How Accurately Does the Foundation Budget Reflect Spending and Staffing Levels in Rural Regional School Districts?

Executive Summary

The Department of Education's 2002 budget included a request from the legislature to look at the appropriateness of the foundation budget calculations as they pertain to spending and staffing issues in rural academic regional school districts.

According to the Department's definition, there are 17 districts in the Commonwealth that can be considered rural academic regionals. The characteristic that these districts share is that they serve relatively few students per square mile.

Our study looks at relevant financial and staffing data to determine whether these districts are spending more than average districts in the state because they (1) enroll relatively few students per square mile of district land area and (2) in some cases serve these students in more than one school.

The primary finding that this study makes is that rural regionals as a group do employ a higher percentage of teacher FTE's above foundation staffing levels than the average district in the state. Rural districts that operate more than one school need to employ more teachers than are assumed in their foundation budgets to sufficiently staff their classrooms. Regionals that operate only one school are not affected by dispersed student populations in the same way, but may employ more teachers to satisfy programmatic needs.

These staffing trends, however, are not increasing costs beyond state averages in regional districts that operate more than one school.

To summarize these and the other findings that this study makes about staffing levels and costs in rural districts:

- Changes in the application of the wage adjustment factor (WAF) since fiscal year 2001 are increasing foundation budgets for rural school districts.
- Net school spending (NSS) above foundation in the largest multi-school regionals does not exceed state averages.
- NSS is high in some regionals, but when ability to pay is considered, high-spending levels may only be adversely affecting a few districts.
- Rural regionals do employ more teachers than foundation budget assumptions. Geography may influence this staffing pattern in the largest regionals that operate more than one school, but in other rural districts local preferences are an important contributing factor.
- Rural regionals do not employ more principals than are assumed in their foundation budgets.
- Higher staffing levels in regionals that operate more than one school are not increasing costs above state averages because these districts pay their staff less than their wage-adjusted assumed salaries.

We also looked at enrollment trends in rural districts compared to the rest of the state and determine that:

- If enrollment continues to decline in rural regionals, particularly those that operate more than one school, it will likely necessitate changes to both enrollment and staffing patterns.

This study shows that higher than average spending in rural academic regional school districts can be offset by a number of factors, including ability to pay, application of the WAF, declining foundation enrollment, and lower teacher salaries. Even though the foundation budget for some multi-school regionals may not be reflective of actual staffing levels, especially those with lower abilities to pay, it is generally reflective of actual spending in these districts relative to state averages.

Though there is no evidence to suggest that additional financial supports need to be put in place specifically for rural regional school districts, there are clearly some rural regionals that are experiencing rising costs that have low abilities to pay. This alone, however, does not make them unique. There are certainly more than a few non-rural districts that are facing the same challenges. Addressing these issues needs to be a general focus as education reform moves forward.

How accurately does the Foundation Budget reflect Spending and Staffing Levels in Rural Regional School Districts?

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The department shall conduct a study. . . to determine the appropriateness of the calculations of foundation budget amounts in chapter 70 of the General Laws as they apply to rural regional school districts; provided further, that the study and report shall provide data and analysis to determine if the ratios and average costs assumed in chapter 70 calculations are reasonably attainable in rural regional districts and shall offer a set of guidelines, procedures and programs to address the problems identified, including cost projections of amounts believed to be sufficient to remedy deficiencies in such calculations and recommended mechanisms for the disbursement of such funds (MGL 2001, C. 177).

Background

Over the course of several months Department of Education staff met with school district representatives, legislative staff, and officials from the Governor's office to discuss the funding issues that were being raised by and about rural regional school districts (also referred to in this report as *regionals*). The question that these conversations centered around was whether these regionals are treated differently than other districts in the state under the foundation budget formula because they (1) enroll fewer students and (2) in some cases serve these students in more than one school.

There are 17 rural academic regional school districts in the Commonwealth, including districts in the western part of the state and the islands. These districts differ widely in enrollment, total land area, the number and type of schools that they operate, and the relative wealth of their member towns. The common characteristic that these districts share and what serves as the basis for classifying them as *rural* is that they serve relatively few students per square mile.

The purpose of this study is to determine whether this common characteristic—relatively few students per square mile—generates additional costs for these districts that are not fully accounted for in their foundation budgets. It will focus in particular on how closely the teacher staffing ratios mirror their actual staffing levels and how district spending on teachers stands relative to the teaching expense category in the foundation budget. Our goal is to determine whether staffing levels are driving up costs in these districts.

The impact that enrollment and geography has on staffing and costs may vary depending on whether the district operates a single school or more than one school. It makes sense that geography would have more influence on staffing in multi-school districts than it would in single school districts. Multi-school districts tend to cover larger areas and generally operate more than one elementary school, some of which can enroll fewer than 200 students in grades K-6. This can lead to classes with fewer than the 22 students assumed in the foundation budget. Geographic distance and the desire of member towns to host their own elementary schools can make it difficult to consolidate these students to save on staffing costs.

Regionals that operate only one school do not face the same problem with geography because their student populations are not dispersed. Students may still need to be transported over longer distances, but transportation costs are reimbursed by the state at as much as 100 percent in regional districts. This makes it difficult to assess the impact that enrollment has on regionals that operate only one school, but it could be that their enrollment is not sufficient to generate a foundation budget that reflects minimum staffing and programmatic needs.

Summary of Findings

Relying primarily on staffing and financial data from district End of Year Reports between 1995 and 2000, this study finds rural regionals as a group and in some cases individually employ a higher percentage of teacher FTE's above foundation than the average district in the state. When district size and organization are taken in to consideration, however, this trend is not increasing costs beyond state averages in the largest regional districts that operate more than one school. This is generally because higher staffing levels are offset by actual salaries that are lower than assumed salaries in these districts.

Districts that operate one school fall into two categories. Some of these districts do employ more staff and spend at levels well above foundation, but they have high abilities to pay, suggesting that local preferences are driving a significant share of their above foundation spending. There are a few single school districts that have relatively low abilities to pay and spending that has been high or grown substantially in recent years relative to foundation. In some cases this growth in spending relative to foundation can be explained by declining wage adjustment factors (WAF), which can reduce a district's foundation budget from one year to the next. Some of these districts also have sufficiently low salaries that they are not increasing their spending beyond foundation even though they employ more teachers.

To summarize these and the other findings that this study makes about staffing levels and costs in rural districts:

- Changes in the application of the WAF since fiscal year 2001 have increased foundation budgets for rural school districts.

- Net school spending (NSS) above foundation in the largest multi-school regionals does not exceed state averages.

- NSS is high in some regionals, but when ability to pay is considered, high-spending levels may only be adversely affecting a few districts.

- Rural regionals do employ more teachers than foundation budget assumptions. Geography may influence this staffing pattern in the largest regionals that operate more than one school, but in other rural districts local preferences are an important contributing factor.

- Rural regionals do not employ more principals than are assumed in their foundation budgets.

- Higher staffing levels in the largest regionals are not increasing costs above state averages because these districts pay their staff less than their wage-adjusted assumed salaries.

We also look at enrollment trends in rural districts compared to the rest of the state:

- If enrollment continues to decline in rural regionals, particularly those that operate more than one school, it will likely necessitate changes to both enrollment and staffing patterns.

This study yields no clear findings that would lead us to recommend a change in current policy. Consequently it does not include any cost projections or explore any corrective mechanisms.

Rural School Districts

Rural school districts in Massachusetts do not exist in the kind of isolation that they do in other states, but nonetheless there are regions where relatively few students reside. What makes these districts rural is that they draw relatively few students from the geographic areas that they serve.

For the purposes of this study we defined rural academic regional districts as those that had less than or equal to one third of the statewide average number of students per square mile based on fiscal year 2001 foundation enrollment. The average number of students per square mile in fiscal year 2001 was 51.54; so any academic regional district that enrolled less than 15.46 students per square mile is considered rural. Table 1 lists these districts along with grade span, enrollment, number of schools, square mileage, and population density. Only seven of these districts operate more than one school.

