dampened effect, then an enhanced one. For the first five Periods the State Net Biennial Change Rate dampened, either completely (Periods I, III, IV, and V) or incompletely (Period II), the Local Net Biennial Change Rate. In Period VI the Local Net Biennial Change Rate was enhanced completely through the effects of a *negative* State Net Biennial Change Rate that was lower than that of the locality.

TABLE 4.51. (TPV/ADM)<sub>Hampton</sub> Local to State Ratio Net Biennial Change Rate, Difference, and Volatility, Biennia 1984-86 through 1996-98

Period	Local Net Biennial Change Rate (Percentage)	-	State Net Biennial Change Rate (Percentage)	=	Local to State Ratio Net Biennial Change Rate (Percentage)	Difference in the Local to State Ratio	Volatility Type <sup>1</sup>
I 84-86 to 86-88	28.815	-	17.058	=	11.767	0.0720	Type A3
II 86-88 to 88-90	18.642	-	16.189	=	2.453	0.0168	Type A1
III 88-90 to 90-92	19.843	-	26.485	=	-6.642	-0.0466	Type B2
IV 90-92 to 92-94	18.763	-	28.971	=	-10.209	-0.0668	Type B2
V 92-94 to 94-96	1.787	-	5.672	=	-3.885	-0.0228	Type B2
VI 94-96 to 96-98	0.344	-	-1.839	=	2.183	0.0123	Type D2

<sup>1</sup>Refer to Appendix C in this volume and the appropriate section in Volume II: Technical Appendix.

TABLE 4.52. (TPV/POP)<sub>Hampton</sub> Local to State Ratio Net Biennial Change Rate, Difference, and Volatility, Biennia 1984-86 through 1996-98

Period	Local Net Biennial Change Rate (Percentage)	-	State Net Biennial Change Rate (Percentage)	=	Local to State Ratio Net Biennial Change Rate (Percentage)	Difference in the Local to State Ratio	Volatility Type <sup>1</sup>
I 84-86 to 86-88	13.659	-	10.321	=	3.338	0.0206	Type B1
II 86-88 to 88-90	17.467	-	13.592	=	3.874	0.0248	Type A2
III 88-90 to 90-92	20.831	-	24.341	=	-3.510	-0.0233	Type B2
IV 90-92 to 92-94	15.827	-	25.836	=	-10.010	-0.0641	Type B2
V 92-94 to 94-96	5.480	-	6.125	=	-0.645	-0.0037	Type B2
VI 94-96 to 96-98	2.795	-	-2.501	=	5.296	0.0303	Type D2

<sup>1</sup>Refer to Appendix C in this volume and the appropriate section in Volume II: Technical Appendix.

***(AGI/ADM)<sub>Hampton</sub> / (AGI/ADM)<sub>State</sub> (Table 4.53)***

For Periods I - IV the State Net Biennial Change Rate dampened, either completely (Periods II - IV) or incompletely (Period I), the magnitude of the corresponding Local Biennial Change Rate. Period I exhibited a Net Local Biennial Change Rate of 26.497%, which was much larger than the State Net Biennial Change Rate. By Period VI the Local Net Biennial Change Rate had dropped to 0.176% against a State rate of 8.885. In Period VI the Local Net Biennial Change Rate was negative (-1.247%), however, the  $AGI_{Hampton}$  has not decreased. Rather this negative change rate was due to the faster change in  $ADM_{Hampton}$  (5.676%) than the change in  $AGI_{Hampton}$  (4.429%).<sup>122</sup> The State Net Biennial Change Rate dampened the Local to State Ratio Net Biennial Change Rate further. Period V exhibited a similar type of volatile behavior.

***(AGI/POP)<sub>Hampton</sub> / (AGI/POP)<sub>State</sub> (Table 4.54)***

The State Net Biennial Change Rate dampened completely all Periods, except IV. In Period IV the Local Net Biennial Change Rate was negative (-2.301%) due to the faster change in  $POP_{Hampton}$  (3.320%) than the change in  $AGI_{Hampton}$  (1.019%). The State Net Biennial Change Rate dampened the Local to State Ratio Net Biennial Change Rate further.

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<sup>122</sup> Refer to the appropriate section in the Volume II: Technical Appendix.

TABLE 4.53. (AGI/ADM)<sub>Hampton</sub> Local to State Ratio Net Biennial Change Rate, Difference, and Volatility, Biennia 1984-86 through 1996-98

Period	Local Net Biennial Change Rate (Percentage)	-	State Net Biennial Change Rate (Percentage)	=	Local to State Ratio Net Biennial Change Rate (Percentage)	Difference in the Local to State Ratio	Volatility Type <sup>1</sup>
I 84-86 to 86-88	26.490	-	20.765	=	5.732	0.0483	Type A3
II 86-88 to 88-90	15.955	-	18.589	=	-2.634	-0.0239	Type B1
III 88-90 to 90-92	14.698	-	19.467	=	-4.769	-0.0413	Type B2
IV 90-92 to 92-94	0.176	-	8.885	=	-8.079	-0.0720	Type B2
V 92-94 to 94-96	-1.247	-	4.178	=	-5.426	-0.0409	Type I2
VI 94-96 to 96-98	-0.331	-	7.788	=	-8.119	-0.0579	Type I2

<sup>1</sup>Refer to Appendix C in this volume and the appropriate section in Volume II: Technical Appendix.

