



North Reading Public Schools Review

Executive Order 393

Education Management Accountability Board Report
August 1999

EDUCATION MANAGEMENT ACCOUNTABILITY BOARD

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I. Introduction

The Massachusetts Education Reform Act (MERA) of 1993 has three major goals: to increase student achievement; to achieve adequate funding for all local and regional school districts over a seven-year period; and to bring equity to local taxation efforts based on a community's ability to pay. In February 1997, the Governor issued Executive Order 393 to evaluate the education reform program that was nearing the end of its fourth year. In FY98, Massachusetts General Laws (M.G.L.) Ch. 70 state aid for education reached \$2.3 billion. With an investment of this magnitude in the Commonwealth's schools, it is critical to "review, investigate and report on the expenditures of funds by school districts, including regional school districts, consistent with the goals of improving student achievement." To that end, Executive Order 393 established the Education Management Accountability Board (EMAB).

The Secretary of Administration and Finance, serving as chief of staff to the EMAB, selected a team of auditors from the Department of Revenue's (DOR) Division of Local Services (DLS) to conduct the school district reviews. DOR's Director of Accounts is the chief investigator with authority to examine municipal and school department accounts and transactions pursuant to M.G.L. Ch. 44, §§45 and 46A. The reviews are conducted in consultation with the State Auditor and the Commissioner of Education.

The North Reading Public Schools (NRPS) is the tenth school district reviewed under Executive Order 393. The audit team began the review of NRPS in January 1999, and completed it in March 1999. As part of this review, the audit team conducted a confidential survey of employees of the school district and included the results in this report. School officials cooperated fully with the audit team.

The Executive Summary includes some of the more significant observations and findings of the review of NRPS's operations. When possible, the audit team has identified and presented best practices, which may be adapted by other school districts. The report discusses all results, best practices and deficiencies, if any, in greater detail in the "General Conditions and Findings" section.

II. Executive Summary

SUMMARY

NRPS has made an effort to achieve education reform goals. This effort began prior to passage of the education reform law in 1993. Disappointing 1990 grade 8 Massachusetts Educational Assessment Program (MEAP) test scores prompted curriculum improvement at all levels. A district task force reviewed the impending education reform law and anticipated future requirements while a district professional standards committee wrote professional development guidelines. Despite an

increasing enrollment and an increasing student per teacher ratio, the district has significantly improved standardized test scores which exceed statewide averages.

NRPS has a student population of about 2,300 students, a budget of \$11.8 million and has experienced a significant increase in student enrollment. Actual net school spending has been at or greater than foundation budget since FY94. Spending was less than foundation target in three out of four key areas from FY94 to FY97, but has shown improvement in recent fiscal years. The two largest net school spending increases from FY94 to FY97 were in teaching salaries and in SPED tuitions. Since 1988, North Reading voters have approved three debt exclusions for school renovation projects.

School improvement plans for the 1997/98 school year were found to vary in structure and in content. Updated guidelines were issued for 1998/99 plans and the auditors noted an improvement in the plans. Also, certain errors were discovered in figures reported to the Department of Education (DOE) on standard reports. The district five-year technology plan is in its fourth year and is less than 20 percent funded.

THE FOUNDATION BUDGET

- NRPS has exceeded the net school spending requirements as determined by DOE for FY94 through FY98. In FY98, the district's local and state percentages of actual net school spending were 86.9 percent and 13.1 percent respectively. FY98 salaries accounted for 79 percent of the school operating budget. [See Section 5 and Appendix A-1]
- FY97 budgeted SPED tuition costs accounted for \$733,000 or 37.2 percent of non-salary budget areas excluding transportation and increased to \$836,000 or 40.8 percent in FY98. [See Section 6]
- The foundation budget does not mandate spending in any specific category. To encourage appropriate levels of spending, M.G.L. Ch.70 §9 requires that a school district report to the Commissioner of Education when it has failed to meet foundation budget spending levels for professional development, books and equipment, expanded program and extraordinary maintenance. Although NRPS did not always meet these levels from FY94 to FY97, it did not file a report as required by law nor did DOE direct it to do so. Total spending exceeded the total foundation budget for FY94 and FY97. [See Section 7 and Appendix B1]

STUDENT ACHIEVEMENT

- NRPS test scores are generally above the state average. MCAS results show the district above the state average scaled scores for all grades in all areas. SAT scores for 1997 exceeded the state average by five points. MEAP scores for 1996 exceeded state averages from 60 to 200 points. The 1998 statewide Iowa tests indicated that 98 percent of NRPS grade 3 students scored at the higher reading skill levels of "proficient" and "advanced." NRPS grade 10 students scored at the

70th percentile in the 1997 Iowa achievement test when compared to a representative national sample of students. [See Section 16, Appendices C and D]

GOVERNANCE AND MANAGEMENT POWERS

- Strong site based management and committee involvement characterize the district's management style. In 1992 the district formed an education reform task force to review the elements of the impending education reform law. The Superintendent's administrative council assumed responsibility of curriculum articulation and consistency. In 1994 a new Superintendent enhanced the role of the council in strategic planning for the district. The Superintendent hired a director of curriculum and technology in 1997 and added the position to the council. Principals play an important role in budgeting, textbook selection, curriculum development and hiring of staff. [See Sections 17 and 25]

STUDENT/FTE TEACHER STAFFING

- Between FY93 and FY97, the total number of FTE teachers increased by 11.9, or 10.2 percent, from 116.4 to 128.3. Despite this increase, the all students/all FTE teacher ratio increased from 15.8:1 to 17.1:1. The FY97 ratio is higher than the FY97 state average of 14.5:1. The FY97 all student/all non-SPED FTE teacher ratio of 17.9:1 is less than the FY97 state average of 18.4:1. [See Section 8]

TEACHER COMPENSATION

- Between FY93 and FY97, expenditures for salaries rose \$1.7 million or 25.4 percent. Total teaching salaries rose \$1.1 million or 23.9 percent, reflecting additional spending for new staff as well as pay raises in teachers' contracts. Union contract annual increases plus step increases for teachers have increased by 47.4 percent from 1993 to 1997. The district FY97 average teacher salary reported to DOE of \$46,066 was \$3,192 or 7.4 percent higher than the state average of \$42,874. [See Section 9]

PROFESSIONAL DEVELOPMENT

- NRPS did not meet the professional development legal minimum spending requirements for FY95 and FY96 nor the foundation budget targets for FY94 to FY97. The audit team determined that the portion of teachers' salaries attributable to professional development was not reported to DOE as required. If it had been, the minimum spending requirements for FY95 and FY96 and the foundation budget target for FY97 would have been met. [See Sections 7 and 10]

TIME AND LEARNING

- NRPS met DOE's time requirements in all levels for the 1997/98 school year with a schedule of 999 hours at the high, 956 hours at the middle and 925 hours at the elementary level. [See Section 12]

TECHNOLOGY

- Full implementation of the district technology plan was projected to cost \$5.3 million over a five-year period. The plan is currently in its fourth year of implementation and \$865,307 has been expended. According to DOE's Edtech Update, NRPS has 121.9 students per type A/B computer. Computers classified as type A/B run the most current software. [See Section 14]

DISTRICT ISSUES

- In verifying the accuracy of the enrollment numbers, the audit team noted a variance between the numbers maintained by NRPS enrollment system and those reported to DOE on the October 1 foundation enrollment report. An understatement of enrollment reduced state aid to the town by an immaterial amount. [See Section 1]
- In verifying the accuracy of the expenditure numbers, the audit team noted a variance between the numbers forwarded to the district by the town finance director and those reported to DOE on the FY96 end-of-year report. [See Section 4]
- In verifying the accuracy of budget records to expenditure reports submitted to DOE, the audit team noted that expenditures for school related capital budget items appropriated in the town warrant by separate articles were not recorded correctly in the end-of-year reports from FY89 through FY98. [See Section 4]

BEST PRACTICES

- NRPS has instituted a program designed to teach students how to answer open ended questions. Since 1995, a reading consultant has presented weekly open-ended questions to students in grade 8 science, math and social studies classes. An open-ended question is presented which corresponds to the subject matter in the discipline and students must respond to it in writing during the class. The teacher evaluates the responses using rubrics and discusses them with the students in a following week's class. The classroom teacher also reviews these evaluations. This effort has helped prepare students for the MEAP and the Massachusetts Comprehensive Assessment System (MCAS) tests.
- Annually, the school department issues a budget booklet to every resident of the town which includes a message from the school committee and Superintendent, the district mission, goals for the upcoming fiscal year, budget and prior fiscal year

expenditure figures and explanatory notes and charts. The public is encouraged to bring this booklet with them to the annual public hearing of the school department budget.

Auditee's Response

The audit team held an exit conference with the Superintendent and his administrative council on May 13, 1999. The team invited NRPS to suggest specific technical corrections and make a formal written response. The Superintendent's formal response is found in Appendix G. Changes were subsequently made in two report sections. A statement regarding school improvement plans was amended to reflect the format of the reviewed plans as well as updated guidelines from central administration. A statement regarding the textbook selection process by principals was withdrawn as a result of additional information received at the exit conference.

Review Scope

In preparation for the school district reviews, the audit team held meetings with officials from DOE, the State Auditor's Office and other statewide organizations such as the Massachusetts Taxpayers Foundation, the Massachusetts Municipal Association and the Massachusetts Association of School Superintendents. The audit team also read published reports on educational and financial issues to prepare for the school district reviews.

DOE provided data including the end-of-year reports, foundation budgets, evaluations of test results for NRPS students, as well as statewide comparative data. The DOR's Division of Local Services Municipal Data Bank provided demographic information, community profiles and overall state aid data. While on site, the audit team interviewed officials including, but not limited to, the town administrator, the school committee chair, the school Superintendent, the business manager, the town finance director, the director of pupil services, principals, the director of curriculum and technology and the teachers' union president. Documents reviewed included vendor and personnel contracts, invoices, payroll data, statistics on students and teachers as well as test results and reports submitted to DOE.

In keeping with the goals set out by the EMAB, the school district review was designed to determine whether or not basic financial goals related to education reform have been met. The audit team gathered data related to performance such as test scores, student to teacher ratios and class sizes to show results and operational trends. However, this report does not intend to present a definitive opinion regarding the quality of education in NRPS, or its successes or failures in meeting particular education reform goals. Rather, it is intended to present a relevant summary of data to the EMAB for evaluation and comparison purposes.

The focus of this review was on operational issues. It did not encompass all of the tests that are normally part of a year-end financial audit such as: review of internal controls; cash reconciliation of accounts; testing compliance with purchasing and expenditure laws and regulations; and generally accepted accounting principles. The audit team tested financial transactions on a limited basis only. The audit team also excluded federal grants, revolving accounts and student activity accounts. The audit team did not test statistical data relating to enrollment, test scores and other measures of achievement. This report is intended for the information and use of EMAB and NRPS. However, this report is a matter of public record and its distribution is not limited.

III. General Conditions and Findings

1. North Reading Overview

DOE classifies the town of North Reading as a residential suburb. Its 1996 population was 12,919, up 7.6 percent from 1990 and up 12.8 percent from 1980. It is located approximately 16 miles north of Boston and is governed by a five-member board of selectmen, a town administrator and an open town meeting. The United States Postal Service's General Mail Facility, North Reading's largest employer, employs 1,081 people. The town's largest taxpayer, Trinet Essential Facilities, is valued in FY99 at \$37.6 million, or 3.2 percent of the town's total taxable value.

Like many Massachusetts school districts, North Reading faced budgetary pressures in the early 1990's as a result of an economic recession and the associated decline in municipal state aid for education and in financial contributions to schools. For FY91, several proposition 2 ½ override votes, including one for the school department for \$1.2 million, lost by substantial margins. Consequently, NRPS approved an operating budget 6.5 percent less than that of the prior fiscal year and 13.4 percent less than the budget originally proposed by the school committee.

Charts 1-1 and 1-2 show some key demographic and economic statistics for North Reading.

Chart 1-1

**Town of North Reading
Demographic Data**

1996 Population	12,919
FY98 Residential Tax Rate	\$16.99
FY98 Average Single Family Tax	\$3,319
FY98 Avg. Assessed Value Per Single Family	\$195,358
FY98 Tax Levy	\$17,252,555
FY98 Levy Limit	\$17,389,480
FY98 Levy Ceiling	\$25,386,338
FY98 State Aid	\$4,337,651
FY98 State Aid as % of Revenue	14.6%
1989 Per Capita Income	\$19,100
1996 Average Unemployment Rate	3.9%

Note: Data provided by DLS

In 1991, after three years of study, the district reorganized from elementary (grades K-6), junior high (grades 7-9) and high school (grades 10-12). As of the audit date, the district consists of one high school (grades 9-12), one middle school (grades 6-8) and three elementary schools (grades K-5). The district's central administration offices are located in the middle school. The town belongs to the Northeast Metropolitan Vocational Technical school district for grades 9-12.