Table 1: Rural Regional School Districts

LEA	District	Grade Span	FY01 Foundation Enrollment	Schools	Square Mileage	Students Per Square Mile
620	BERLIN BOYLSTON	07-12	364	1	28.85	12.62
632	CHESTERFIELD GOSHEN	K-06	176	1	48.32	3.64
635	CENTRAL BERKSHIRE	K-12	2,365	7	212.26	11.14
662	FARMINGTON RIVER	P-12	294	1	88.28	3.33
670	FRONTIER	07-12	718	1	105.20	6.83
672	GATEWAY	K-12	1,678	7	204.59	8.20
683	HAMPSHIRE	07-12	868	1	129.54	6.70
685	HAWLEMONT	K-06	155	1	57.04	2.72
700	MARTHAS VINEYARD	09-12	797	1	93.18	8.55
715	MOUNT GREYLOCK	07-12	747	1	75.69	9.87
717	MOHAWK TRAIL	K-12	1,613	5	229.85	7.02
728	NEW SALEM WENDELL	P-06	171	1	76.69	2.23
750	PIONEER	K-12	1,118	5	112.92	9.90
755	RALPH C MAHAR	07-12	806	1	165.99	4.86
765	SOUTHERN BERKSHIRE	K-12	1,041	5	152.56	6.82
770	TANTASQUA	07-12	1,613	3	117.00	13.79
774	UPISLAND	K-08	471	2	52.06	9.05

Foundation Budget

How is the Foundation Budget Calculated

Each year a foundation budget is calculated for each school district, representing the minimum amount of funding which the district needs to provide an adequate education.

The district's needs are estimated in 18 different expense categories: teachers; support staff (guidance counselors, librarians, etc.); aides; principals; clerical staff; health care staff; central office staff; custodial staff; fringe benefits; expanded programs (to meet the needs of low-income students); professional development; athletics; extracurricular activities; utilities and ordinary maintenance; special education tuition; books and equipment; extraordinary maintenance (building repairs); and miscellaneous.

Chapter 70 also defines 12 enrollment categories: pre-school; half-time kindergarten; full-time kindergarten; elementary (grades 1-5); junior high/middle school (grades 6-8); high school (grades 9-12); special education in-school; special education tuitioned-out; bilingual; vocational; low income elementary (grades 1-8); and low income other.

The Chapter 70 program establishes a standard per pupil cost for each expense category and enrollment category. The standard costs are adjusted annually for inflation, based on the federal government's price deflator index for state and local government purchases. For FY03, this adjustment is 1.927 percent.

Each district's foundation budget is also adjusted to reflect the relative cost of labor in different parts of the state. Referred to as the wage adjustment factor (WAF), this index is calculated using community and labor market wage levels and applied to each of the salary categories in the foundation budget (see Table 2). The state average is benchmarked at 1.000. If a district's WAF is greater than 1.000, its foundation budget will be adjusted upward to reflect higher labor costs. Likewise if the WAF is less than 1.000, the factor will lower the foundation budget in line with less than average labor costs. Many rural districts have WAF's that are less than 1.000.

For the purpose of calculating salaries in the eight foundation budget staff categories there is an assumed number of students associated with each full time equivalency (FTE) staff member. These ratios, shown in Table 2, have remained unchanged since 1993.

Table 2: Foundation Budget Pupil per Staff Allotments

	Teaching	Support	Aides	Principals	Clerical	Health	Central	Custodial
Pre-School	44	138	167	667	364	1,000	1,000	334
Kindergarten-Half	44	138	167	667	364	1,000	1,000	334
Kindergarten-Full	22	69	83	333	182	500	500	167
Elementary	22	69	83	333	182	500	500	167
Junior/Middle	25	40	500	286	182	667	500	154
High School	17	238	1,250	286	182	667	500	159
Special Ed-In School	8	13	8		50		67	50
Spec Ed Tuition-Out					50		67	
Bilingual	15	69	83	333	182	500	500	123
Vocational	10	238	1,250	286	182	667	444	96
Low Income Elem	33							333
Low Income HS	33							333

One of the issues that rural regional districts point to is that the staff allowances in the foundation budget are set too low and are not sensitive to the fact that they operate smaller schools with smaller class sizes. If, for example, a rural district is operating elementary schools with average class sizes of less than 22 students, the number of assumed teacher FTE's in the district's foundation budget might be less than the actual number that the district employs. Even though there are fewer students in each school, unless the school adopts a multi-age approach there are likely to be teachers dedicated to each grade. The real question, however, is whether these staffing needs are being driven by a combination of geography and enrollment in multi-school regionals or by enrollment alone in districts that operate more than one school.

Foundation Budget per Pupil

One way to assess the adequacy of the foundation budget for rural school districts is to look at foundation budget per pupil figures. The size of a district's foundation budget is not only dependent on the number of students enrolled in the district, but also the mix of students. Districts with more vocational, bilingual, or low-income students will naturally have higher foundation budget per pupil numbers because of the higher cost associated with these students. The additional increment allotted for students enrolled in special needs programs, both in-district and out-of-district placements, does not have as much impact on these per pupil figures because the special needs allotments are based on assumed percentages that are the same for every district.

Rural regional districts tend not to have as many high cost students as other districts in the state. In fiscal year 2001 there were only 18 bilingual students enrolled in rural regional districts and only a few counted any vocational students in their foundation enrollment. The one enrollment category that did correlate with higher foundation budget per pupil figures among these districts in 2001 was low-income enrollment.

Table 3: Foundation Budget Per Pupil

LEA	DISTRICT	1995	1996	1997	1998	1999	2000	2001
620	BERLIN BOYLSTON	5,239	5,355	5,509	5,622	5,874	5,884	6,060
632	CHESTERFIELD GOSHEN	4,769	4,820	4,654	5,128	5,349	5,319	5,708
635	CENTRAL BERKSHIRE	5,330	5,417	5,544	5,701	5,893	5,911	6,131
662	FARMINGTON RIVER	4,791	4,900	4,924	5,023	5,373	5,396	5,731
670	FRONTIER	5,256	5,193	5,348	5,455	5,652	5,669	6,024
672	GATEWAY	5,301	5,456	5,610	5,815	6,018	6,006	6,297
683	HAMPSHIRE	4,837	4,960	5,082	5,221	5,436	5,429	5,787
685	HAWLEMONT	6,083	5,476	5,695	6,076	6,378	6,507	5,895
700	MARTHAS VINEYARD	5,330	5,167	5,616	5,725	6,058	6,283	6,486
715	MOUNT GREYLOCK	5,085	5,156	5,272	5,401	5,584	5,590	5,945
717	MOHAWK TRAIL	5,697	5,337	5,435	6,059	6,310	6,315	6,031
728	NEW SALEM WENDELL	5,767	5,758	5,712	6,001	6,228	6,321	6,580
750	PIONEER	5,136	5,236	5,409	5,466	5,683	5,681	5,989
755	RALPH C MAHAR	5,744	5,925	6,066	6,218	6,423	6,534	6,705
765	SOUTHERN BERKSHIRE	5,176	5,319	5,618	5,749	5,765	5,820	6,174
770	TANTASQUA	5,321	5,461	5,611	5,716	6,197	6,242	6,469
774	UPISLAND	4,749	4,871	4,961	5,088	5,307	5,307	5,626
	STATE AVERAGES	**5,772**	**5,920**	**6,048**	**6,209**	**6,442**	**6,465**	**6,700**

The foundation budget assigns a dollar increment to low-income students on top of the grade level amount that these students receive. In addition, if the percentage of low-income students from the host community within a regional (the town where the district's high school or elementary school is located) exceeds the state average, then the district's WAF is brought up to 1.000. Together these mechanisms increase the foundation budgets for districts that enroll low-income students.

Table 3 shows the foundation budget per pupil amounts for fiscal years 1995 through 2001. Hawlemont and Ralph C. Mahar are the only two districts that came close to or exceeded the state average in each of these years. Both districts were eligible for the WAF adjustment because they enrolled high percentages of low-income students. Mohawk and New Salem Wendell also enrolled higher than average percentages of low-income students over this period, but not to the same extent. The other districts fell short of the state average each year because they enrolled fewer high cost students.