TABLE 4.54. (AGI/POP)<sub>Hampton</sub> Local to State Ratio Net Biennial Change Rate, Difference, and Volatility, Biennia 1984-86 through 1996-98

Period	Local Net Biennial Change Rate (Percentage)	-	State Net Biennial Change Rate (Percentage)	=	Local to State Ratio Net Biennial Change Rate (Percentage)	Difference in the Local to State Ratio	Volatility Type <sup>1</sup>
I 84-86 to 86-88	11.609	-	13.840	=	-2.231	-0.0190	Type B2
II 86-88 to 88-90	14.806	-	16.089	=	-1.283	-0.0107	Type B1
III 88-90 to 90-92	15.643	-	17.218	=	-1.575	-0.0129	Type B2
IV 90-92 to 92-94	-2.301	-	6.206	=	-8.507	-0.1014	Type I2
V 92-94 to 94-96	2.338	-	4.573	=	-2.238	-0.0165	Type B2
VI 94-96 to 96-98	2.104	-	7.424	=	-5.320	-0.0385	Type B2

<sup>1</sup>Refer to Appendix C in this volume and the appropriate section in Volume II: Technical Appendix.

***(TRS/ADM)<sub>Hampton</sub> / (TRS/ADM)<sub>State</sub> (Table 4.55)***

For Periods I - VI the State Net Biennial Change Rate dampened, either completely (Periods III, IV, and VI) or incompletely (Periods I and II), the magnitude of the corresponding Local Biennial Change Rate. In Period V the Local Net Biennial Change Rate was negative (-4.252%), however, the TRS<sub>Hampton</sub> had not decreased. Rather this negative change rate was due to the faster change in ADM<sub>Hampton</sub> (8.681%) than the change in TRS<sub>Hampton</sub> (4.429%).<sup>123</sup> However, the negative State Net Biennial Change Rate (-1.434%) enhanced the Local to State Ratio Net Biennial Change Rate to a smaller decline in the Local to State Ratio.

***(TRS/POP)<sub>Hampton</sub> / (TRS/POP)<sub>State</sub> (Table 4.56)***

The State Net Biennial Change Rate dampened four Periods, either incompletely (I and II) or completely (III and VI). In Period IV the Local Net Biennial Change Rate was negative (-2.086%) due to the faster change in POP<sub>Hampton</sub> (3.327%) than the change in TRS<sub>Hampton</sub> (1.241%). The State Net Biennial Change Rate dampened the Local to State Ratio Net Biennial Change Rate further. In Period V similarly the Local Net Biennial Change Rate was negative (-0.778%) due to the faster change in POP<sub>Hampton</sub> (-2.030%) than the change in TRS<sub>Hampton</sub> (1.251%). However, the negative (-1.235%) State Net Biennial Change Rate enhanced the Local to State Ratio Net Biennial Change Rate.

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<sup>123</sup> Refer to the appropriate section in the Volume II: Technical Appendix.

TABLE 4.55. (TRS/ADM)<sub>Hampton</sub> Local to State Ratio Net Biennial Change Rate, Difference, and Volatility, Biennia 1984-86 through 1996-98

Period	Local Net Biennial Change Rate (Percentage)	-	State Net Biennial Change Rate (Percentage)	=	Local to State Ratio Net Biennial Change Rate (Percentage)	Difference in the Local to State Ratio	Volatility Type <sup>1</sup>
I 84-86 to 86-88	31.501	-	22.370	=	9.131	0.1061	Type A4
II 86-88 to 88-90	28.597	-	27.607	=	0.990	0.0125	Type A1
III 88-90 to 90-92	5.795	-	15.065	=	-9.269	-0.1187	Type B2
IV 90-92 to 92-94	0.396	-	8.661	=	-8.265	-0.0960	Type B2
V 92-94 to 94-96	-4.252	-	-1.434	=	-2.819	-0.0300	Type I3
VI 94-96 to 96-98	0.721	-	9.604	=	-8.886	0.0921	Type B2

<sup>1</sup>Refer to Appendix C in this volume and the appropriate section in Volume II: Technical Appendix.