As of the audit date, the Superintendent has been in this position for 4 1/2 years and the business manager for 15 years. The organization chart indicates that the business manager, principals, director of pupil personnel and director of curriculum and technology report directly to the Superintendent. The chart also indicates that cafeteria staff report to the director of food services who reports to the business manager. Although the cafeteria staff are town employees, the director of food services is an employee of a private food service management company.

Since 1996, NRPS has participated in an exchange program with the American Nicaraguan School (ANS) in Managua, Nicaragua. Twenty-five ANS students visited North Reading in 1997 and 17 North Reading high school students with chaperones visited Nicaragua in February 1998. Students from both systems communicate throughout the school year in writing and by e-mail.

Transportation is provided to elementary students who live more than one mile from the school they attend and to secondary students who live more than one and one-half miles away. Kindergarten students are transported door to door.

NRPS high school graduating class of 1997 indicated that 79.1 percent intended to go on to a 2 or 4 year college, a rate higher than the 71.9 percent state average. The percent of graduates planning to go to work was 7.3 percent, a rate lower than the state average of 16.8 percent. In 1997, the high school dropout rate was 0.6 percent, significantly less than the state average of 3.4 percent.

Chart 1-2

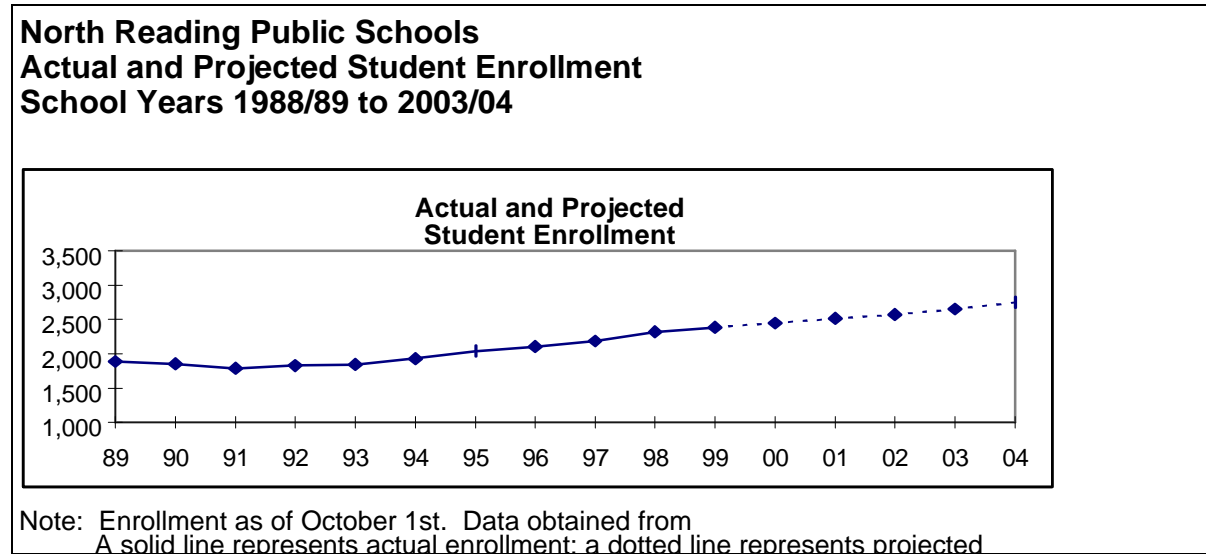
**North Reading Public Schools
Demographic Data 1997/98**

	NRPS	State Average
Enrollment: Race / Ethnicity		
White	97.7%	77.5%
Minority	2.3%	22.5%
Limited English Proficiency	0.1%	4.8%
Special Education	12.9%	16.6%
Percentage Attending Private School -1997	5.2%	10.6%
High School Drop-Out Rate - 1997	0.6%	3.4%
Plan of Graduates - Class of '97:		
4 Year College	69.1%	53.4%
2 Year College	10.0%	18.5%
2 or 4 Year College	79.1%	71.9%
Work	7.3%	16.8%

Note: Data provided by DOE. Special Education data as of June 1998.

Chart 1-3 illustrates NRPS enrollment trend from October 1988, the 1988/89 school year, to October 1998, the 1998/99 school year. Enrollments projected by the district are shown from October 1999 to October 2003. All enrollments are as of October 1 of each year and are shown as reported by the district to DOE.

Chart 1-3



As shown in *Chart 1-3a*, enrollment has increased from 1,890 in October of the 1988/89 school year to 2,319 in October of the 1997/98 school year. Total NRPS enrollment increased by 22.7 percent during this time period, a higher rate of increase than the state average of 15.1 percent. The chart shows a total enrollment increase in each year since October 1990. Prior to this, total enrollment declined for 19 straight years. Enrollment projections show increasing enrollments, especially at the middle and high school levels. In this case, ungraded students represent all substantially separate SPED students educated by NRPS and not tuitioned out.

NRPS officials are aware of these projections as well as the current and impending pressures at all levels. The district has monitored the availability of space for years through the involvement of special committees. The current school building needs plan proposed in 1995 a new elementary school, additions/renovations to the other two elementary schools and a secondary schools/central administration space review. Funding for construction has been through general obligation bonds contingent upon the passage of separate proposition 2 ½ debt exclusion votes. Three debt exclusion votes for school renovation projects have passed and one for new construction has failed. The most recent debt exclusion vote was taken in March 1999 where the town passed a \$4.9 million elementary school reconstruction project by a vote of 866 to 537.

The district contracted with the New England School Development Council (NESDEC), an organization which offers a variety of services to school districts, to provide it with a long-range school facilities plan for the middle and high schools. A final report is expected in April 1999.

Chart 1-3a

**North Reading Public Schools
Actual and Projected Student Enrollment**

School Year	Elementary School		Middle School	High School	Ungraded	Total Enrollment
	Pre K & K	1 - 5	6 - 8	9 - 12		
88-89	167	715	414	566	28	1,890
89-90	162	722	403	536	28	1,851
90-91	141	758	353	513	24	1,789
91-92	175	767	379	491	19	1,831
92-93	174	806	387	459	17	1,843
93-94	214	812	428	476	0	1,930
94-95	195	911	476	458	0	2,040
95-96	180	949	510	467	0	2,106
96-97	210	1,005	469	504	0	2,188
97-98	231	1,045	497	546	0	2,319
98-99	243	1,070	518	556	0	2,387
99-00	223	1,080	592	553		2,448
00-01	236	1,102	598	579		2,515
01-02	241	1,128	621	585		2,575
02-03	249	1,138	636	629		2,652
03-04	240	1,158	661	689		2,748
NRPS 89-98						
% Change	38.3%	46.2%	20.0%	-3.5%		22.7%
State 89-98						
% Change	20.7%	22.1%	21.8%	2.8%		15.1%
NRPS 99-04						
% Change	-1.2%	8.2%	27.6%	23.9%		15.1%

Note: Data obtained from NRPS. Ungraded students reported by grade after 10/1/92.

Chart 1-4 illustrates the relative growth in the elementary and middle schools in contrast to the high school level expressed in terms of percentage of total enrollment.

Chart 1-4

**North Reading Public Schools
Distribution of Enrollment by Type of School**

School Year	Elementary School		Middle School	High School	Ungraded	Total Enrollment
	Pre K & K	1 - 5	6 - 8	9 - 12		
88-89	8.8%	37.8%	21.9%	29.9%	1.5%	100.0%
89-90	8.8%	39.0%	21.8%	29.0%	1.5%	100.0%
90-91	7.9%	42.4%	19.7%	28.7%	1.3%	100.0%
91-92	9.6%	41.9%	20.7%	26.8%	1.0%	100.0%
92-93	9.4%	43.7%	21.0%	24.9%	0.9%	100.0%
93-94	11.1%	42.1%	22.2%	24.7%	0.0%	100.0%
94-95	9.6%	44.7%	23.3%	22.5%	0.0%	100.0%
95-96	8.5%	45.1%	24.2%	22.2%	0.0%	100.0%
96-97	9.6%	45.9%	21.4%	23.0%	0.0%	100.0%
97-98	10.0%	45.1%	21.4%	23.5%	0.0%	100.0%
98-99	10.2%	44.8%	21.7%	23.3%	0.0%	100.0%
99-00	9.1%	44.1%	24.2%	22.6%	0.0%	100.0%
00-01	9.4%	43.8%	23.8%	23.0%	0.0%	100.0%
01-02	9.4%	43.8%	24.1%	22.7%	0.0%	100.0%
02-03	9.4%	42.9%	24.0%	23.7%	0.0%	100.0%
03-04	8.7%	42.1%	24.1%	25.1%	0.0%	100.0%
Percentage Point						
Chg '89-'98	1.1	7.2	-0.5	-6.4	-1.5	0.0
Percentage Point						
Chg '99-'04	-1.4	-2.7	2.4	1.8	0.0	0.0

Note: Data obtained from NRPS. Ungraded students reported by grade after 10/1/92.
Percentages may not calculate due to rounding.

In verifying the accuracy of the enrollment numbers the audit team noted a variance between the numbers maintained by NRPS enrollment system and those reported to DOE on the October 1 foundation enrollment report. Specifically, the review of data revealed that foundation enrollment reports were understated by a combined total of 64 students due generally to how tuitioned in and tuitioned out students were reported. This error reduced state aid to the town by an immaterial amount.

2. School Finances

Overall, NRPS has benefited from additional funds available due to education reform. As state aid increased from \$900,000 in FY94 to \$1.6 million in FY98, the combination of state education aid and the local share allowed the district to hire more teachers, to fund additional SPED costs, to increase salaries and to spend for new academic initiatives.

School district funding and financial reporting requirements are generally complex and become especially complicated in the context of education reform. A district annually determines how much money it will spend on education. DOE considers only certain expenditures and funding when determining whether or not a district meets education reform requirements.

This audit examines school funding primarily from three perspectives: the school committee budget, net school spending, and the foundation budget.

The audit team examined the school committee budget in some detail as a matter of practice because it reflects basic financial and educational decisions, provides an overview of financial operations and indicates how the community expects to meet the goals and objectives of education reform.

Net school spending, the sum of the required minimum contribution from local revenues plus state chapter 70 education aid, is a figure issued annually by DOE that must be met by school districts under education reform.

The foundation budget is a school spending target under education reform which the school district should meet. Calculated on the basis of pupil characteristics and community demographics, it is designed to ensure that a minimum level of educational resources is available per student in each school district. Under education reform, all school districts are expected to meet their foundation budget targets by the year 2000.

3. School Committee Budget Trend

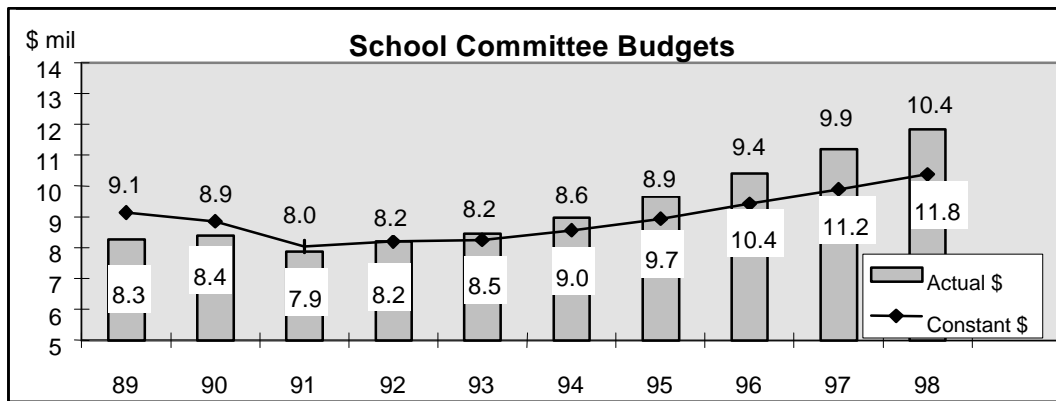
Chart 3-1 illustrates the school committee budget trend from FY89 to FY98. For this purpose, the budget includes annual and special town meeting appropriations for support of the schools. Separate articles for capital improvement are not included.

The total school committee budget as defined above increased by \$200,000, or 2.4 percent between FY89 and FY93. The FY90 budget of \$8.4 million decreased to \$7.9 million in FY91 due to a proposition 2 ½ override loss and to town budget constraints. With education reform aid, the budget increased between FY93 and FY97 by \$2.7 million or 31.8 percent. The FY98 budget further increased over FY97 by \$600,000 or 5.4 percent.

In constant dollars, where FY92 is set at 100, the chart illustrates how the school committee budget fared with respect to inflation over time. From FY89 to FY97, the school committee budget as defined above increased from \$9.1 million to \$9.9 million, an 8.8 percent increase in constant dollars. From FY93 to FY97, it increased \$1.7 million or 20.7 percent in constant dollars, from \$8.2 million to \$9.9 million. In constant dollars, NRPS experienced net budget increases in six of the last nine years.