Increases to the Wage Adjustment Factor

Over time the difference between rural regionals' per pupil foundation budgets and the state average will close as all districts with WAF's below 1.000 are brought up to 1.000. Beginning in fiscal year 2001 the difference between 1.000 and the WAF's of every district below 1.000 was closed by 25 percent. In 2002 the increment was 50 percent and in 2003 75 percent of the gap was closed. Table 4 shows how this phase-in along with the WAF adjustment for low-income students is increasing the foundation budgets for rural regional districts.

Table 4: Unadjusted and Adjusted Wage Adjustment Factors Fiscal Years 1999-2003

		1999	2000	2001	2002	2003
BERLIN BOYLSTON	Unadjusted	0.963	0.961	0.955	0.953	0.946
	Adjusted	0.963	0.961	0.966	0.977	0.987
CHESTERFIELD GOSHEN	Unadjusted	0.859	0.865	0.867	0.857	0.846
	Adjusted	0.859	0.865	0.900	0.929	0.962
CENTRAL BERKSHIRE	Unadjusted	0.951	0.955	0.945	0.932	0.923
	Adjusted	0.951	0.955	0.959	0.966	0.981
FARMINGTON RIVER	Unadjusted	0.876	0.875	0.874	0.873	0.865
	Adjusted	0.876	0.875	0.906	0.937	0.966
FRONTIER	Unadjusted	0.915	0.911	0.904	0.894	0.883
	Adjusted	0.915	0.911	0.928	0.947	0.971
GATEWAY	Unadjusted	0.928	0.924	0.921	0.913	0.900
	Adjusted	0.928	0.924	0.941	0.957	0.975
HAMPSHIRE	Unadjusted	0.859	0.865	0.867	0.857	0.846
	Adjusted	0.859	0.865	0.900	0.929	0.962
HAWLEMONT	Unadjusted	0.882	0.878	0.874	0.870	0.858
	Adjusted	1.000	1.000	0.906	1.000	1.000
MARTHAS VINEYARD	Unadjusted	0.897	0.899	0.898	0.893	0.880
	Adjusted	0.897	0.899	0.924	0.947	0.970
MOUNT GREYLOCK	Unadjusted	0.897	0.897	0.894	0.909	0.886
	Adjusted	0.897	0.897	0.921	0.955	0.972
MOHAWK TRAIL	Unadjusted	0.887	0.886	0.880	0.883	0.875
	Adjusted	1.000	1.000	0.910	1.000	1.000
NEW SALEM WENDELL	Unadjusted	0.911	0.908	0.900	0.890	0.878
	Adjusted	1.000	1.000	1.000	1.000	1.000
PIONEER	Unadjusted	0.908	0.904	0.898	0.888	0.874
	Adjusted	0.908	0.904	0.924	0.944	0.969
RALPH C MAHAR	Unadjusted	0.890	0.896	0.887	0.877	0.865
	Adjusted	1.000	1.000	1.000	1.000	1.000
SOUTHERN BERKSHIRE	Unadjusted	0.891	0.887	0.890	0.884	0.878
	Adjusted	0.891	0.887	0.918	0.942	0.970
TANTASQUA	Unadjusted	0.952	0.953	0.947	0.940	0.935
	Adjusted	0.952	0.953	0.960	0.970	0.984
UPISLAND	Unadjusted	0.897	0.899	0.898	0.893	0.880
	Adjusted	0.897	0.899	0.924	0.947	0.970

NSS Trends in Rural Districts

Ability to Pay

One way to measure the extent to which local preferences are influencing decisions to spend above foundation is to look at the relative ability to pay of school districts. There are a number of rural districts that can support high levels of spending from local sources because they enjoy high property wealth.

Table 5: 2001 Adjusted Equalized Property Value (AEQV) Per Pupil Percentages of the State Average

LEA	District	2001 AEQV per Pupil
620	BERLIN BOYLSTON	129.26%
632	CHESTERFIELD GOSHEN	55.45%
635	CENTRAL BERKSHIRE	57.51%
662	FARMINGTON RIVER	194.79%
670	FRONTIER	82.06%
672	GATEWAY	46.20%
683	HAMPSHIRE	59.95%
685	HAWLEMONT	41.69%
700	MARTHAS VINEYARD	410.49%
715	MOUNT GREYLOCK	94.14%
717	MOHAWK TRAIL	49.77%
728	NEW SALEM WENDELL	47.67%
750	PIONEER	54.36%
755	RALPH C MAHAR	29.73%
765	SOUTHERN BERKSHIRE	138.80%
770	TANTASQUA	53.32%
774	UPISLAND	589.60%

Table 5 lists each district's ability to pay based on income adjusted equalized property wealth per pupil as a percent of the state average. These figures are calculated for regional school districts by weighting each member town's EQV percent of the state average by its share of regional foundation enrollment and then summing these weighted figures to determine the district's ability pay.

NSS Trends

Net school spending (NSS) includes all of the operating expenses in a school district less transportation and capital costs. Looking at a district's actual NSS as a percentage of their foundation budget can indicate the level of effort that a district is making out of local resources to pay for schooling services, particularly in light of the district's relative ability to pay. Table 6 examines changes in actual NSS percent of foundation budget for 1994 through 2001.

Table 6: Actual NSS Percent of Foundation Fiscal Years 1994-2001

LEA	DISTRICT	1994	1995	1996	1997	1998	1999	2000	2001
620	BERLIN BOYLSTON	173.64%	167.06%	172.80%	166.35%	166.49%	164.56%	168.05%	191.80%
632	CHESTERFIELD GOSHEN	94.78%	107.87%	112.45%	127.59%	104.95%	123.75%	120.90%	135.55%
635	CENTRAL BERKSHIRE	96.74%	97.69%	100.28%	102.51%	103.27%	103.10%	109.20%	118.33%
662	FARMINGTON RIVER	133.40%	126.52%	114.05%	122.18%	126.09%	133.40%	143.34%	139.56%
670	FRONTIER	103.56%	109.38%	118.13%	119.14%	116.52%	124.13%	128.00%	138.63%
672	GATEWAY	97.41%	96.09%	96.62%	97.66%	102.19%	105.02%	116.32%	114.53%
683	HAMPSHIRE	112.70%	117.21%	110.25%	120.28%	117.61%	113.72%	128.59%	134.37%
685	HAWLEMONT	81.20%	90.42%	107.00%	104.82%	107.73%	99.75%	102.51%	125.03%
700	MARTHAS VINEYARD	211.24%	201.71%	216.66%	189.15%	187.07%	170.37%	165.81%	178.91%
715	MOUNT GREYLOCK	155.00%	152.23%	151.69%	145.11%	146.88%	145.17%	147.26%	143.86%
717	MOHAWK TRAIL	134.09%	99.10%	110.68%	115.32%	102.03%	102.40%	113.79%	129.51%
728	NEW SALEM WENDELL	90.77%	92.99%	92.07%	96.41%	96.45%	104.52%	117.38%	133.29%
750	PIONEER	102.60%	100.42%	96.66%	96.70%	102.32%	103.03%	111.14%	119.98%
755	RALPH C MAHAR	107.69%	119.04%	117.45%	117.36%	122.20%	129.04%	128.86%	129.30%
765	SOUTHERN BERKSHIRE	121.62%	122.86%	116.16%	127.37%	115.91%	130.97%	146.46%	133.53%
770	TANTASQUA	104.20%	108.08%	109.61%	108.93%	115.09%	104.51%	110.95%	112.44%
774	UPISLAND	0.00%	159.27%	149.17%	160.78%	147.21%	152.62%	185.36%	203.29%
	STATE AVERAGE	**99.31%**	**101.04%**	**102.63%**	**105.14%**	**107.37%**	**108.72%**	**113.84%**	**115.69%**

Between 1994 and 2001 the largest geographic districts that operate more than one school did not exceed state averages in terms of their NSS percentages. There are districts that are spending well in excess of foundation, but most of them are single school districts with relatively high abilities to pay. The few single school regionals that do not have high abilities to pay have seen their NSS percentages increase sharply in recent years due to WAF changes and decreases in their foundation budgets.