TABLE 4.56. (TRS/POP)<sub>Hampton</sub> Local to State Ratio Net Biennial Change Rate, Difference, and Volatility, Biennia 1984-86 through 1996-98

Period	Local Net Biennial Change Rate (Percentage)	-	State Net Biennial Change Rate (Percentage)	=	Local to State Ratio Net Biennial Change Rate (Percentage)	Difference in the Local to State Ratio	Volatility Type <sup>1</sup>
I 84-86 to 86-88	16.029	-	15.119	=	0.910	0.0107	Type B2
II 86-88 to 88-90	27.323	-	24.932	=	2.391	0.0283	Type B1
III 88-90 to 90-92	6.667	-	12.893	=	-6.226	-0.0329	Type B2
IV 90-92 to 92-94	-2.086	-	5.976	=	-8.062	-0.0916	Type F1
V 92-94 to 94-96	-0.778	-	-1.235	=	0.457	0.0048	Type D1
VI 94-96 to 96-98	3.181	-	9.292	=	-2.015	-0.0642	Type B2

<sup>1</sup>Refer to Appendix C in this volume and the appropriate section in Volume II: Technical Appendix.

### **Local Composite Index Net Biennial Change Rate. (Table 4.57)**

The Hampton City Local Composite Index<sup>124</sup> value exhibited patterns of volatile behavior that appeared to correspond with the three LCI change trends discussed in Chapter 1. For Period I, unlike many low fiscal capacity localities, the LCI<sub>Hampton</sub> increased five percent, which is not characteristic of the near zero change of Balanced Change. However, the relatively higher Local Net Biennial Change Rate (22.318% for Hampton versus 16.810% for the State) may be a function of the extremely small size of the Hampton Local indicator bases, rather than a true large dollar amount increase.

Divergent Change appeared to occur in Periods II and III in which the Hampton County LCI declined (-9.332% and -6.999%, respectively). As the LCI declined the Percentage of Change attributable to Local and State factors became more balanced, from 57.357% and 42.643% to 50.610% and 49.390%.

Beginning a Period earlier than in many other jurisdictions, the third trend, Convergent Change, appeared to emerge in Periods VI - VI during which the LCI increased from 1.699% to 4.230. In Period VI, the TPV/ADM and TPV/POP Local to State Ratios exhibited enhanced change, while three other Local to State Ratios exhibited incompletely dampened change, and a fourth exhibited completely dampened change. Throughout the Convergent Change Trend, the Local Percentage of LCI Change ranged from 60.967% to 64.500%.

Initially, it may appear that the ratio structure (through the dampening effects of the denominator on the numerator) inhibits LCI increases. In all but two of the thirty-six examples, the Local to State Ratio Net Biennial Change Rate was smaller than the Local Net Biennial Change Rate alone.<sup>125</sup>

For the Hampton City LCI calculation there are three significant concerns:

- the synthetic change rate effects due to decreasing ADM and/or POP,
- the negligible influence of small indicator and standardized indicator values on the large aggregate State Mean (denominator) Standardized Indicator values, and
- the subordination of Hampton City's independent fiscal capacity measurement to the rationalized structure of the LCI formula.

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<sup>124</sup> The Local Composite Index is the weighted sum of the Local to State Ratios. Recall that each Local to State Ratio is composed of the sum of the Local Net Biennial Change and the State Net Biennial Change.

<sup>125</sup> This pattern was exactly the same as Carroll County in which the only two Local Net Biennial Change Rates that were larger than their respective Local to State Ratio Net Biennial Change Rates. These two Local Rates were TPV/ADM and TPV/POP for Period VI.

TABLE 4.57. Local Composite Index Values, Net Biennial Change Rate, and Local and State Percentages, Hampton City, 1984-86 through 1996-98 Biennia

Period	LCI <sub>initial</sub>	LCI <sub>final</sub>	Net LCI Biennial Change Rate		Percentage of Change Attributable to Local Factors	Percentage of Change Attributable to State Factors
			$\frac{LCI_{final} - LCI_{initial}}{LCI_{initial}}$	% of LCI <sub>initial</sub>		
I 1984-86 to 1986-88	0.3810	0.4036	+0.0226	5.932 <sup>1</sup>	57.357	42.643
II 1986-88 to 1988-90	0.4036	0.4054	+0.0018	0.446 <sup>2</sup>	50.610	49.390
III 1988-90 to 1990-92	0.4054	0.3842	-0.0212	-5.229 <sup>2</sup>	42.914	57.086
IV 1990-92 to 1992-94	0.3842	0.3488	-0.0354	-9.214 <sup>3</sup>	60.967	39.033
V 1992-94 to 1994-96	0.3488	0.3372	-0.0116	-3.326 <sup>3</sup>	64.500	35.500
VI 1994-96 to 1996-98	0.3372	0.3274	-0.0098	-2.906 <sup>3</sup>	61.449	38.551

<sup>1</sup> Balanced Change - LCI Biennial Change Rate is approximately equally attributable to local and state factors.

<sup>2</sup> Divergent Change - Low fiscal capacity localities experienced decreases in their LCI values and high fiscal capacity localities experienced increases in their LCI values.

<sup>3</sup> Convergent Change - Low fiscal capacity localities experienced increases in their LCI values and high fiscal capacity experienced decreases in their LCI values.