Chart 3-1

**North Reading Public Schools
School Committee Budgets in Actual and Constant Dollars
FY89 - FY98**



Note: Data obtained from NRPS and town of North Reading. Years are in fiscal years.

In FY98, NRPS received \$355,000 from DOE’s Foundation Reserve Program, or “pothole” fund, to help fund contractual obligations for 14 retirements. The town obtained special legislation for a fund into which both school and town could contribute in anticipation of retirements. In 1997, NRPS contracted its food services program to a private food service management company with expectations of increasing student participation and gaining financial independence from the school operating budget.

A special town meeting appropriated and the finance committee authorized additional funds to the school budget in FY95 for extraordinary SPED related expenses.

4. Total School District Expenditures

Total school district expenditures includes expenditures by the school committee and expenditures by the town for school purposes as reported in the DOE end-of-year report. Total school district expenditures increased between FY89 and FY93 by \$1.0 million or 10.9 percent. Expenditures increased between FY93 and FY97 by \$2.5 million or 24.5 percent.

Expenditures paid for by the town for school purposes were \$800,000 in FY89 and increased to \$1.8 million in FY93 primarily due to debt service payments on the high school renovations. In FY97, the major components were \$771,000 for debt service, and \$706,000 for active and retired employee insurance.

In verifying the accuracy of the expenditure numbers, the audit team noted a variance between the numbers forwarded to the district by the town finance director and those reported to DOE on the FY96 end-of-year report. Specifically, the review of data revealed that amounts reported for long-term debt retirement and service for school

construction should have been \$729,507. The amount reported to DOE was \$370,925. For purposes of *Chart 4-1*, FY96 includes the higher figure.

In verifying the accuracy of budget records to expenditure reports submitted to DOE, the audit team noted that expenditures for school related capital budget items appropriated in the town warrant by separate articles were not recorded correctly in the end-of-year reports from FY89 through FY98. Amounts in recent fiscal years ranged from \$70,000 to \$385,000. The audit team determined that certain unreported expenditures should have been reported as net school spending and suggested that the town finance director and the school business manager review separate articles in the future using DOE's reporting requirements.

Chart 4-1

**North Reading Public Schools
Total School District Expenditures
(in millions of dollars)**

	FY89	FY93	FY94	FY95	FY96	FY97	FY98
School Committee	\$8.4	\$8.4	\$9.0	\$9.6	\$10.2	\$11.0	\$11.8
Town	\$0.8	\$1.8	\$1.8	\$1.7	\$1.7	\$1.7	\$1.6
Total	\$9.2	\$10.2	\$10.8	\$11.3	\$11.9	\$12.7	\$13.4

Note: Data obtained from NRPS

Chart 4-2 shows the FY94 to FY98 trend in net school spending per student. It indicates that actual net school spending per student has increased from \$4,870 in FY94 to \$5,256 in FY97, or 7.9 percent. FY98 increased to \$5,261 or 0.1 percent from FY97. The inflation adjusted figures increased from \$4,643 in FY94 to \$4,651 in FY97, or 0.2 percent in 1992 dollars. FY98 decreased to \$4,615 or 0.8 percent from FY97.

Chart 4-2

**North Reading Public Schools
Net School Spending Per Student
Actual and Constant (1992=100) Dollars**

	FY94	FY95	FY96	FY97	FY94-FY97 Change	FY98
Expenditures / Student in Actual \$	\$4,870	\$4,951	\$5,033	\$5,256	7.9%	\$5,261
Expenditures / Student in 1992 \$	\$4,643	\$4,580	\$4,555	\$4,651	0.2%	\$4,615

Note: Data obtained from NRPS

5. Net School Spending Requirements

Pursuant to the education reform law, DOE develops annual spending requirements and budget targets for each school district. The requirements are based on a formula which is used to set specific minimum spending requirements and in combination with other factors is also used to set foundation budget targets as well as determining the amount of state aid for each district.

Each school district must meet a net school spending requirement. Expenditures which count towards a district's net school spending, generally include all education related expenditures paid for with state aid under Chapter 70 and municipal appropriations used for that purpose. Excluded from the net school spending definition are expenditures for school transportation, school lunch, school construction and certain capital expenditures. Expenditures from federal funds and from school revolving accounts are also excluded.

As indicated in *Chart 5-1*, the recommended foundation budget target, that is the ultimate spending goal for the district, increased from \$9.3 million in FY94 to \$11.9 million in FY98, a 28.0 percent increase. During this same time period, required net school spending, the amount the district must spend to move towards the foundation budget target, increased by 25.8 percent, from \$9.3 million in FY94 to \$11.7 million in FY98. Actual net school spending increased by 29.8 percent, from \$9.4 million to \$12.2 million. In FY97 and FY98, actual net school spending was greater than the foundation budget target.

Chart 5-1

North Reading Public Schools Foundation Budget and Net School Spending (NSS) (in millions of dollars)

	FY94	FY95	FY96	FY97	FY98
Foundation Budget Target	\$9.3	\$9.6	\$10.6	\$11.2	\$11.9
Required NSS as % of Foundation	99.6%	101.0%	96.1%	96.1%	98.3%
Required Net School Spending	\$9.3	\$9.7	\$10.2	\$10.8	\$11.7
Actual Net School Spending	\$9.4	\$10.1	\$10.6	\$11.5	\$12.2
Variance \$	\$0.1	\$0.4	\$0.4	\$0.7	\$0.5
Variance %	1.1%	4.1%	3.9%	6.5%	4.3%
Actual NSS as % of Foundation	100.7%	105.2%	99.9%	102.3%	102.5%

Note: Data obtained from DOE and NRPS. Percentages may not calculate due to rounding.

Chart 5-2 indicates that state aid, as a percent of actual net school spending, increased from 9.6 percent in FY94 to 13.1 percent in FY98, while the local share decreased from 90.4 percent in FY94 to 86.9 percent in FY98. The chart also indicates that from FY94 to FY98, the actual local contribution exceeded the required local contribution by as low as 1.2 percent and by as high as 8.7 percent.

Chart 5-2

**North Reading Public Schools
Net School Spending
(in millions of dollars)**

	FY94	FY95	FY96	FY97	FY98
Required Local Contribution	\$8.4	\$8.7	\$9.0	\$9.2	\$10.1
Actual Local Contribution	\$8.5	\$9.2	\$9.4	\$10.0	\$10.6
Variance \$	\$0.1	\$0.5	\$0.4	\$0.8	\$0.5
Variance %	1.2%	5.7%	4.4%	8.7%	5.0%
Required Net School Spending	\$9.3	\$9.7	\$10.2	\$10.8	\$11.7
Actual Net School Spending	\$9.4	\$10.1	\$10.6	\$11.5	\$12.2
Local Share \$	\$8.5	\$9.2	\$9.4	\$10.0	\$10.6
State Aid \$	\$0.9	\$0.9	\$1.2	\$1.5	\$1.6
Local Share %	90.4%	91.1%	88.7%	87.0%	86.9%
State Aid %	9.6%	8.9%	11.3%	13.0%	13.1%

Note: Data obtained from DOE and NRPS. Percentages may not calculate due to rounding.

6. School Committee Program Budget

Within the context of education reform and improving student achievement, the audit team tries to establish what a school district budgets and spends on academic courses such as English and science versus other subjects or programs. Program budgets are generally intended to show the total financial resources for a particular program or activity. Well developed program budgets include goal statements, planned actions and expected outcomes along with the total amount of resources required to achieve the objectives. In the school environment, a program budget for mathematics, for example, would show salaries for mathematics teachers and related costs such as supplies, textbooks, etc. It would also indicate the expected outcomes for the budget year.

Since FY93, NRPS has produced a budget detailing proposed operating expenses by certain program categories and by school. The budget does not detail proposed salaries as such. Salaries are budgeted by proposed FTEs, by steps and by salary lanes. The audit team could not obtain a listing by discipline of these proposed FTEs as of the budget date. For purposes of *Charts 6-2, 6-2a* and *Appendix A-2*, acceptable information was used.

Chart 6-1 summarizes the school committee budget for FY93, FY95, FY97 and FY98 for non-salary areas. The school transportation budget has been excluded from this data to approximate net school spending.

According to *Chart 6-1*, budgeted amounts for elementary education and SPED tuitions increased most in dollar and in percentage terms between FY93 and FY97. SPED tuitions increased by \$470 thousand or 178.7 percent during this time period and elementary education expenses increased by \$103 thousand or 127.2 percent. SPED tuitions increased by another 14.1 percent from FY97 to FY98.

Chart 6-1

**North Reading Public Schools
School Committee Program Budget - Non-Salary Areas
(in thousands of dollars)**

	FY93	FY95	FY97	FY93 - FY97			FY98
				\$ Diff	% Diff	% of Tot	
Elementary	\$81	\$106	\$184	\$103	127.2%	13.6%	\$199
Certain Core Subjects	\$42	\$58	\$67	\$25	59.5%	3.3%	\$56
Art and Music	\$26	\$24	\$32	\$6	23.1%	0.8%	\$28
Non-Core Subjects	\$157	\$154	\$173	\$16	10.2%	2.1%	\$169
SPED	\$75	\$105	\$146	\$71	94.7%	9.4%	\$149
SPED Tuitions	\$263	\$513	\$733	\$470	178.7%	62.2%	\$836
Pupil Services	\$15	\$16	\$13	(\$2)	-13.3%	-0.3%	\$15
Unassigned	\$399	\$379	\$438	\$39	9.8%	5.2%	\$416
Buildings and Grounds	\$154	\$157	\$182	\$28	18.2%	3.7%	\$182
Total	\$1,212	\$1,512	\$1,968	\$756	62.4%	100.0%	\$2,050

Note: Data obtained from NRPS. School transportation and employee benefits are not included.
Core subjects included here are English, mathematics, science and social studies.
Elementary includes kindergarten.

Salary and expense budgets by NRPS program categories for FY89, FY93, FY97 and FY98 are shown in *Appendix A-1*. This appendix shows budget increases in both salary and expense categories from FY93 to FY97, especially in SPED tuitions. This appendix includes budgeted transportation.

Chart 6-1a shows the same program budget data on a percentage distribution basis to illustrate how particular budget items have changed since FY93 in certain areas.

Chart 6-1a

**North Reading Public Schools
School Committee Program Budget - Non-Salary Areas
Percentage Distribution**

	FY93	FY95	FY97	% Point Diff.	
				FY93 - FY97	FY98
Elementary	6.7%	7.0%	9.3%	2.7	9.7%
Certain Core Subjects	3.5%	3.8%	3.4%	-0.1	2.7%
Art and Music	2.1%	1.6%	1.6%	-0.5	1.4%
Non-Core Subjects	13.0%	10.2%	8.8%	-4.2	8.2%
SPED	6.2%	6.9%	7.4%	1.2	7.3%
SPED Tuitions	21.7%	33.9%	37.2%	15.5	40.8%
Pupil Services	1.2%	1.1%	0.7%	-0.6	0.7%
Unassigned	32.9%	25.1%	22.3%	-10.7	20.3%
Buildings and Grounds	12.7%	10.4%	9.2%	-3.5	8.9%
Total	100.0%	100.0%	100.0%	0.0	100.0%

Note: Data obtained from NRPS. School transportation and employee benefits are not included.
Core subjects included here are English, mathematics, science and social studies.
Elementary includes kindergarten. Percentages may not add due to rounding.

Chart 6-2 provides a more detailed review of budgeted teaching salaries by selected discipline. This chart indicates that the salaries for certain core subjects and for elementary school teachers increased most in dollar terms for the disciplines shown from FY93 to FY97. Budgeted salaries for SPED teachers increased most in percentage terms during this time period. Their increase also extended into FY98.

Chart 6-2

**North Reading Public Schools
Budgeted Teaching Salaries - Selected Disciplines
(in thousands of dollars)**

Discipline	FY93	FY95	FY97	FY93 - FY97			FY98
				\$ Diff.	% Diff	% of Total	
Certain Core Subjects	\$1,546	\$1,657	\$1,811	\$265	17.1%	26.5%	\$1,877
Art and Music	\$266	\$256	\$322	\$56	21.1%	5.6%	\$393
Kindergarten	\$179	\$230	\$181	\$2	1.1%	0.2%	\$202
Physical Education	\$225	\$240	\$211	(\$14)	-6.2%	-1.4%	\$274
SPED	\$338	\$372	\$502	\$164	48.5%	16.4%	\$528
Elementary	\$1,159	\$1,288	\$1,622	\$463	39.9%	46.3%	\$1,851
Reading	\$118	\$128	\$137	\$19	16.1%	1.9%	\$240
Foreign Language	\$157	\$203	\$202	\$45	28.7%	4.5%	\$189
Total Selected	\$3,988	\$4,374	\$4,988	\$1,000	25.1%	100.0%	\$5,554

Note: Data interpreted from NRPS information. Core subjects included here are English, math, science and social studies. Kindergarten includes preschool.