Besides Mohawk Trail and Southern Berkshire, the regional districts on this table that operate more than one school do not have NSS percentages that exceed state averages. Mohawk is a special case. It started out spending at 134 percent of foundation in 1994 yet that number fell dramatically in 1995 when the district fully incorporated Buckland, Shelburne, Ashfield, and Plainfield as K-12 members. This expansion increased the size of the district's foundation budget and decreased its NSS percentage. Mohawk's percentage fluctuated slightly above the state average in 1996 and 1997, but dropped below in the three subsequent years. The sharp increase between 2000 and 2001 was caused by a readjustment in the district's WAF at the same time that district spending increased. Between 2000 and 2001 the districts WAF dropped from 1.000 to 0.910 because the percentage of low-income students in Buckland fell below the state average. This decreased their foundation budget at the same time that the district's local contribution increased by 14 percent or $684,000, dramatically increasing their actual position relative to foundation.

Among the other multi-school regions, Southern Berkshire spent at 188.33 percent of foundation in fiscal year 2001, Gateway was at 114.53 percent, Central Berkshire was at 118.33 percent,

Pioneer was at 119.98 percent, and Tantasqua was at 112.44 percent. None of these districts experienced any significant spike in their spending relative to foundation between fiscal years 1994 and 2001. With the exception of Southern Berkshire, all of these districts were reasonably positioned with respect to the state average between 1994 and 2001. Southern Berkshire has consistently spent well above foundation and well above the statewide average since 1994, but the towns that belong to Southern Berkshire have relatively high abilities to pay. Collectively, their AEQV per pupil percent of the state average is 138.80 percent, indicating that local preferences are influencing this high level of spending.

Berlin Boylston, Farmington River, Martha's Vineyard, Mount Greylock, and UpIsland are regionals that operate one or two schools that also have high NSS percentages and high abilities to pay. UpIsland operates two schools, but it is geographically small compared with the other multi-school regionals. Since they do not cover large areas and are consolidating their spending in one or two schools, geography is not prompting these districts to spend at such high levels. It is likely that local preferences are driving a significant share of this spending. Looking at their 2001 AEQV percentages, the lowest was Mount Greylock at 94.14 percent. Berlin Boylston was at 129.26 percent, Farmington River at 194.79 percent, and Martha's Vineyard and UpIsland were two of the wealthiest districts in the state at 410.49 percent and 589.60 percent respectively.

The second group of single school regionals has seen their NSS percentages increase above state averages, particularly in recent years. Chesterfield Goshen, Hampshire, Hawlemont, and New Salem Wendell stayed at or near the state average NSS percentage for most of the years between 1994 and 2001 and only in recent years has their spending sharply exceeded state averages. The increase in Hawlemont's NSS percentage can be explained by a change in the district's WAF between 2000 and 2001. In fiscal year 2000 the number of low income students living in Charlemont, the host town, exceeded the state average so the district's WAF was set at 1.000, as it was in fiscal years 1998 and 1999. When the district's WAF fell from 1.000 to 0.906 between 2000 and 2001 due to declining low-income enrollment its foundation budget decreased by $140,000. This caused the district's NSS percent to jump in comparison to the state average.

New Salem Wendell's foundation enrollment declined between 2000 and 2001 causing its foundation budget to decrease. At the same time the district's required NSS (required local contribution plus state aid) was increasing. When the district added the above-minimum assessment to its required contribution, which grew by 9 percent or $30,000 from the year before, their NSS percentage increased well above the state average. Chesterfield Goshen's foundation budget also declined from 1998 to 1999, which led to the first significant increase in the district's NSS. Then between 2000 and 2001 the district's local contribution increased by 33 percent or $180,000, causing its NSS percentage to increase once more.

Hampshire's NSS percentage has consistently been above state averages, reaching its highest point in 2001. Over this period there have been three instances where the district's local contribution, above minimum plus required, grew significantly. These high growth years coincided with the significant increases in the district's NSS percentage. Between 1996 and 1997 Hampshire's local contribution increased by 16 percent or $453,000. This was followed-up by a 12 percent increase between 1999 and 2000 amounting to $411,000 and again by a 15 percent increase or $607,000 between 2000 and 2001.

Mohawk and Chesterfield Goshen have seen their NSS percentages increase because their foundation budgets decreased. At the same time, however, both of these districts saw substantial increases in their local contributions. Hampshire's high NSS percentages have been driven almost entirely by significant growth in the district's local contribution. Given these districts' relative ability to pay, this may be cause for concern, particularly if their NSS continues to grow beyond their foundation budgets.

Staffing Levels

Comparison of Actual and Foundation Staffing Levels

Teacher salaries comprise such a large share of NSS that they could very well be the cause of higher than average NSS percentages in these districts. Of course, staffing might not necessarily need to be higher than average for staffing levels to be an important issue. It is likely that multi-school regionals whose NSS percentages have stayed closer to or fallen below state averages need to employ more teachers than are assumed in their foundation budgets because their students are dispersed. This section also looks briefly at actual versus assumed staffing levels for school principals.

Instructional spending makes up the majority of NSS in school districts and teacher salaries constitute most of these expenditures. In fiscal year 2000 instructional costs accounted for 67 percent of actual NSS and teacher's salaries were 69 percent of total instructional spending. Spending on teacher salaries can have a dramatic impact on where districts are spending in relation to their foundation budgets.

The foundation budget is built so that for every student that a district has in each of the grade level and programmatic categories, there is a corresponding number of staff FTE's. Table 2 shows these student to staff ratios. By looking at the teaching and principal portions of the foundation budget it is possible to determine the number of assumed FTE's for each district by multiplying grade level and programmatic enrollment by the staff per student ratios, which are determined by dividing 1.0 by the figures in Table 2.

These assumed FTE's can be compared with the actual number of FTE's reported on each district's annual Pupil and Financial Report. Instructional supervisors, department chair people and supervisory teachers, are reported separately on the End of Year Report whereas in the foundation budget calculations these staff categories are combined in teaching. In order to compare the assumed FTE's with the actual FTE's the number of teachers and instructional supervisors reported to the state need to be combined.

Table 7: Comparison of Assumed and Actual Teacher FTE Staffing Levels

	Rural			Statewide		
	Assumed FTE's	Actual FTE's	Percent Difference	Assumed FTE's	Actual FTE's	Percent Difference
1995	751.9	1,057.3	40.61%	52,277.5	60,352.8	15.45%
1996	853.8	1,087.8	27.40%	54,170.9	62,700.6	15.75%
1997	872.6	1,119.7	28.31%	55,262.5	64,927.3	17.49%
1998	893.3	1,146.1	28.30%	56,691.3	67,625.4	19.29%
1999	905.9	1,161.0	28.16%	57,590.3	69,737.3	21.09%
2000	911.2	1,171.3	28.54%	58,702.8	71,686.2	22.12%

Table 8: Comparison of Assumed and Actual Principal FTE Staffing Levels

	Rural			Statewide		
	Assumed FTE's	Actual FTE's	Percent Difference	Assumed FTE's	Actual FTE's	Percent Difference
1995	42.3	48.6	14.95%	2,717.9	2,270.8	-16.45%
1996	48.0	48.9	1.92%	2,792.8	2,376.0	-14.93%
1997	48.7	44.1	-9.41%	2,855.5	2,452.8	-14.10%
1998	49.7	49.5	-0.50%	2,929.4	2,505.9	-14.46%
1999	50.5	49.8	-1.40%	2,985.3	3,289.4	10.19%
2000	50.7	51.6	1.86%	3,045.1	2,870.2	-5.74%

Tables 7 and 8 look at the difference between assumed and actual FTE's for rural regionals compared to the rest of the state as they pertain to teachers and principals. As far as teachers are concerned, the difference between assumed and actual teachers in rural regionals has been as high as 40 percent and consistently at 28 percent between 1995 and 2000. The difference between assumed and actual staffing levels statewide has not been as great, but it has grown since 1995. On the principal side, the difference between actual and assumed FTE's has been quite small or even negative in most years since 1995. Principal staffing levels in rural districts and across the state are not an issue, at least in comparison to the foundation budget.