Chart 6-2a shows the same program budget data on a percentage distribution basis to illustrate how budgeted teaching salaries in selected disciplines have changed since FY93.

Chart 6-2a

**North Reading Public Schools
Distribution of Teachers' Salaries - Selected Disciplines**

Discipline	FY93	FY95	FY97	% Point Change	
				FY93 - FY97	FY98
Certain Core Subjects	38.8%	37.9%	36.3%	-2.5	33.8%
Art and Music	6.7%	5.9%	6.5%	-0.2	7.1%
Kindergarten	4.5%	5.3%	3.6%	-0.9	3.6%
Physical Education	5.6%	5.5%	4.2%	-1.4	4.9%
SPED	8.5%	8.5%	10.1%	1.6	9.5%
Elementary	29.1%	29.4%	32.5%	3.5	33.3%
Reading	3.0%	2.9%	2.7%	-0.2	4.3%
Foreign Language	3.9%	4.6%	4.0%	0.1	3.4%
Total All Selected	100%	100%	100%		100%

Note: Data interpreted from NRPS information. Core subjects included here are English, math, science and social studies. Percentages and percentage point changes may not add due to rounding.

Budgeted teaching salaries are detailed by selected disciplines in *Appendix A-2*.

7. Foundation Budget

The foundation budget is a target level of spending developed to ensure that a minimum level of education resources is available per student in each school district. The foundation budget shown in *Appendix B* is determined by a number of factors including enrollment, staffing and salary levels. The key items in the foundation budget include: payroll, non-salary expenses, professional development, expanded programs, extraordinary maintenance, and books and instructional equipment. DOE calculates each of these budget items using the previous year's end-of-year pupil enrollment with adjustments for special education, bilingual and low-income students. Certain salary levels and full time equivalent (FTE) standards are used to calculate salary budgets which also include annual adjustments for inflation.

The foundation budget establishes spending targets by grade (pre-school, kindergarten, elementary, junior high and high school) and program (regular day, special education, bilingual, vocational and expanded or after-school activities). Grade and program spending targets are intended to serve as guidelines only and are

not binding on local school districts. To encourage appropriate levels of spending, M.G.L.

Ch.70, §9 requires that a school district report to the Commissioner of Education when it has failed to meet foundation budget spending levels for professional development, books and instructional equipment, extended/expanded programs and extraordinary maintenance.

According to *Chart 7-1*, expenditures for books and equipment met foundation budget in FY96 and in FY97, but not in FY94. Expenditures did not reach foundation budget for the other categories in any of the fiscal years shown. NRPS did not file a report with the Commissioner’s office as required by Ch.70, §9 for these fiscal years nor did DOE direct NRPS to submit such report. The audit team determined that professional development expenditures have never been calculated according to DOE requirements and would have exceeded the FY97 foundation budget if they were.

Chart 7-1

**North Reading Public Schools
Net School Spending According to
Foundation Budget
(in thousands of dollars)**

	FY94		FY96		FY97	
	Actual	Budget	Actual	Budget	Actual	Budget
Professional Development	\$0	\$147	\$21	\$168	\$130	\$178
Books and Equipment	\$476	\$541	\$637	\$597	\$721	\$632
Expanded Program	\$0	\$19	\$0	\$33	\$0	\$28
Extraordinary Maintenance	\$0	\$279	\$0	\$316	\$0	\$334

Expenditures As Percentage of Foundation Budget

	FY94	FY96	FY97
	NSS/FND	NSS/FND	NSS/FND
Professional Development	0.0%	12.3%	73.1%
Books and Equipment	87.9%	106.7%	114.2%
Expanded Program	0.0%	0.0%	0.0%
Extraordinary Maintenance	0.0%	0.0%	0.0%

Note: Data obtained from DOE and NRPS. Percentages calculated using whole dollars.

Appendix B shows the NRPS foundation budget for FY94, FY96 and FY97. For each year, the chart shows expenditures and variances from the foundation budgets as well as how expenditures compare with the foundation budgets. Although specific spending levels were not met, total spending exceeded the total foundation budget for FY94 and FY97. For FY97, spending was greater than the foundation budget target for teaching salaries by \$1.4 million, by \$485,000 in special needs tuition, but was less than the foundation budget target for support salaries by \$1.2 million.

8. Staffing – Full Time Equivalent (FTE) Trends

Since salaries comprise approximately 66.1 percent of the FY97 total school district expenditures, budget changes closely reflect changes in staffing or FTEs. According to *Chart 8-1*, NRPS had a total of 260.1 FTEs including 128.1 teachers in FY89. By FY93, these numbers had dipped to 228.7 and 116.4 respectively, as fiscal pressures in the early 1990s forced the district to close one elementary school and to reduce staff. With the assistance of education reform, staffing increased so that by FY97, total teacher FTEs of 128.3 were back to the FY89 level. In this context, teachers exclude instructional assistants. Guidance counselors, psychologist, cafeteria, custodians and maintenance personnel are included as all others in the chart.

As *Chart 8-1* indicates, NRPS went through a period of staff reductions between FY89 and FY93, reducing FTEs by 31.4 including 11.7 teaching positions. Due in part to increased state aid, staffing increased by 4.4 percent between FY93 and FY97, as 10.1 FTEs including 11.9 teaching FTEs were added during this period. This addition of 11.9 teaching FTEs represented an increase of 10.2 percent from FY93 to FY97. This compares to a total student enrollment increase of 18.7 percent from FY93 to FY97.

Over the FY89 to FY97 period, schools in the district experienced a decline in total FTEs of 8.2 percent while teachers rose by 0.2 percent, lower than the enrollment increase of 15.8 percent from FY89 to FY97.

Chart 8-1

North Reading Public Schools Staffing Trends Full Time Equivalent (FTE)

	Total FTEs	Teachers	Teachers as % Instruct.			All	
			of FTEs	Assists.	Principals	Administrators	Others
FY89	260.1	128.1	49.3%	32.1	7.6	10.0	82.3
FY93	228.7	116.4	50.9%	27.7	5.8	7.4	71.4
FY97	238.8	128.3	53.7%	32.7	6.8	5.8	65.2
FY89-93	-31.4	-11.7	37.3%	-4.4	-1.8	-2.6	-10.9
Incr./ Decr.	-12.1%	-9.1%		-13.7%	-23.7%	-26.0%	-13.2%
FY93-97	10.1	11.9	117.8%	5.0	1.0	-1.6	-6.2
Incr. / Decr.	4.4%	10.2%		18.1%	17.2%	-21.6%	-8.7%
FY89-97	-21.3	0.2	-0.9%	0.6	-0.8	-4.2	-17.1
Incr. / Decr.	-8.2%	0.2%		1.9%	-10.5%	-42.0%	-20.8%

Note: Data obtained from NRPS. FTEs are from October 1 report.

Chart 8-2 shows changes in teaching FTEs by type of school or program. The largest increase in teachers occurred at the elementary school level between FY93 and FY97, when 10.8 FTEs were added. This was a 22.3 percent increase. High school teacher FTEs decreased by 0.3 and middle school teacher FTEs increased by 0.7, or -0.9 percent and 2.6 percent respectively.

Chart 8-2

**North Reading Public Schools
Teachers By Program
Full Time Equivalent
(excluding teaching aides)**

	FY89	FY93	FY97	FY93 - FY97	
				Increase	% Incr / Decr
Elementary	50.5	48.5	59.3	10.8	22.3%
Middle	32.3	27.2	27.9	0.7	2.6%
High School	33.5	34.3	34.0	-0.3	-0.9%
Systemwide	4.0	0.4	1.0	0.6	150.0%
Subtotal	120.3	110.4	122.2	11.8	10.7%
Special Education	7.8	6.0	6.1	0.1	1.7%
Total	128.1	116.4	128.3	11.9	10.2%

Note: Data obtained from NRPS. FTEs from October 1 report. Kindergarten and Pre-Kindergarten included in Elementary

Student/teacher ratios increased between FY89 and FY93 and then again between FY93 and FY97 as shown in *Chart 8-3*. The overall ratio for students to teachers was 14.8:1 in FY89, 15.8:1 in FY93 and 17.1:1 by FY97. These ratios were all greater than the state averages. When adjusted for the number of SPED teachers, using the same total student population for illustration purposes, the resulting all student ratios are somewhat higher. The non-SPED teacher ratios were all less than the state averages.

Chart 8-3

**North Reading Public Schools
Students Per FTE Teacher**

	FY89	FY93	FY97
All Students / All FTE Teachers	14.8	15.8	17.1
All Students / All FTE Teachers - State Average	13.8	15.1	14.5
All Students / All Non-SPED FTE Teachers	15.7	16.7	17.9
All Students / All Non-SPED FTE Teachers - State Avg.	17.2	19.2	18.4
<hr/>			
<u>All Students / All FTE Teachers</u>			
Elementary	16.4	19.5	19.8
Middle	12.7	13.2	15.2
High	15.9	13.0	14.4

Note: Data obtained from NRPS and DOE. Kindergarten and Pre-K included in Elementary.

Teaching FTEs increased only in English and decreased slightly in the other core subject areas of mathematics, science and social studies as shown in *Chart 8-4*. FY97 FTE levels are higher than they were in FY89 in most subjects shown.

Chart 8-4

**North Reading Public Schools
Teachers - Core Subjects
High and Middle School FTEs**

	FY89	FY93	FY97	FY93 - FY97	
				Increase	% Incr / Decr
English	11.9	10.8	12.0	1.2	11.1%
Mathematics	9.3	9.9	9.8	-0.1	-1.0%
Science	9.5	9.6	9.4	-0.2	-2.1%
Social Studies	9.7	9.6	9.8	0.2	2.1%
Total	40.4	39.9	41.0	1.1	2.8%

Note: Data obtained from NRPS. FTEs from October 1 report.

9. Payroll – Salary Levels, Union Contracts

Expenditures for salaries are reviewed to determine how the school district has increased expenditures for teachers and how teaching salaries have increased as a result of union contract agreements.

Chart 9-1 indicates how school salaries have increased in comparison to total school district expenditures. NRPS increased its expenditures for salaries by \$1.7 million between FY93 and FY97, an increase of 25.4 percent. This is 0.9 percentage points more than the increase in total school district expenditures during the same time period. Total salaries made up 65.7 percent of these expenditures in FY93 and increased to 66.1 percent in FY97. Total school district expenditures include fringe benefits.

Of the \$2.5 million total school expenditure increase from FY93 to FY97, \$1.7 million is attributable to salaries. Of this \$1.7 million salary increase, \$1.1 million, or 64.7 percent, applied to teaching salaries and \$600,000, or 35.3 percent, applied to non-teaching salaries. The latter group includes administrators, para-professionals, clerical staff, custodial staff, etc.

Chart 9-1

**North Reading Public Schools
Salary Expenditures Compared to Total School District Expenditures
(in millions of dollars)**

	FY89	FY93	FY96	FY97	FY93 - FY97	
					\$ Incr. / Decr.	% Incr. / Decr.
Total School District Expenditures	\$9.2	\$10.2	\$11.9	\$12.7	\$2.5	24.5%
Total Salaries	\$6.8	\$6.7	\$7.9	\$8.4	\$1.7	25.4%
as % of Total Expenditures	73.9%	65.7%	66.4%	66.1%	68.0%	
Teaching Salaries	\$4.8	\$4.6	\$5.3	\$5.7	\$1.1	23.9%
as % of Total Salaries	70.6%	68.7%	67.1%	67.9%	64.7%	
Non-Teaching Salaries	\$2.0	\$2.1	\$2.6	\$2.7	\$0.6	28.6%
as % of Total Salaries	29.4%	31.3%	32.9%	32.1%	35.3%	

Note: Data obtained from NRPS

Chart 9-2 shows that the average teacher's salary increased from \$40,178 to \$46,066 between FY93 and FY97. The FY97 average teacher's salary of \$46,066 is above the state average salary of \$42,874 reported by DOE.

Chart 9-2

**North Reading Public Schools
Teaching Salaries and Teachers (FTE)
Average Salary Comparison**

	FY89	FY93	FY94	FY95	FY96	FY97
Teaching Salaries (\$ in mil)	\$4.8	\$4.6	\$4.8	\$5.1	\$5.3	\$5.7
FTE - Teachers	139.5	115.0	116.6	116.6	126.2	124.1
FTE Incr. / Decr. from Previous Year	-1.8	-0.4	1.6	0	9.6	-2.1
Average Salary per FTE	\$ 34,073	\$40,178	\$41,163	\$43,616	\$41,722	\$46,066
DOE Reported State Average	N/A	\$38,681	\$39,012	\$40,718	\$41,760	\$42,874

Note: FTE excludes adult education teachers. Average salary per FTE consists of all salaries (i.e. asst principals, advisors, coaches etc.), step increases, longevity and differentials. Data obtained from NRPS and DOE end-of-year reports.

Of the additional \$1.1 million spent for teaching salaries between FY93 and FY97 as shown in *Chart 9-2a*, \$300,000 or 27 percent represents the cost of new positions and \$600,000 or 55 percent represents salary increases for existing teaching staff. According to NRPS officials, for FY97, approximately 70 percent of teachers are at the top step.

Chart 9-2a

**North Reading Public Schools
Salary Expenditures
Cost of New Positions and Salary Increases
(in millions of dollars)**

	FY93	FY97	% of Cum. Incr.
Total Teaching Salary Exp.	\$4.6	\$5.7	
Cumulative Increase from FY93		\$1.1	100%
Cost of 3% Inflationary Increase FY93-FY97 Cost of New Positions		\$0.6	55%
Subtotal		\$0.3	27%
<u>Amount above 3% Annual Increase</u>		\$0.9	82%
		\$0.2	18.0%

Note: Analysis based on data obtained from NRPS

Chart 9-2b indicates that increases due to annual contracts and steps ranged between 8.6 percent and 10.1 percent from the 1993 to 1997 time period.

Chart 9-2b

**North Reading Public Schools
Teachers Salaries - Step and Contract Percent Increases**

Period	1993	1994	1995	1996	1997	Total
Annual Contract Increase	3.0%	4.0%	4.0%	2.5%	3.5%	17.0%
Step Increase	6.0%	6.1%	6.1%	6.1%	6.1%	30.4%
Total	9.0%	10.1%	10.1%	8.6%	9.6%	47.4%

Note: Data obtained from NRPS

As shown in *Chart 9-3*, a review of salary changes over the FY93 to FY97 period indicates that the step 8 salary level increased by 13.6 percent without including step increases or lane changes. This represents the minimum increase a full time teacher would receive exclusive of raises due to step changes or obtaining an advanced academic degree. In contrast, the state and local government implicit price deflator indicates about a 10.2 percent inflationary trend for the FY93 to FY97 period.

Chart 9-3 shows how NRPS salary schedules might apply to a particular teacher for the period of FY93 to FY97 depending on the step and academic degree. Various examples outline different situations. The chart illustrates so-called lane changes due to degree earned such as BA to MA and an MA to D.

For example, as of FY93, teacher A was on the maximum step 8 and had a BA. By FY97, this teacher on step 8 received salary increases totaling to 13.6 percent. If this teacher earned an MA and changed salary lane during this period, the increase would have amounted to 25.4 percent.

Teacher B had a BA, step 4, in FY93. In FY97, this teacher was on step 8 and received a salary increase of 45.3 percent. Had this teacher earned an MA and changed salary lane during this period, the increase would have amounted to 60.3 percent.

Teacher C entered NRPS with a BA at step 1 in FY93. By FY97, this teacher reached step 5 and received a 44.8 percent increase in pay. By earning the next contract salary lane of an MA, the percent increase in salary would have reached 61.1 percent.

Chart 9-3

**North Reading Public Schools
Teaching Staff
Step/Degree Summary - Selected Years**

	FY93 Base Pay		FY97 Base Pay			FY93-97 % Change	
	Step	Base Pay	Step	Base Pay		BA	MA
		BA		BA	MA		
Teacher A	8	\$36,301	8	\$41,253	\$45,538	13.6%	25.4%
Teacher B	4	\$28,400	8	\$41,253	\$45,538	45.3%	60.3%
Teacher C	1	\$23,677	5	\$34,295	\$38,134	44.8%	61.1%
		MA		MA	D	MA	D
Teacher A	8	\$40,071	8	\$45,538	\$47,373	13.6%	18.2%
Teacher B	4	\$31,658	8	\$45,538	\$47,373	43.8%	49.6%
Teacher C	1	\$26,580	5	\$38,134	\$39,879	43.5%	50.0%

Note: NRPS has 3 salary lanes: BA - Bachelor degree; MA - Master degree; D - Doctoral degree
Data obtained from NRPS.

Chart 9-4

**North Reading Public Schools
Teaching Salary Schedules
Comparison of FY93 - FY97 Salary Schedules - Steps 1 and 8**

Salary Lane	Initial Entry Level - Step 1				
	FY93	FY94	FY95	FY96	FY97
BA	\$23,677	\$24,387	\$25,241	\$26,251	\$26,907
MA	\$26,580	\$27,377	\$28,335	\$29,468	\$30,205
D	\$27,987	\$28,827	\$29,836	\$31,029	\$31,805

Salary Lane	Highest Level - Step 8				
	FY93	FY94	FY95	FY96	FY97
BA	\$36,301	\$37,390	\$38,699	\$40,247	\$41,253
MA	\$40,071	\$41,273	\$42,718	\$44,427	\$45,538
D	\$41,686	\$42,937	\$44,440	\$46,218	\$47,373

Note: NRPS has 3 salary lanes: BA - Bachelor degree; MA - Master degree; D - Doctoral Degree. Data obtained from NRPS.

10. Professional Development Program

DOE requires school systems to prepare a professional development plan and to meet minimum spending requirements for professional development. NRPS has had a professional standards committee, now called the professional development

committee, since 1992. This committee was the result of a cooperative effort between the district and the teachers' union, the North Reading Education Association (NREA). Its initial goal was to develop comprehensive guidelines for in-service education with an emphasis on local control and participation.

The district professional development plan, in place since 1995, offers in-service programs as well as study and action research groups to NRPS instructional staff. The plan states that the purpose of professional development is "to enhance student learning through the encouragement of increased knowledge and skills and the renewal of each individual educator." The plan, offering a variety of courses including technology programs, mathematics portfolios, gender equity issues, curriculum development, development of open-ended questions and portfolio assessment programs, is updated three times annually.

In-service credits and professional development points (PDPs) are awarded for the courses taken. Six PDPs are equivalent to one in-service credit. In-service credits add to salary, but not to the base pay level. The district pays \$250 for each nine earned graduate/in-service credits authorized and approved by the Superintendent up to a maximum of \$2,250 for eighty-one credits.

In addition to the above-mentioned programs, NRPS participates in a consortium of five communities which organizes special courses at the University of Massachusetts at Lowell.

During FY95 and FY96, DOE required school districts to spend at a rate equivalent to \$25 per pupil for professional development. This requirement increased to \$50 per pupil for FY97. According to *Chart 10-1*, NRPS did not meet the minimum spending requirements in FY95 and FY96, but did so in FY97. The audit team determined that the portion of teachers' salaries attributable to professional development was not reported to DOE as required. The audit team determined that if this amount was added to other professional development expenditures, the minimum spending requirements for FY95 and FY96 would have been met. It was indicated to the audit team that the district does not calculate professional development expenditures as defined by DOE guidelines.

Chart 10-1

**North Reading Public Schools
Expenditures for Professional Development
(in whole dollars)**

	Professional Development	Minimum Spending Requirement	Total Spent as % of Requirement
FY94	\$0	N/A	N/A
FY95	\$13,623	51,000	26.7%
FY96	\$20,725	52,650	39.4%
FY97	\$130,163	109,400	119.0%

Note: Data obtained from NRPS

The elementary and middle school levels currently have five early release days and the high school has three during the school year specifically for professional development.

Chart 10-2 shows a sample of courses offered, the number of professional development points earned for each course and the number of attendees.

**North Reading Public Schools
 Selected Professional Development Offerings 1996-1998**

<u>Title</u>	<u>PDPs</u>	<u>Attendance</u>
Navigating the Net (A & B)	6	20
Spelling Program Development at the Little School	12	18
Comprehensive Reading Strategies for Grades 3-5	6	17
Infusing Geography into the Social Studies	6	16
Application of Technology within Middle School	18	10
Integrating Technology into the	12	9
Navigating the Net	6	8
Mass. History/Social Studies Framework:Impact Study	18	8
Connecting Language Arts to the Core Reading Program	18	8
Perform. Based Investigations for Middle School Science	18	7
Develop of a Correlated Science & Technology Framework	18	7
Language Arts Curriculum Reference Guide	12	6
Reading and Writing Development in	6	6
Integr. of World History/Geog. Curric. for grades 6-7	18	5
Curriculum Development in the Visual	6	5
Integr. of World History/Geog. Curric. for grades 6-7	18	5
Coord. the Language Arts Frameworks and the	12	5
Science and Technology Curriculum Framework	18	4
Aligning High School Social Studies with the	12	4
Perform. Based Units for Level 1 World Language	18	3

Note: Information obtained from

11. School Improvement Plans

M.G.L. Chapter 71, §59C mandates a school council at each school that must develop a school improvement plan and update it annually. For the purpose of this audit, the audit team reviewed FY98 NRPS school improvement plans for all schools.

The guidelines for NRPS school improvement plans distributed system-wide do not address certain components of M.G.L. Ch. 71 §59C such as: class size, funding for professional development, tolerance and extracurricular activities. As a result, plans vary in structure and in content. Plans for FY98 ranged from a 24-page document plus an appendix for one elementary school to a four-page narrative style plan for another elementary school. Measurable objectives and timetables are used sporadically or not at all. None of the plans included provisions for assignment of task completion or how progress would be monitored or evaluated during the year.

12. Time and Learning

Time and learning standards refer to the amount of time students are expected to spend in school. It is measured by the number of minutes or hours in a school day and the number of days in the school year. As of September 1997, DOE requires 990 instruction hours per year for both secondary (junior high and high schools) and 900 hours of instruction for the elementary and middle schools. There is no requirement for kindergarten.

In NRPS, there were 181 teaching days in the 1997 school year and 182 in 1998. The DOE requirement is 180 teaching days per year. Teachers were compensated an additional 0.5 percent in school years 1997 and 1998 for the increased time.

As shown in *Chart 12-1*, NRPS time and learning plan exceeded the 1997/98 DOE school year requirements by nine hours in the high school, 56 hours in the middle school and 25 hours in the elementary schools.

Chart 12-1

North Reading Public Schools Time and Learning Standards

	1995/96	1997/98	
	NRPS Standard Hours Per Year	DOE Req. Hours Per Year	NRPS Standard Hours Per Year
High School	945	990	999
Middle School	925	900	956
Elementary School	902	900	925
Kindergarten	420	N/A	428

Note: Data obtained from NRPS

13. Courses and Class Sizes

Chart 13-1 shows core class sections and enrollment as well as average class sizes as of September 1997 for the 1997/98 school year. The average enrollment in these sections was 22.2 or less students per class. English had the smallest average class size with 18.5 students, while Social Studies had the largest with 22.2 students. All core subjects had some sections with at least 25 students, and all except science had a section with 30 or more.

Chart 13-1

**North Reading Public Schools
High School Classes
1997/98 School Year**

Subject	Number of Sections	Total Enrollment	Avg. Enroll. Per Section	Sect. w/ 25-29	Sect. w/ 30 or more	30+ %
English	43	795	18.5	10	1	2.3%
Math	29	553	19.1	6	1	3.4%
Science	24	493	20.5	3	0	0.0%
Social Studies	41	911	22.2	14	1	2.4%

Note: Data obtained from NRPS

14. Technology

NRPS developed a five-year implementation plan to improve technology for the years 1996-2000. DOE approved the plan in October of 1996 and the update was submitted electronically in November of 1998. The plan was created by a twenty-two-member technology advisory committee representing a variety of community interests. Funding was to be provided through a combination of an appropriation in the school budget, separate warrant articles, capital grants through DOE, and both private and corporate donations.

The plan projected that full implementation would cost \$5.3 million over five years. The plan is currently in its fourth year and \$865,307, or 16.3 percent, has been expended. The plan's objectives have not occurred due to budget constraints.

There are currently 363 computers in the school system. According to DOE's 1998 EdTech Update, NRPS has 121.9 students per type A/B computer. Type A/B computers can handle the most current software. The district has 9.3 students per computer of all types. This is somewhat higher than the statewide average of 7.2. There is a formal inventory system in place for both the hardware and software.

NRPS aligns its technology curriculum with the Inter Society for Technology and Education (ISTE) as well as the Massachusetts state frameworks. ISTE's mission is to promote appropriate use of technology to support and improve learning, teaching and administration. Most of the instructional training takes place in the school computer laboratories.

NRPS accessed the Internet through a partnership with University of Massachusetts in 1992. All of the schools in the district are connected to a Wide Area Network (WAN), except for one elementary school, where the connection is currently in progress. Each school has its own Local Area Network (LAN). A group of over a dozen volunteers known as the Tech Core took on small projects to wire schools to the WAN.

Year 2000 Compliance (Y2K)

The basis of the Y2K issue is computer programs that do not have four digits in the date field, which may cause programs reading the year 00 as 1900 rather than 2000. The software programs are Y2K compliant. Payroll, accounting systems, and student information management software programs are being upgraded this year and will be compliant. Most educational software is not date sensitive.

The school department security system is Y2K compliant. Physical plant functions such as electric, gas services and telephones remain an issue as they are controlled by other computer systems and programs. The most current issue facing North Reading is setting the clock systems located at the high school.

15. Supplies and Textbooks

The school district's annual budget provides for textbooks and instructional supplies. The acquisition of instructional equipment is provided for in the town's capital budget plan.