Rural districts do staff more teachers than the foundation budget assumes and at a greater distance above foundation than the state average. At least in 2000, however, the comparison to the state has improved as district staffing levels across the board have increased beyond foundation.

Table 9 compares the assumed and actual teacher staffing levels in the seven rural regional districts that operate more than one school. In terms of magnitude and percentage Mohawk, Pioneer, and Tantasqua stand out as the three districts that have consistently exceeded the state average in terms of the number of teachers that they employ above the number assumed in their foundation budgets. We are more interested in these districts than the other districts on this table because they also have low abilities to pay.

Table 9: Assumed versus Actual Teacher Staffing Levels Multi-School Districts

		1995	1996	1997	1998	1999	2000
CENTRAL BERKSHIRE	Assumed	134.5	138.4	137.5	141.1	143.8	141.9
	Actual	146.9	153.6	158.1	162.1	161.0	161.4
	Difference	12.4	15.2	20.6	21.0	17.2	19.5
	Percent	9.19%	10.98%	14.97%	14.86%	11.98%	13.74%
GATEWAY	Assumed	101.8	106.2	106.4	107.8	107.3	104.3
	Actual	118.0	123.0	132.0	126.5	126.3	123.5
	Difference	16.2	16.8	25.6	18.7	19.0	19.2
	Percent	15.94%	15.86%	24.11%	17.29%	17.74%	18.45%
MOHAWK TRAIL	Assumed	45.1	96.0	97.1	102.1	102.3	97.7
	Actual	122.6	121.6	135.3	134.1	135.7	131.3
	Difference	77.5	25.6	38.2	32.0	33.4	33.6
	Percent	171.61%	26.70%	39.27%	31.36%	32.66%	34.44%
PIONEER	Assumed	59.8	65.4	67.9	64.7	66.4	67.0
	Actual	78	90.1	88.9	97.9	98.7	86.9
	Difference	18.2	24.7	21.0	33.2	32.3	19.9
	Percent	30.38%	37.78%	30.99%	51.39%	48.54%	29.64%
SOUTHERN BERKSHIRE	Assumed	63.4	68.4	68.5	68.1	62.5	62.6
	Actual	70.4	72.4	77.1	77.2	78.0	79.6
	Difference	7.0	4.0	8.6	9.1	15.5	17.0
	Percent	11.09%	5.84%	12.62%	13.38%	24.72%	27.12%
TANTASQUA	Assumed	89.4	91.8	96.5	95.9	100.6	103.2
	Actual	111.2	114.2	115.4	122.3	120.3	130.5
	Difference	21.8	22.4	18.9	26.4	19.7	27.3
	Percent	24.43%	24.33%	19.60%	27.50%	19.59%	26.50%
UPISLAND	Assumed	0.0	21.6	22.6	25.5	25.1	24.0
	Actual	38.6	42.9	38.1	43.8	42.0	46.5
	Difference	38.6	21.3	15.5	18.3	16.9	22.5
	Percent	NA	98.78%	68.86%	71.60%	67.01%	93.41%

Table 10 looks at the same issue, assumed versus actual FTE teachers, in rural districts that operate only one school. Hampshire is the district with the lowest ability to pay and the highest magnitude difference between assumed and actual FTE's in fiscal year 2000, 25.9 teachers in excess of foundation. For Hampshire, however, the difference was not always that large. Between 1996 and 1999 the difference was less than 20 and as low as 9.4, increasing sharply between 1999 and 2000 when the district hired 10 additional teachers. The other districts with relatively low abilities to pay, Chesterfield Goshen, Hawlemont, and New Salem Wendell, have seen only small differences between actual and assumed FTE's. In Mahar's case, the difference has declined steadily over time as the district's foundation budget has increased and staffing levels have declined.

Table 10: Assumed versus Actual Teacher Staffing Levels Single School Districts

		1995	1996	1997	1998	1999	2000
BERLIN BOYLSTON	Assumed	17.7	18.6	19.4	19.3	20.0	20.3
	Actual	31.8	32.4	34.4	33.6	34.7	37
	Difference	14.1	13.8	15.0	14.3	14.7	16.7
	Percent	79.37%	74.55%	77.50%	74.46%	73.66%	81.92%
CHESTERFIELD GOSHEN	Assumed	10.5	9.6	8.6	9.6	8.9	9.7
	Actual	17	17.7	13.4	12.4	13.9	14.9
	Difference	6.5	8.1	4.8	2.8	5.0	5.2
	Percent	62.62%	83.94%	55.32%	29.68%	56.07%	53.98%
FARMINGTON RIVER	Assumed	17.0	19.7	18.3	17.3	16.7	16.4
	Actual	18.1	17.8	17.8	18.0	18.2	14.5
	Difference	1.1	-1.9	-0.5	0.7	1.5	-1.9
	Percent	6.31%	-9.53%	-2.70%	4.32%	8.85%	-11.52%
FRONTIER	Assumed	36.0	35.2	36.4	39.6	40.0	42.6
	Actual	47.0	46.8	48.3	51.4	54.9	57.2
	Difference	11.0	11.6	11.9	11.8	14.9	14.6
	Percent	30.41%	33.12%	32.57%	29.81%	37.32%	34.17%
HAMPSHIRE	Assumed	39.5	43.7	44.5	46.9	51.2	49.3
	Actual	60.9	59.9	61.4	56.3	65.2	75.2
	Difference	21.4	16.2	16.9	9.4	14.0	25.9
	Percent	54.17%	36.97%	38.01%	20.04%	27.44%	52.49%
HAWLEMONT	Assumed	10.3	9.7	10.3	9.3	10.2	9.8
	Actual	14.4	14.1	13.7	16	11	12.4
	Difference	4.1	4.4	3.4	6.7	0.8	2.6
	Percent	40.13%	44.73%	33.28%	71.78%	7.61%	26.19%
MARTHAS VINEYARD	Assumed	35.0	33.7	39.9	43.3	49.3	57.2
	Actual	53.1	55.6	58.2	60.2	65.6	69.1
	Difference	18.1	21.9	18.3	16.9	16.3	11.9
	Percent	51.71%	64.94%	45.87%	38.91%	33.14%	20.84%
MOUNT GREYLOCK	Assumed	35.1	36.4	37.7	39.9	41.9	43.5
	Actual	52.2	51.6	52.8	57.5	58.9	59.8
	Difference	17.1	15.2	15.1	17.6	17.0	16.3
	Percent	48.77%	41.66%	40.09%	44.14%	40.56%	37.45%
NEW SALEM WENDELL	Assumed	10.7	11.4	11.2	11.6	10.6	11.3
	Actual	14.5	14.5	14.5	16	15.6	16.9
	Difference	3.8	3.1	3.3	4.4	5.0	5.6
	Percent	36.01%	27.54%	29.03%	38.43%	47.30%	49.69%
RALPH C MAHAR	Assumed	46.1	48.1	49.9	51.4	49.1	50.4
	Actual	62.6	59.6	60.3	60.8	61	54.6
	Difference	16.5	11.5	10.4	9.4	11.9	4.2
	Percent	35.71%	24.03%	20.82%	18.35%	24.26%	8.40%

Spending on Teachers

It is important to look at the relationship between teacher FTE's and spending on teachers in order to assess the monetary impact of higher than average staffing levels. This next section looks at the position of districts relative to their foundation budget in the teaching category, which includes salaries for both teachers and instructional supervisors. Even though a district

might exceed assumed staffing levels, it might not exceed the teaching portion of its foundation budget because it pays its staff on average less than the assumed wage adjusted foundation salary.

Since 1996 there has been a summary table on the End of Year Report that translates district spending from the Department's account structure into foundation budget terms. This table is a useful tool for comparing actual spending with assumed spending across each of the eighteen foundation budget expense categories. Table 11 compares the foundation budget with the actual spending in the teaching category for rural regional districts and the state for fiscal years 1996 to 2000. What it shows is that rural districts as a group exceed the state in terms their actual spending on teaching salaries as a percentage of foundation.