Chart 15-1 shows the total budgeted amount for textbooks and instructional supplies for selected years and a yearly per student amount. The audit team noted that expenditures for textbooks may exceed the budgeted amounts. From FY90 to FY98, textbook expenditures exceeded budgeted amounts in six out of nine years by a combined total of \$76,394 or 17 percent.

According to *Chart 15-1*, budgeted textbooks and instructional supplies increased most in dollar and percentage terms at the elementary level between FY93 and FY97. Budgeted supplies and supplies per student increased by \$110,000 or 88.7 percent from FY93 to FY97.

**North Reading Public Schools
 Textbooks and Instructional Supplies
 (in thousands of dollars)**

	FY93	FY94	FY95	FY96	FY97	FY93 - FY97	
						\$ Incr.	% Incr.
High School	\$62	\$57	\$70	\$70	\$96	\$34	54.8%
Middle School	\$39	\$38	\$35	\$35	\$45	\$6	15.4%
Elementary	\$54	\$60	\$86	\$101	\$143	\$89	164.8%
SPED	\$8	\$10	\$11	\$11	\$15	\$7	87.5%
Systemwide	\$9	\$8	\$12	\$12	\$15	\$6	66.7%
Total	\$172	\$173	\$214	\$229	\$314	\$142	82.6%
Textbooks Only	\$47	\$48	\$55	\$55	\$79	\$32	68.1%
Supplies	\$124	\$125	\$159	\$174	\$234	\$110	88.7%
Textbooks / Student	\$26	\$25	\$27	\$26	\$36	\$11	41.6%
Supplies / Student	\$67	\$65	\$78	\$83	\$107	\$40	59.0%

Note: Data obtained from NRPS. No detailed breakdown available for FY89.

The district has a written textbook adoption process. A recommendation is made to the principal and to the director of curriculum and technology along with a narrative evaluation of the recommendation. The recommendation is usually made at the elementary level by the individual teachers and at the secondary level by the department heads. The evaluation must describe the utility of the text from several perspectives including whether it meets the Massachusetts curriculum frameworks in content and skill analysis. The evaluation must then be reviewed by the curriculum standards committee and by the administrative council before being forwarded to the Superintendent and school committee for their approval.

An updated system-wide textbook inventory was not available. A partial listing was provided to the audit team.

16. Test Scores

NRPS test scores are generally above the state average. MCAS scores show that NRPS scored above the state average scaled scores for all grades in all areas. SAT scores have generally been above the state average. MEAP, the state's educational testing program from 1988 to 1996, showed that NRPS scores increased significantly in all four subject areas for grades 4 and 8 between 1988 and 1996. Results from the 1998 Iowa Tests of Educational Development (ITED) indicate that 98 percent of NRPS grade 3 students demonstrated a high degree of proficiency in fundamental skills of reading.

From 1990 to 1996 there were no standardized tests other than MEAP and Iowa tests. The Comprehensive Testing Program (CTP III or ERB) was administered in the 1980s. It was discontinued in 1989 due to budget constraints. It was reinstated in 1996 to prepare students for the PSATs and SATs. In the fall of 1998, the CTP III was replaced with the Terra Nova. NRPS officials indicated that the Terra Nova achievement test was a multiple assessment test with open-ended questions that was the best test for their needs and closely approached the MCAS test.

Scholastic Aptitude Test (SAT)

SAT scores are generally above the state average as shown in *Chart 16-1*. Scores from 1994 and 1995 cannot be compared to 1996 and 1997 scores since SAT scores were “reentered” in 1996 resulting in a higher score for those years for all schools and consequently a higher state average.

Chart 16-1

North Reading Public Schools Scholastic Aptitude Test (SAT) Results

SAT Content Areas	1994		1995		1996		1997	
	NRPS	State Avg.	NRPS	State Avg.	NRPS	State Avg.	NRPS	State Avg.
Verbal	411	426	437	430	518	507	517	508
Math	458	475	478	477	499	504	504	508
Total	869	901	915	907	1017	1011	1021	1016
NRPS - % of State Avg.	96.4%		100.9%		100.6%		100.5%	

Note: Data obtained from NRPS and DOE

Massachusetts Educational Assessment Program (MEAP)

An analysis of NRPS MEAP scores is in *Appendix C*. MEAP scores are reported in two ways: scaled scores, which range from 1000 to 1600, and proficiency levels which are reported as a percentage of students in each proficiency. Level 1 is the lowest, level 2 is considered the “passing grade” level, while levels 3 and 4 constitute the more advanced levels of skills.

Proficiency scores for 1992 and 1996 shown in *Chart 16-2* indicate that scores for NRPS grade 4 students increased in all four subject areas for level 2. The scores for grade 8 students also show an increase in level 2 during this same time period.

Chart 16-2

**North Reading Public Schools
MEAP Proficiency Scores
1992 and 1996 Fourth and Eighth Grades**

Fourth Grade	1992			1996		
	Level 1 or Below	Level 2	Levels 3 & 4	Level 1 or Below	Level 2	Levels 3 & 4
Reading	25%	36%	39%	25%	45%	31%
Mathematics	24%	42%	35%	13%	61%	25%
Science	27%	39%	35%	10%	53%	37%
Social Studies	19%	50%	31%	16%	51%	33%
Eighth Grade	1992			1996		
	Level 1 or Below	Level 2	Levels 3 & 4	Level 1 or Below	Level 2	Levels 3 & 4
Reading	28%	27%	45%	16%	32%	47%
Mathematics	28%	43%	30%	19%	50%	31%
Science	21%	26%	53%	13%	46%	37%
Social Studies	30%	29%	42%	22%	40%	38%

Note: Data provided by DOE and NRPS

According to *Appendix C*, between 1988 and 1996, MEAP scores for students in grades 4 and 8 improved significantly in all four subject areas. In fact, all four subject areas for grade 8 improved by 100 points or more.

Chart 16-3 shows MEAP grade 4 reading scores for selected school districts whose scores in 1988 ranged from 1360 to 1400 as compared to NRPS's score of 1380. The scores for grade 4 students are particularly significant because, by 1996, the greatest impact of education reform should initially be seen in the performance of these students. The reading scores for NRPS grade 4 students showed significant improvement from 1988 to 1996. The score remained at 1430 for 1992 and for 1996.

MEAP Reading Scores - 4th Grade- 1988 Scores from 1360-1400

	1988	1990	1992	1994	1996	1992 - 1996 Change
Marshfield	1400	1420	1450	1440	1410	-40
Hanover	1400	1460	1450	1470	1440	-10
Lexington	1400	1440	1440	1460	1460	20
Wachusett	1400	1420	1410	1420	1440	30
Swampscott	1400	1390	1380	1400	1380	0
Nashoba	1400	1390	1420		1400	-20
Westwood	1390	1470	1420	1440	1480	60
Marblehead	1390	1440	1410	1440	1420	10
Chelmsford	1390	1400	1440	1430	1410	-30
Williamstown	1390	1430	1390	1440	1410	20
Monson	1390	1380	1300	1320	1340	40
North Reading	1380	1430	1430	1460	1430	0
Danvers	1380	1340	1440	1410	1410	-30
*Wellfleet	1380	1390	1430	1420	1430	0
Rockport	1380	1310	1340	1430	1420	80
Walpole	1380	1410	1370	1410	1400	30
*Hatfield	1380	1450	1350	1330	1400	50
Watertown	1370	1270	1260	1300	1360	100
*Hadley	1370	1390	1380	1310	1210	-170
Ashland	1370	1330	1370	1350	1360	-10
Duxbury	1370	1400	1440	1490	1400	-40
North Andover	1370	1400	1410	1410	1370	-40
*Wales	1360	1340	1330	1340	1360	30
Lenox	1360	1320	1330	1370	1390	60
Dennis-Yarmouth	1360	1330	1340	1350	1350	10
Waltham	1360	1330	1370	1370	1350	-20
Triton	1360	1380	1370	1370	1360	-10
State Average	1300	1310	1330	1300	1350	20

Note: A significant change in a score is considered to be 50 points in either direction. An asterisk signifies a small school district whose scores may vary significantly and are not as reliable due to the size of the test sample.

Iowa Tests

The Iowa Tests of Basic Skills (Iowa tests) for grade 3 students was administered throughout Massachusetts in the spring of 1998. Results were categorized by students tested under routine conditions, students with disabilities tested under non-routine conditions and students with limited English proficiency. NRPS was at the 85th percentile in reading for all students tested under routine conditions. The state score was at the 64th percentile. The test defines four different levels of reading comprehension: pre-reader, basic reader, proficient reader and advanced reader. Two percent of students tested as pre- or basic readers while 98 percent tested as proficient or advanced. In 1998, 51 percent of NRPS students were advanced readers, which is more than twice the state average of 23 percent for that same category. About 93 percent of the tested students have attended NRPS since the first grade.

The Iowa Tests of Educational Development, also referred to as the Massachusetts Grade 10 Achievement Test, was also administered in the spring of 1997. It tested seven different areas of skills including reading, quantitative thinking and social studies. Scores were based on a national sample of students who took the test. NRPS grade 10 students scored at the 70th percentile compared to the national sample. NRPS's performance compares to scores as high as the 89th percentile and as low as the 28th percentile for other Massachusetts school districts.

CTP III

NRPS reinstated the CTP III (ERB) test in 1996 for grade 9 students after having eliminated them in 1989 due to budget constraints. The decision was based on preparing the students for Preliminary Scholastic Aptitude Tests (PSATs) and SATs.

The CTP III tests student skills in reading, writing and mathematics and assesses their scores in each category by school in terms of a national percentile and stanines, or grouped intervals of scores that indicate levels of performance. CTP III measures achievement in grades 1 to 12 and verbal and quantitative ability in grades 3 to 12. The district replaced the CTP III with the Terra Nova in the fall of 1998. The Terra Nova was administered to grades 6 and 9.

Massachusetts Comprehensive Assessment System (MCAS)

MCAS scores show that NRPS students scored above the state average scaled scores for all students as well as all students attending the district for three years or more.

MCAS is the new statewide assessment program administered annually to grades 4, 8 and 10. It measures performance of students, schools and districts on learning standards contained in the Massachusetts curriculum frameworks and fulfills the requirements of education reform. This assessment program serves two purposes:

- measures performance of students and schools against established state standards; and
improves effective classroom instruction by providing feedback about instruction and modeling assessment approaches for classroom use.

MCAS tests are reported according to performance levels that describe student performance in relation to established state standards. Students earn a separate performance level of advanced, proficient, needs improvement or failing based on their total scaled score for each test completed. There is no overall classification of student performance across content areas. School, district and state levels are reported by performance levels.

Chart 16-4 reflects performance level percentages for all NRPS students in tested grades. *Appendix F* provides additional detail for students who have attended schools in the school district for at least three years.

**North Reading Public Schools
 MCAS Test Scores
 Percentage of Students at Each Performance Level**

All Students	Advanced	Proficient	Needs Improvement	Failing (Tested)	Failing (Absent)	Average Scaled Score	State Avg. Scaled Score
Grade 4:							
English Language Arts	2	37	61	0	0	238	230
Mathematics	27	42	30	1	0	249	234
Science & Technology	16	66	18	0	0	249	238
Grade 8:							
English Language Arts	4	83	12	0	0	247	237
Mathematics	22	43	23	12	0	243	227
Science & Technology	7	59	28	6	0	242	225
Grade 10:							
English Language Arts	3	58	30	10	0	240	230
Mathematics	11	25	28	36	0	230	222
Science & Technology	4	37	47	11	0	236	225

Note: Data provided by DOE

17. Management and Personnel Practices

Management Practices

Strong site-based management and committee involvement characterize the district's management style. Principals are given control by central administration in the management of their schools. As a result principals play an important role in budgeting, textbook selection, curriculum development and hiring of staff.

In 1992, the school committee formed an education reform task force to review certain areas of the impending state education reform law including site-based management, curriculum improvement, staff development and school governance councils.

The Superintendent meets with an administrative council biweekly. The council includes all principals, the business manager, the director of pupil services and the director of curriculum and technology. In the early 1990's, the council assumed the responsibility of curriculum articulation and consistency.

The district's strategic planning committee discusses the mission, beliefs and vision statements for the district's strategic plan. The committee outlines goals and themes for action plans. Action teams then write specific action plans.

The technology advisory committee that developed the district technology plan in 1996 was one of several technology committees formed.

Hiring Process

NRPS uses a contractual transfer process to fill projected teaching vacancies. If a vacancy occurs during the summer months, it is posted in the Superintendent's bulletin and is advertised in the local newspaper. A copy of all posted vacancies is sent to the NREA president. The position can then be filled with a person hired from outside the school system. The principal screens candidates and sends selections to the Superintendent who sends a letter offering the position to the chosen candidate. NRPS advertises vacancies for principals in the same manner as well as in the regional and national media. Interested candidates must be certified for that particular position.