Table 11: Comparison of Rural and Statewide Teaching Percent of Foundation

	Rural Regional			Statewide		
	Teaching Salaries Foundation	Teaching Salaries Actual	Actual Percent of Foundation	Teaching Salaries Foundation	Teaching Salaries Actual	Actual Percent of Foundation
1996	31,301,855	42,652,253	136.26%	2,150,482,771	2,620,848,197	121.87%
1997	32,929,104	44,784,403	136.00%	2,253,003,373	2,777,012,425	123.26%
1998	34,752,037	47,212,076	135.85%	2,363,730,541	2,952,538,470	124.91%
1999	36,726,014	48,514,815	132.10%	2,495,726,234	3,112,941,176	124.73%
2000	37,049,323	50,922,323	137.44%	2,552,852,469	3,295,169,910	129.08%

Table 12: Teaching Percent of Foundation 1996-2000

LEA	District	1996	1997	1998	1999	2000
620	BERLIN BOYLSTON	192.17%	181.44%	171.62%	161.08%	151.05%
632	CHESTERFIELD GOSHEN	165.47%	155.16%	134.16%	143.07%	137.97%
635	CENTRAL BERKSHIRE	126.77%	130.43%	132.01%	128.79%	131.40%
662	FARMINGTON RIVER	97.33%	108.74%	115.54%	104.56%	100.12%
670	FRONTIER	132.88%	133.63%	130.19%	131.40%	131.62%
672	GATEWAY	114.47%	111.77%	111.53%	111.38%	116.55%
683	HAMPSHIRE	144.55%	142.81%	143.48%	127.72%	145.06%
685	HAWLEMONT	123.04%	121.85%	116.29%	82.57%	88.97%
700	MARTHAS VINEYARD	202.20%	175.21%	173.09%	162.40%	150.61%
715	MOUNT GREYLOCK	191.28%	185.97%	181.37%	175.49%	176.25%
717	MOHAWK TRAIL	129.34%	137.12%	120.74%	109.08%	129.52%
728	NEW SALEM WENDELL	97.35%	100.17%	103.00%	122.43%	125.93%
750	PIONEER	117.53%	116.07%	127.80%	120.94%	126.99%
755	RALPH C MAHAR	124.03%	116.06%	117.87%	123.25%	114.75%
765	SOUTHERN BERKSHIRE	132.14%	133.43%	139.02%	149.56%	154.46%
770	TANTASQUA	144.01%	145.35%	151.80%	142.79%	149.16%
774	UPISLAND	202.43%	200.08%	194.38%	202.98%	223.90%
	STATE TOTALS	**121.87%**	**123.26%**	**124.91%**	**124.73%**	**129.08%**

A closer look at where each individual district stands relative to foundation is available in Table 9. The districts that came close to or fell consistently below the state average were Central Berkshire, Farmington River, Gateway, Hawlemont, New Salem Wendell, and Ralph C. Mahar. Pioneer was consistently below the state average in every year with the exception of 1998.

Mohawk Trail exceeded the state average in 1996 and 1997, fell below in 1998 and 1999, and essentially mirrored the state average in 2000.

Nine out of the seventeen districts exceeded the state average in terms of their actual teaching expenditures as a percent of the teaching portion of their foundation budgets. Of this group there are three that raise some concerns because they have low abilities to pay. These districts are Chesterfield Goshen, Hampshire, and Tantasqua. We need to look at what these and the other districts are paying their teachers on average in order to get a better sense of what is driving this spending.

Table 13 shows what these and the other rural districts are paying their teachers on average compared to the wage adjusted salary that is assumed in their foundation budgets. The teacher salary assumed in the foundation budget is a function of the number of students associated with 1.0 teacher FTE's at each grade level multiplied by the corresponding per pupil rate. The assumed teacher salary was set at $38,000 in 1993 and increased by inflation each subsequent year. In order to be consistent with the foundation budget the assumed salary needs to be adjusted by each district's WAF. The Department calculates average teacher salaries based on End of Year report data each year, and these averages provide a reasonable basis of comparison with the wage adjusted foundation budget salaries.

Tantasqua, Hampshire, and to a lesser degree Chesterfield Goshen are three districts that are spending in excess of foundation compared to state averages for teachers despite relatively low abilities to pay. Tantasqua is the only district in this grouping that operates more than one school. Tantasqua spent at 149.16 percent of foundation in the teaching expense category in 2000 yet in the same year the district's NSS percentage was 110.95 percent, which was below the state average. This means that Tantasqua spent below foundation in some of the other expense categories and funded a higher level of spending on teachers, the net effect being that more money spent on teachers did not push the district's NSS above the state average. Tantasqua employed 27 more teachers in 2000 than were assumed in its foundation budget, but staffing levels alone did not drive this spending. Looking at Table 13 the district also paid its teachers on average $7,702 above its wage adjusted assumed foundation salary. So the combination of more staff and higher salaries resulted in a higher-than-average spending percentage in the teaching category.

With the exception of 1995, Hampshire's teaching percentage has exceeded the state average by around 20 percent. In recent years Hampshire has seen its actual NSS increase well above its required NSS, and spending on teachers is one the primary factors driving these increases. In 2000 Hampshire's actual NSS percent of foundation was 128.59 percent, the state average that year was 113.84 percent and its required NSS percent was 104.00. The difference between required and actual NSS can be attributed to average teacher salaries that exceeded foundation assumed salaries by as much as $6,800. Actual salaries fell below assumed salaries in fiscal year 2000, but the declining district average was caused by the fact that the number of teachers that the district employed increased between 1998 and 2000 (see Table 10).

Chesterfield Goshen is a small elementary district like Hawlemont that has seen its teaching percent of foundation decline since 1996 yet still remain above state averages. Spending from

local sources has fluctuated between positive and negative growth from year to year, the net effect being that from 1995 to 2001 the district's local contributions have only increased by 11 percent. Growth in local spending was also offset by increasing state aid, grew by 87 percent, from 341,801 to 646,949, between 1995 and 2001, suggesting that state aid contributed to these higher than average percentages. The districts staffing in excess of foundation did decrease between 1995 and 2000 and in only two of these six years did the district pay its teachers more than the assumed foundation salary. In most years the district's average salary has been well below its wage adjusted assumed salary.

Looking at a few other districts, Central Berkshire and Farmington River have consistently paid their teachers more than their foundation assumed salaries. Because these two districts only employed slightly more staff than was assumed in their foundation budgets their teaching percentages have stayed close to the state average. Gateway, Hawlemont, Mohawk, New Salem Wendell, Pioneer and Ralph C. Mahar all pay their teachers less than their assumed salaries, which has meant that staffing is not increasing costs above state averages even though these districts do employ more teachers, at least in percentage terms if not in actual numbers of individuals.

Tantasqua, Hampshire, and Chesterfield Goshen are three districts where the combination of staffing and salaries are increasing costs. Tantasqua is a multi-school regional yet staffing levels are not the reason why the district is spending so much more on its teachers. The district's salaries are driving this trend. Foundation budgets in other multi-school regionals are less reflective of actual staffing levels, but they are no less reflective of spending than they are for the average district in the state.