The principal selection process includes a search committee consisting of teachers, department heads, parents, a school council member and is chaired by the Superintendent. Through screening and interviewing, four to six candidates are submitted for public interviews. The Superintendent then selects the principal from this list.

The audit team examined managerial staff contracts for positions of Superintendent, the business manager and principals. Starting salaries for school principals are based on the type of school, the school enrollment level and their professional experience. Although the principals had different salaries, three of five principal contracts reviewed received the same percentage raise and two had three year contracts all ending on the same day. Contracts state that annual salary increases are based on performance standards consistent with the principals of evaluation established by the Board of Education pursuant to M.G.L. Ch. 69 and 71.

Evaluation Process

Principals and Administrators

Each principal contract has an evaluation section. This section states that the principal is evaluated in accordance with principles and procedures outlined in the Professional Growth and Evaluation Plan and the Principles of Effective Leadership and Performance Standards and the duties and responsibilities contained in the principals' job descriptions.

Before FY96, the North Reading principals were part of an administrators' union. At that time, principals worked under letters of employment. Under current contracts, the Superintendent will base future annual salary increases upon positive performance evaluations.

Principals received professional development training in teacher evaluation from a program called Research for Better Teaching (RBT). Three principals have been

appointed since education reform went into effect. The system uses a similar process to evaluate administrators.

Teachers

The evaluation process for teachers was negotiated as part of the union contract. This process was conducted in accordance with DOE's Seven Principles of Effective Teaching and North Reading's Professional Growth and Evaluation Plan.

North Reading's Professional Growth and Evaluation Plan consists of a four-year cycle. By January of year one, the teacher designs a multi-year Professional Growth Plan which is consistent with the district goals and includes an individual activities component and a collaborative activities component. Once the plan is developed, the principal confirms it. Year two involves a formal assessment of classroom teaching where the teacher applies the Principles of Effective Teaching. In year three, the teacher reflects on teaching practices, professional expectations and professional development in the form of a portfolio, a journal, or a narrative. The principal writes an annual progress report which becomes part of the teacher's summative evaluation in year four.

At any point in the four-year cycle the principal may require for the next school year a Focused Evaluation plan that addresses specific needs for improvement. When the principal determines that the teacher no longer requires significant improvement, the principal will place the teacher in the appropriate phase of the four-year professional growth and evaluation cycle. Although there is a specific plan for teachers that fail to meet performance standard(s), the process is lacking any dismissal language.

Certified staff without professional status is to be evaluated three times per year with the first evaluation completed no later than December 1. The principal or supervising administrator will complete the annual evaluation by May 1 of each year.

For the 1997/98 school year, 80 teachers were evaluated. Of these, 41 were teachers without professional status.

Under education reform, NRPS has used this process to remove two teachers without professional status.

18. Accounting and Reporting

The audit team traced a sample of expenditures reported to DOE to NRPS accounting records. The audit team also met separately with several NRPS staff and the town finance director. The audit team was satisfied that adequate safeguards exist for proper internal controls. Based upon a sample, expenditure reports were generally an accurate representation of NRPS expenditures.

The school lunch fund had a positive balance of \$1,593.33 at the close of FY98. This did not reflect unpaid bills for the last quarter of FY98. If it had, the account would have been in deficit by \$51,000. The school budget has transferred funds in the past to cover an end-of-year deficit but it has not done so for the last couple of years.

There is a good working relationship between the town and the school department. Their respective accounting packages are not completely compatible. Although payroll information is transferred by diskette, accounts payable requires duplicate entry. It was indicated to the audit team that by the end of FY99, both payroll and accounts payable will be automatically uploaded into the town's system with software that will bridge the school department's chart of accounts to the town's.

19. Review of Expenditures

The audit team completed a review of NRPS expenditures and purchasing controls, analyzed the accounting system and selected accounts from the FY98 general ledger. The review showed that purchasing procedures and controls are in place and are being utilized.

All purchase orders are requested by staff, authorized by the principals and forwarded to central administration for approval by the business manager who is the chief purchasing agent for the district. The request is then ordered and upon receipt of the order the requesting party must sign the purchase order verifying receipt. Once verified, the payment voucher is sent to the town hall for payment. The warrants are then returned to the school central administrative office with the check number for comparison to the purchase order.

20. High School Accreditation

North Reading high school (NRHS) is accredited. The accreditation visit by the New England Association of Schools and Colleges (NEASC) took place in March of 1993. NRHS submitted the required interim status reports in 1995 and in 1998. Interim reports are due two years and five years after the initial accreditation reports are issued. NEASC voted to accept the high school's five-year progress report in June 1998 stating that it was pleased with several issues including:

- the hiring of a system-wide Director of Curriculum and Instruction;
- the addition of a new state-of-the-art computer lab;
- reinstatement of the reading program;
- the offering of additional Advanced Placement courses in french, spanish, physics, chemistry and biology; and
- the initiation of a curriculum mapping process.

Chart 20-1 identifies the status of the recommendations contained in the 1998 five-year progress report.

Chart 20-1

**North Reading Public Schools
Status of Accreditation Recommendations**

Area	Rec's Completed	In Progress	Planned for the Future	No Rejected	No Action
Philosophy	5	4	1		
Curriculum & Instruction	22	18	2	1	1
Business Education	3	3			
English	9	7	2		
Foreign Language	10	9	1		
Health Education	6	5		1	
Home Economics	3	1			2
Mathematics	5	4			1
Music	2	2			
Physical Education	6	6			
Science	7	4			3
Social Studies	8	8			
Special Education	2	2			
Student Activities	2	2			
Technology Education	5	4	1		
Visual Arts	4	3	1		
Student Services	13	9			4
Educational Media Services	8	6	1		1
Admin., Faculty, Staff	18	15	2		1
School Facilities	8	6	1	1	
Comm. Support and Involvement	2	1	1		
School Climate	5	5			
Assm't of Educational Progress	6	6			
Total	159	130	13	3	8

Note: Data obtained from NRPS

21. Grade 3 Transiency

Student transiency is generally defined as the percentage of students who enter and/or leave the system after the first day of school. Transiency poses an educational problem because students may lose the benefit of a sequential and coherent school program as they move from school to school.

NRPS has a relatively stable student population in the lower grades as measured by the 1998 Iowa 3rd grade reading test in comparison to 14 communities of similar population to North Reading. Results from that test are categorized by students who have taken the test under routine conditions. Students who did not take the test or were given extra time to finish the test are excluded. According to *Chart 21-1*, of the communities shown, NRPS has the lowest transiency percentage, 7.3 percent, well below the state average of 19.6 percent. NRPS has the highest stable population

percent of grade 3 students who attended NRPS in grades 1, 2 and 3. This stability percentage, 92.7 percent, is well above the statewide average of 80.4 percent.

Chart 21-1

Transiency and Stability - 3rd Grade

Selected Communities

Student Population Participating in the 1998 Iowa 3rd Grade Reading Test

Community	Stable Population	Total Population	Stable Population Percent	Transiency Percent
Ipswich	118	151	78.1%	21.9%
Oxford	122	153	79.7%	20.3%
Westwood	408	500	81.6%	18.4%
Grafton	167	202	82.7%	17.3%
Clinton	148	176	84.1%	15.9%
Seekonk	142	166	85.5%	14.5%
Ashland	143	164	87.2%	12.8%
Wayland	176	201	87.6%	12.4%
Holliston	186	212	87.7%	12.3%
Hanover	182	207	87.9%	12.1%
Belchertown	171	193	88.6%	11.4%
Palmer	134	151	88.7%	11.3%
East Bridgewater	169	188	89.9%	10.1%
Millbury	154	171	90.1%	9.9%
North Reading	165	178	92.7%	7.3%
Statewide	54,047	67,233	80.4%	19.6%

Note: Student population includes only students tested under "routine" conditions.
Data obtained from DOE's 1998 Iowa Grade 3 reading test summary results.

22. Special Education and Transitional Bilingual Education

Special Education (SPED)

According to *Chart 22-1*, NRPS had a SPED participation rate of 11.3 percent in FY97, 5.2 percentage points lower than the state average of 16.5 percent reported by DOE. Total SPED enrollment in the 1990s has averaged around 250 students, yet increased significantly from FY97 to FY98. This increase was especially found in the "up to 25% separate" prototype category. District officials suggest that this increase is due in part to increased district enrollment and to increased parental understanding of the special education laws. As a percentage of total foundation enrollment, SPED enrollment has fluctuated during the 1990's, but has increased in the most recent year shown.

The percentage of SPED students who are considered substantially separate has decreased from a high of 14.4 percent in FY91 to 7.0 percent in FY98.

Chart 22-1

**North Reading Public Schools
SPED Enrollment
Based on October 1 Reports**

School Year Ending	Total Enrollment	Total SPED	SPED as % of Total Enrollment	Substantially Separate	Substantially Separate as % of SPED
1991	1,789	229	12.8%	33	14.4%
1992	1,831	229	12.5%	29	12.7%
1993	1,843	241	13.1%	27	11.2%
1994	1,930	254	13.2%	25	9.8%
1995	2,040	256	12.5%	26	10.2%
1996	2,106	254	12.1%	26	10.2%
1997	2,188	247	11.3%	23	9.3%
1998	2,319	300	12.9%	21	7.0%

Note: Data obtained from NRPS

According to *Chart 22-2*, the increase in SPED costs from FY93 to FY97 was \$716,000, or 61 percent, while the increase in total school district expenditures reported to DOE for the same period was \$2.5 million, or 24.5 percent. A majority of the SPED cost increase was due to an increase in tuitions. NRPS is a member of the SEEM (Special Education of Education Mutual) collaborative which provides services to children with low incident special needs. In 1996, SEEM became tuitioned based rather than shared services based. As a result, tuitions replaced the cost of each system providing its own teaching staff, instructional materials and space for certain special needs classes. SPED expenditures for FY93 increased from 11.5 percent of total school district expenditures to 14.9 percent in FY97.

**North Reading Public Schools
 Total SPED Expenditures as Reported to DOE
 (in whole dollars)**

	FY89	FY93	FY97	FY93-FY97	
				\$ Incr. / Decr.	% Incr. / Decr.
Special Education	\$1,040,387	\$1,173,827	\$1,889,355	\$715,528	61.0%

Note: Data obtained from NRPS

Transitional Bilingual Education (TBE)

NRPS does not have a bilingual program. As of the audit date, the district has only five students who have been recommended for English as a Second Language (ESL). A foreign language teacher taught the program for a couple of years after the departure of the ESL teacher. The system is currently in search of an ESL teacher.

23. Dropout and Truancy

Chart 23-1 identifies North Reading's dropout rates from FY93 to FY97 in comparison to the state average and to the average of fourteen communities of similar population to North Reading. North Reading's dropout rate was 0.6 percent in FY97, significantly less than the state average of 3.4 percent.

There is no formal dropout program. North Reading does have a program offered to those who need an alternative setting. It is located at a reclaimed school in Wakefield, otherwise known as the SEEM Campus Academy. It is a behavioral program where there are smaller class sizes and more time is devoted to the students. Students are provided with their own case manager who evaluates behavior and tracks progress. The goal of the program is to decrease the SEEM service, ultimately returning the student back to NRPS.

**High School Dropout Rates
 Selected Communities
 FY93 - FY97**

Community	FY93	FY94	FY95	FY96	FY97
Millbury	3.9%	2.3%	2.3%	2.1%	7.1%
Clinton	3.0%	6.3%	3.8%	6.4%	6.0%
Grafton	1.1%	2.7%	3.9%	1.7%	3.8%
East Bridgewater	1.8%	1.3%	2.9%	3.0%	3.2%
Oxford	0.6%	1.2%	1.4%	0.4%	3.0%
Ipswich	0.7%	2.6%	2.5%	2.2%	2.8%
Seekonk	1.1%	1.5%	1.2%	1.2%	2.7%
Belchertown	1.4%	2.2%	2.3%	2.4%	2.4%
Palmer	1.6%	1.6%	1.9%	1.3%	1.5%
Hanover	0.4%	0.6%	0.8%	0.9%	0.7%
North Reading	1.1%	0.6%	0.9%	1.3%	0.6%
Wayland	0.0%	0.2%	0.3%	0.2%	0.5%
Westwood	0.0%	0.2%	0.4%	1.0%	0.4%
Holliston	0.4%	0.3%	0.9%	0.4%	0.4%
Ashland	0.0%	0.0%	0.0%	0.2%	0.0%
Average These Communities	1.1%	1.6%	1.7%	1.6%	2.3%
Median These Communities	1.1%	1.3%	1.4%	1.3%	2.4%
State Average	3.5%	3.7%	3.6%	3.4%	3.4%

Note: Data provided by DOE

24. Maintenance and Capital Improvement

The audit team made site visits to all five schools in the district. These buildings were found to be clean and well kept. There was no evidence of smoking on school property by students, staff or by the visiting public as per the district's "no smoking" policy.