Table 13: Comparison of Wage Adjusted Assumed and Actual Average Teacher Salaries

District		1995	1996	1997	1998	1999	2000
BERLIN BOYLSTON	Assumed	37,704	38,351	39,233	39,972	41,754	41,813
	Actual	42,196	41,551	39,486	37,803	37,667	33,980
	Difference	4,492	3,200	253	-2,169	-4,087	-7,833
CHESTERFIELD GOSHEN	Assumed	33,731	34,209	35,082	36,008	37,245	37,636
	Actual	32,411	30,735	35,451	37,771	34,723	35,352
	Difference	-1,320	-3,474	369	1,763	-2,522	-2,284
CENTRAL BERKSHIRE	Assumed	37,548	38,147	38,867	39,846	41,233	41,552
	Actual	42,378	43,892	44,724	46,417	48,325	49,041
	Difference	4,830	5,745	5,857	6,571	7,092	7,489
FARMINGTON RIVER	Assumed	33,302	33,811	34,675	35,382	37,982	38,071
	Actual	34,159	37,867	38,978	40,137	36,451	43,483
	Difference	857	4,056	4,303	4,755	-1,531	5,412
FRONTIER	Assumed	36,964	36,593	37,971	38,219	39,673	39,638
	Actual	34,692	36,624	38,261	39,096	38,502	39,597
	Difference	-2,272	31	290	877	-1,171	-41
GATEWAY	Assumed	36,224	37,116	38,053	38,928	40,236	40,203
	Actual	35,653	36,145	34,155	36,762	37,835	39,721
	Difference	-571	-971	-3,898	-2,166	-2,401	-482
HAMPSHIRE	Assumed	33,731	34,209	35,082	36,008	37,245	37,636
	Actual	35,779	37,178	37,634	42,816	38,305	37,021
	Difference	2,048	2,969	2,552	6,808	1,060	-615
HAWLEMONT	Assumed	38,950	35,961	36,994	41,724	43,358	43,510
	Actual	28,198	30,649	33,392	28,253	33,742	30,646
	Difference	-10,752	-5,312	-3,602	-13,471	-9,616	-12,864
MARTHAS VINEYARD	Assumed	35,094	35,762	36,547	37,510	38,892	39,115
	Actual	43,291	43,152	43,479	46,195	46,802	47,902
	Difference	8,197	7,390	6,932	8,685	7,910	8,787
MOUNT GREYLOCK	Assumed	35,483	35,961	36,832	37,677	38,892	39,028
	Actual	47,260	48,453	48,973	47,835	48,850	49,779
	Difference	11,777	12,492	12,141	10,158	9,958	10,751
MOHAWK TRAIL	Assumed	38,950	35,961	36,994	41,724	43,358	43,510
	Actual	33,482	36,329	35,963	38,080	36,089	42,323
	Difference	-5,468	368	-1,031	-3,644	-7,269	-1,187
NEW SALEM WENDELL	Assumed	38,950	39,824	40,698	41,724	43,358	43,510
	Actual	27,215	30,298	32,835	31,881	36,659	37,378
	Difference	-11,735	-9,526	-7,863	-9,843	-6,699	-6,132
PIONEER	Assumed	35,561	36,081	37,157	37,718	39,369	39,333
	Actual	34,965	29,444	31,369	30,080	32,683	38,564
	Difference	-596	-6,637	-5,788	-7,638	-6,686	-769
RALPH C MAHAR	Assumed	38,950	39,824	40,698	41,724	43,358	43,510
	Actual	37,055	39,644	38,996	41,376	42,830	46,731
	Difference	-1,895	-180	-1,702	-348	-528	3,221
SOUTHERN BERKSHIRE	Assumed	35,289	36,001	36,872	37,677	38,632	38,593
	Actual	42,273	44,428	43,519	46,046	46,130	46,795
	Difference	6,984	8,427	6,647	8,369	7,498	8,202
TANTASQUA	Assumed	35,406	36,081	36,791	37,802	41,277	41,465
	Actual	42,447	48,185	45,288	45,780	49,827	49,167
	Difference	7,041	12,104	8,497	7,978	8,550	7,702

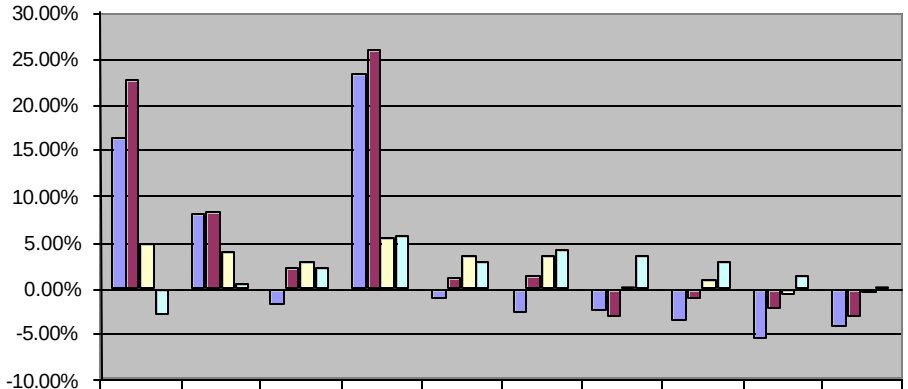
UPISLAND	Assumed	35,094	35,762	36,547	37,510	38,892	39,115
	Actual	36,740	36,329	43,297	42,429	47,105	45,261
	Difference	1,646	567	6,750	4,919	8,213	6,146

Enrollment Trends

Rural regional districts are losing enrollment, which is a trend that, if it continues, will prompt these districts to make decisions about how small a school can get before it is too small.

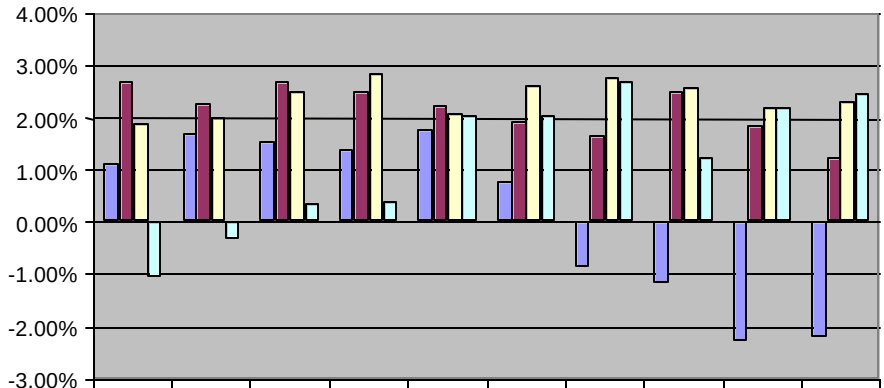
Figure 1 shows that since 1996 rural districts have seen negative growth in the early elementary grades and this trend has progressed into the upper elementary and middle school grades in more recent years.

Figure 1: Rural Regional School District Annual Growth Percentages in ISR October 1 Enrollment Fiscal Years 1992 to 2001



	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
K-3	16.34%	8.22%	-1.74%	23.52%	-1.21%	-2.74%	-2.61%	-3.55%	-5.46%	-4.24%
4-6	22.68%	8.37%	2.43%	26.09%	1.17%	1.36%	-3.26%	-1.22%	-2.39%	-3.19%
7-9	4.74%	3.94%	2.98%	5.55%	3.49%	3.43%	0.14%	0.76%	-0.83%	-0.58%
10-12	-2.84%	0.56%	2.38%	5.76%	2.84%	4.27%	3.43%	2.86%	1.48%	0.18%

Figure 2: Statewide Annual Growth Percentages in ISR October 1 Enrollment Fiscal Years 1992 to 2001



	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
K-3	1.14%	1.69%	1.56%	1.39%	1.80%	0.76%	-0.86%	-1.20%	-2.27%	-2.22%
4-6	2.68%	2.28%	2.72%	2.47%	2.21%	1.93%	1.67%	2.51%	1.84%	1.22%
7-9	1.89%	2.03%	2.52%	2.83%	2.09%	2.63%	2.77%	2.56%	2.17%	2.31%
10-12	-1.06%	-0.31%	0.36%	0.40%	2.06%	2.05%	2.66%	1.22%	2.18%	2.45%

Statewide enrollment growth in the early elementary grades only began to turn negative in 1998 and has not fallen to the level of decline currently being experienced in rural regional districts. Since 1996 enrollment growth in the other grade categories has been consistently at or near two percent each year with only a few exceptions.

Enrollment trends in Mohawk Trail Regional School District give some indication of what these larger enrollment changes might mean for other rural regional districts. Mohawk is the largest academic regional district in the state, incorporating towns in the northern part of Franklin County. There are five member towns, Ashfield, Buckland, Charlemont, Colrain, Hawley, Heath, Plainfield, and Shelburne. Hawley and Charlemont only send their students to Mohawk for grades 7-12. Rowe is not a member of Mohawk, but sends its students to the middle and high school under school choice.

Ashfield, Colrain, and Heath have their own elementary schools and Buckland and Shelburne share an elementary school that is centrally located near the border of the two towns. Buckland, Colrain, and Heath serve students in grades pre-school through 6, while Sanderson Academy (Ashfield) is a K-6 elementary. Rowe and Hawlemont (Hawley and Charlemont) each operate their own elementary schools. Table 10 provides some detailed enrollment trends for all of the schools that send students to Mohawk.

Between 1995 and 2001 all of the elementary schools lost enrollment with the exception of Heath, which held steady at around 100 students. Enrollment at Mohawk Trail High School, which serves students in grades 7 through 12, grew between 1995 and 1996 and then leveled off at 830 students. Given the overall enrollment declines in the elementary grades, however, it is likely that the high school will begin to see enrollment declines in the near future.

Over time declining enrollment may not make it possible or practical to operate these small elementary schools. Some effort may need to be made to combine elementary schools in order to increase class sizes. Of course consideration will need to be given to geographic location and driving distances.

Table 14: Rowe, Hawlemont and Mohawk Trail School Enrollment

District	School	Grade	1995	1996	1997	1998	1999	2000	2001	Change
ROWE	ROWE	K-3	60	51	28	32	24	24	22	-38
		4-6	51	44	17	17	21	18	25	-26
		Totals	**111**	**95**	**45**	**49**	**45**	**42**	**47**	**-64**
HAWLEMONT	HAWLEMONT	K-3	110	105	77	82	70	63	75	-35
		4-6	67	89	79	87	78	70	65	-2
		Totals	**177**	**194**	**156**	**169**	**148**	**133**	**140**	**-37**
MOHAWK	BUCKLAND	K-3	209	194	190	168	161	168	154	-55
		4-6	160	173	165	160	148	141	141	-19
		Totals	**369**	**367**	**355**	**328**	**309**	**309**	**295**	**-74**
	COLRAIN CENTRAL	K-3	98	114	102	112	97	95	86	-12
		4-6	94	79	77	72	90	81	92	-2
		Totals	**192**	**193**	**179**	**184**	**187**	**176**	**178**	**-14**
	HEATH	K-3			63	62	57	62	56	-7
		4-6			43	49	53	50	52	9
		Totals			**106**	**111**	**110**	**112**	**108**	**2**
	SANDERSON	K-3	135	131	129	136	119	117	108	-27
		4-6	92	88	88	96	96	102	98	6
		Totals	**227**	**219**	**217**	**232**	**215**	**219**	**206**	**-21**
	MOHAWK TRAIL	7-9	443	481	505	478	467	467	454	11
		10-12	346	349	362	354	373	358	376	30
		Totals	**789**	**830**	**867**	**832**	**840**	**825**	**830**	**41**

Conclusion

This study shows that higher than average spending in rural academic regional school districts can be offset by a number of factors, including ability to pay, application of the WAF, declining foundation enrollment, and lower teacher salaries. Even though the foundation budget for some multi-school regionals may not be reflective of actual staffing levels, especially those with lower abilities to pay, it is generally reflective of actual spending in these districts relative to state averages.

Though there is no evidence to suggest that additional financial supports need to be put in place specifically for rural regional school districts, there are clearly some rural regionals that are experiencing rising costs that have low abilities to pay. This alone, however, does not make them unique. There are certainly more than a few non-rural districts that are facing the same challenges. Addressing these issues needs to be a general focus as education reform moves forward.

Appendix A: Comparison of Rural and Statewide Trends

Following the last major round of regionalization in 1995, rural regional school districts have closely mirrored the rest of the state in terms of annual growth percentages in foundation budget, state aid, local contribution, and NSS. One area where rural districts have lagged behind the state, particularly in recent years, is in enrollment growth. Figures 1a and 2a summarize this data for rural districts and districts statewide.

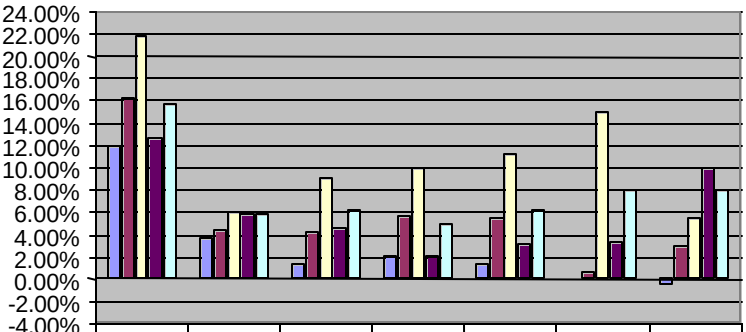
In recent years foundation enrollment growth in rural regionals has slowed far more than it has statewide, even dipping in to negative territory in 2001. This is a trend that could have important implications for rural districts if it continues into the future and one that this study will address in greater detail in the following sections. Despite declining enrollments, foundation budgets among rural districts did increase at a higher percentage in 2001 than 2000 due to inflation and the mechanism that is moving every district's wage adjustment factor (WAF) towards 1.0.

Changes in NSS can be explained by looking at changes in both chapter 70 aid and local contributions. Growth in chapter 70 aid for rural regional districts outpaced the state average in two out of the seven years, 1995 and 2000, and remained within or just over a percentage point below in three of the years, 1998, 1999, and 2001. Rural districts saw significantly lower growth in state aid compared to the rest of the state in 1996 and 1997.

Growth in actual local contributions—actual NSS less chapter 70 aid—statewide has remained relatively constant at between 4 and 5.5 percent each year, rising slightly higher in fiscal year 2001 at 6.5 percent. Rural districts meanwhile saw a sharp increase in 1995 followed by two years of slightly higher than average growth in 1996 and 1997 and three years of lower than average growth. Local contributions once again exceeded the state average in 2001, though it is not clear if this is a one-year spike or the front end of a longer-term trend.

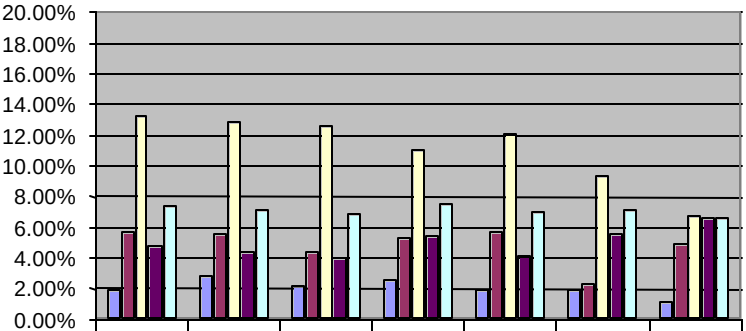
Growth in actual NSS among the rural regionals has increased, out-pacing the state in recent years. The sharp increase in NSS in 1995 was due to the increase in state assistance that rural districts received in the wake of regionalization. Since then actual NSS for these districts has grown at a slower rate than the state up to fiscal year 2000, which is partly explained by the supplemental aid that was distributed that year to bring districts up to foundation.

Figure 1a: Rural School District Annual Growth Percentages Fiscal Year 1995 to 2001



	1995	1996	1997	1998	1999	2000	2001
Foundation Enrollment	12.05%	3.76%	1.38%	2.09%	1.35%	0.11%	-0.60%
Foundation Budget	16.30%	4.45%	4.26%	5.75%	5.49%	0.62%	2.88%
Chapter 70 Aid	21.88%	5.96%	9.13%	10.08%	11.18%	14.89%	5.55%
Local Contribution	12.72%	5.80%	4.62%	2.08%	3.08%	3.42%	9.85%
Net School Spending	15.82%	5.85%	6.23%	5.01%	6.19%	8.03%	8.01%

Figure 2a: Statewide Annual Growth Percentages Fiscal Year 1995 to 2001



	1995	1996	1997	1998	1999	2000	2001
Foundation Enrollment	1.95%	2.85%	2.23%	2.55%	1.85%	1.94%	1.21%
Foundation Budget	5.61%	5.49%	4.44%	5.27%	5.68%	2.30%	4.88%
Chapter 70 Aid	13.25%	12.88%	12.55%	11.02%	12.12%	9.24%	6.66%
Local Contribution	4.78%	4.30%	4.00%	5.45%	4.06%	5.51%	6.54%
Net School Spending	7.45%	7.15%	6.99%	7.50%	7.01%	7.12%	6.58%