The audit team found structural issues at two elementary schools. The first school had visible evidence of ceiling damage due to a leaky roof. It was noted to the audit team that this was the case throughout the building. The roof is almost 40 years old and has been patched over time. The most recent school construction project approved by the town will re-roof and renovate the building. The second school had a failing septic system. Funds are included in the FY2000 capital budget for this repair.

NRPS had two comprehensive facilities audits completed in the last ten years by two different architectural firms. The most recent audit, completed in 1997, provides a plan for maintenance and building improvements and is included in the district's strategic action plan for school facilities maintenance. The action plan becomes the basis for

annual capital requests. Prior to FY99, the school business manager would meet with the school committee to develop the next fiscal year's capital budget. The school committee would then request a separate article from the board of selectmen for their capital requests. In FY99, the town began a five-year capital improvement plan. NRPS now prepares a five-year capital plan for school committee approval that is then forwarded to the town administrator for further review and presentation to the board of selectmen and to the finance committee for their recommendations.

School building assistance authorizes a 64 percent reimbursement rate to the town. The town is currently receiving school building assistance for one project, anticipating funding for a second in FY2001 or FY2002 and planning to submit for funding for a third project.

In FY97, the district spent 62.9 percent of the foundation budget targets for ordinary and extraordinary maintenance. The 1998 amendment to the school building assistance law requires an expenditure of at least 50 percent.

In FY97, the town appropriated funds for two double-unit modular classrooms to be placed at one elementary school. The town's historic district commission had to approve the modulares because the school was located in the town's historic district. In 1997, the commission voted a certificate of hardship allowing the school department to install the units at the site for a limit of four years, with a maximum of two one-year extensions.

25. Curriculum Development

In the early 1990s, the district changed its curriculum structure due in part to low MEAP scores, to reflect future MEAP open-ended test questions, and in response to the loss of curriculum coordinators to budget constraints. The changes implemented were based on national standards. These curriculum initiatives were delegated to the administrative council. Department heads assessed the curriculum and adjusted it to the changing needs of the departments and met monthly with the Superintendent. In addition, in 1992, one of the duties of the education reform task force was to improve curriculum development.

A new Superintendent was hired in 1994. His previous positions in other districts had been both as an assistant superintendent for curriculum and a director of curriculum. A strategic action plan for curriculum assessment was instituted by the Superintendent. Curriculum framework study groups were implemented in 1995 to review the state frameworks. The Superintendent hired a director of curriculum and technology and included the position to his administrative council in 1997. In that same year, a reading consultant teaching critical reading and thinking introduced weekly open ended questions for classes in eighth grade science, math and social studies.

A curriculum/assessment standards action team further developed a district-wide strategic plan in 1998.

Currently, NRPS is one of fifteen schools working with DOE on an Internet curriculum alignment sharing project. Teachers can download specific projects as well as student assessments for these projects.

IV. Employee Survey

The audit team conducted a confidential survey of all employees of NRPS to provide a forum for teachers and staff to express their opinions on education in NRPS.

Approximately 274 questionnaires were delivered to school staff and 106 responses were received and tabulated, a response rate of 38.7 percent. Areas covered by the survey include:

1. education reform,
2. education goals and objectives,
3. curriculum,
4. planning,
5. communications and mission statements,
6. budget process,
7. professional development,
8. supplies,
9. facilities, and
10. computers and other education technology.

Appendix D shows the teachers' answers to the survey questions. The Superintendent also received a summary of responses.

The survey results indicate that education reform is taken seriously in North Reading. Eighty-four percent of teachers think that education reform issues are considered when their own school plans are made and 79 percent think that also applies to district wide plans. Eighty-four percent believe that the school district is taking positive steps to improve education and 85 percent state that their job has changed because of education reform.

Sixty-six percent of teachers are clear about the school district's goals and objectives as well as how they relate to their own jobs. Sixty-seven percent feel that they have a role in the development of these goals and objectives, and 66 percent confirm that there are indicators used to measure progress toward them.

The survey indicates that 24 percent of teachers do not think that an increase in school funding is tied directly to improvements in education. Sixty-five percent of teachers think that improvements in education at the school would have occurred without education reform.

Seventy-four percent believe that the curriculum is coherent and sequential. Sixty-six percent believe that the curriculum now in use in their school will improve student test scores while 25 percent said that it would not. Ninety-one percent of the teachers feel that there is a coherent, on-going effort within NRPS to keep curriculum current and 65 percent feel that teachers play an important role in reviewing and revising the curriculum. Seventy-two percent feel that the curriculum does not impact test scores as much as how a subject is taught by a teacher.

V. Superintendent's Statement – Education Reform

As part of this review, the Superintendent was asked to submit a brief statement expressing his point of view with respect to three areas:

1. school district progress and education reform since 1993;
2. barriers to education reform; and
3. plans over the next three to five years.

As of April 27, 1999, the Superintendent had not submitted his brief statement despite repeated requests by the audit team. The statement was received on April 28, 1999 and has been included in *Appendix E*

VI. Appendix

Appendix A1	School Committee Budgets
Appendix A2	Budgeted Teachers' Salaries by Discipline
Appendix B1	Foundation Budget Line Items Targets and Expenditures FY94, FY96-FY97 - Table
Appendix B2 - 3	Foundation Budget Line Items Targets and Expenditures FY94, FY96-FY97 - Graph
Appendix C	Mass. Educational Assessment Program (MEAP)
Appendix D	Employee Survey Results
Appendix E	Superintendent's Statement on Education Reform Accomplishments, Barriers and Goals
Appendix F	Comparison of MCAS Average Scaled Scores
Appendix G	Auditee's Response

**North Reading Public Schools
School Committee Budgets
(in thousands of dollars)**

Category	FY89	FY93	FY89 - FY93		FY97	FY93 - FY97		FY98
			\$ Incr.	% Incr.		\$ Incr.	% Incr.	
Salaries:								
Teachers	\$4,752	\$4,794	\$42	0.9%	\$5,902	\$1,108	23.1%	\$6,474
Teachers - Other	\$221	\$192	(\$29)	-13.1%	\$296	\$104	54.2%	\$313
Administration	\$621	\$572	(\$49)	-7.9%	\$753	\$181	31.6%	\$868
Office Staff	\$254	\$287	\$33	13.0%	\$340	\$53	18.5%	\$374
Aides/Tutors	\$244	\$354	\$110	45.1%	\$493	\$139	39.3%	\$558
Custodial	\$370	\$381	\$11	3.0%	\$493	\$112	29.4%	\$535
Health	\$61	\$57	(\$4)	-6.6%	\$97	\$40	70.2%	\$112
Sick Leave	\$113	\$150	\$37	32.7%	\$196	\$46	30.7%	\$94
Transportation - SPED	\$0	\$39	\$39	0.0%	\$44	\$5	12.8%	\$47
Negotiations	\$0	\$70	\$70	0.0%	\$170	\$100	142.9%	\$0
Subtotal - Salaries	\$6,636	\$6,896	\$260	3.9%	\$8,784	\$1,888	27.4%	\$9,375
Expenses:								
Supplies	\$124	\$124	\$0	0.0%	\$182	\$58	46.8%	\$188
Textbooks	\$45	\$47	\$2	4.4%	\$79	\$32	68.1%	\$79
Equipment Maintenance	\$66	\$44	(\$22)	-33.3%	\$62	\$18	40.9%	\$70
New Equipment	\$16	\$31	\$15	93.8%	\$0	(\$31)	-100.0%	\$0
Operating - Other	\$239	\$308	\$69	28.9%	\$472	\$164	53.2%	\$434
Facilities	\$407	\$382	(\$25)	-6.1%	\$430	\$48	12.6%	\$443
Transportation	\$433	\$344	(\$89)	-20.6%	\$430	\$86	25.0%	\$402
Tuition	\$303	\$275	(\$28)	-9.2%	\$743	\$468	170.2%	\$836
Subtotal - Operating Exp	\$1,633	\$1,555	(\$78)	-4.8%	\$2,398	\$843	54.2%	\$2,452
Total School Budget	\$8,269	\$8,451	\$182	2.2%	\$11,182	\$2,731	32.3%	\$11,827

Note: Data obtained from NRPS

North Reading Public Schools
Budgeted Teachers' Salaries By Selected Discipline
(in thousands of dollars)

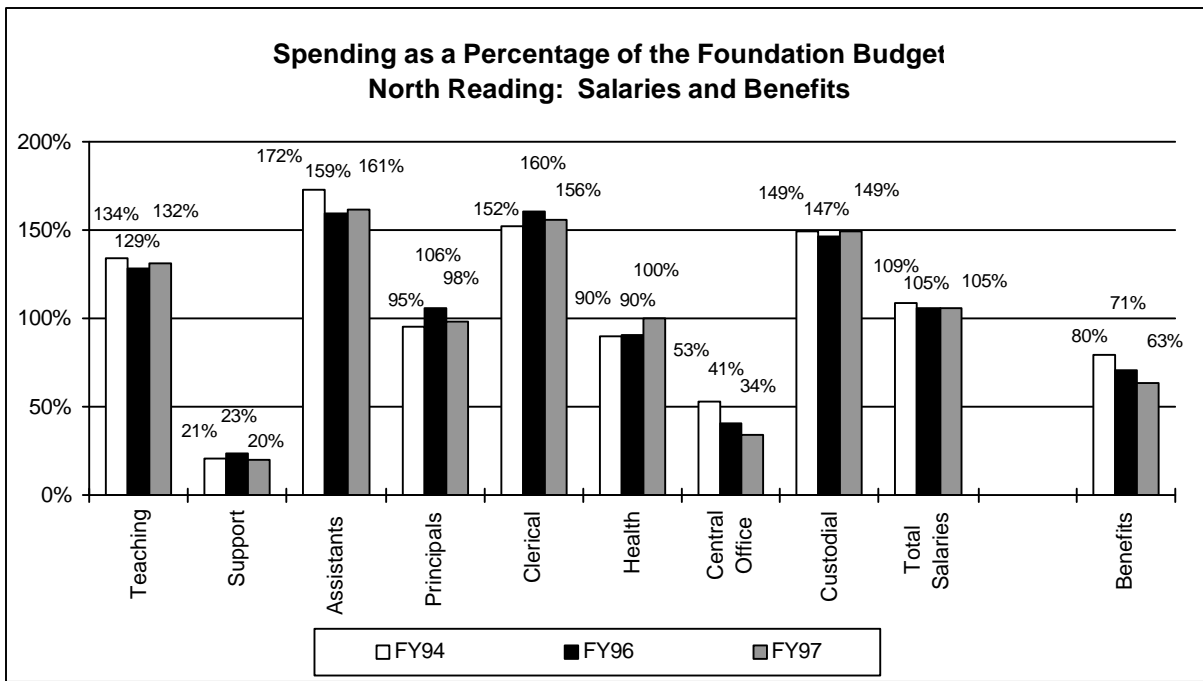
Discipline	FY93	FY95	FY93-FY97		FY93-FY98			FY97-FY98		
			FY97	\$ Incr.	% Incr.	FY98	\$ Incr.	% Incr.	\$ Incr.	% Incr.
Elementary	\$1,159	\$1,288	\$1,622	\$463	39.9%	\$1,851	\$692	59.7%	\$229	14.1%
English/Language Arts	\$437	\$475	\$533	\$96	22.0%	\$491	\$54	12.4%	(\$42)	-7.9%
Mathematics	\$375	\$393	\$454	\$79	21.1%	\$565	\$190	50.7%	\$111	24.4%
Science	\$355	\$371	\$410	\$55	15.5%	\$409	\$54	15.2%	(\$1)	-0.2%
Social Studies	\$379	\$418	\$436	\$57	15.0%	\$411	\$32	8.4%	(\$25)	-5.7%
Foreign Language	\$157	\$203	\$202	\$45	28.7%	\$189	\$32	20.4%	(\$13)	-6.4%
Business Education	\$100	\$64	\$110	\$10	10.0%	\$117	\$17	17.0%	\$7	6.4%
Art	\$109	\$92	\$151	\$42	38.5%	\$176	\$67	61.5%	\$25	16.6%
Music	\$157	\$164	\$171	\$14	8.9%	\$217	\$60	38.2%	\$46	26.9%
Kindergarten	\$179	\$230	\$181	\$2	1.1%	\$202	\$23	12.8%	\$21	11.6%
Physical Education	\$225	\$240	\$211	(\$14)	-6.2%	\$274	\$49	21.8%	\$63	29.9%
Reading	\$118	\$128	\$137	\$19	16.1%	\$240	\$122	103.4%	\$103	75.2%
Industrial Arts	\$76	\$81	\$0	(\$76)	0.0%	\$0	(\$76)	0.0%	\$0	0.0%
Health	\$75	\$83	\$91	\$16	21.3%	\$97	\$22	29.3%	\$6	6.6%
SPED	\$338	\$372	\$502	\$164	48.5%	\$528	\$190	56.2%	\$26	5.2%
General Arts	\$96	\$64	\$87	(\$9)	-9.4%	\$92	(\$4)	-4.2%	\$5	5.7%

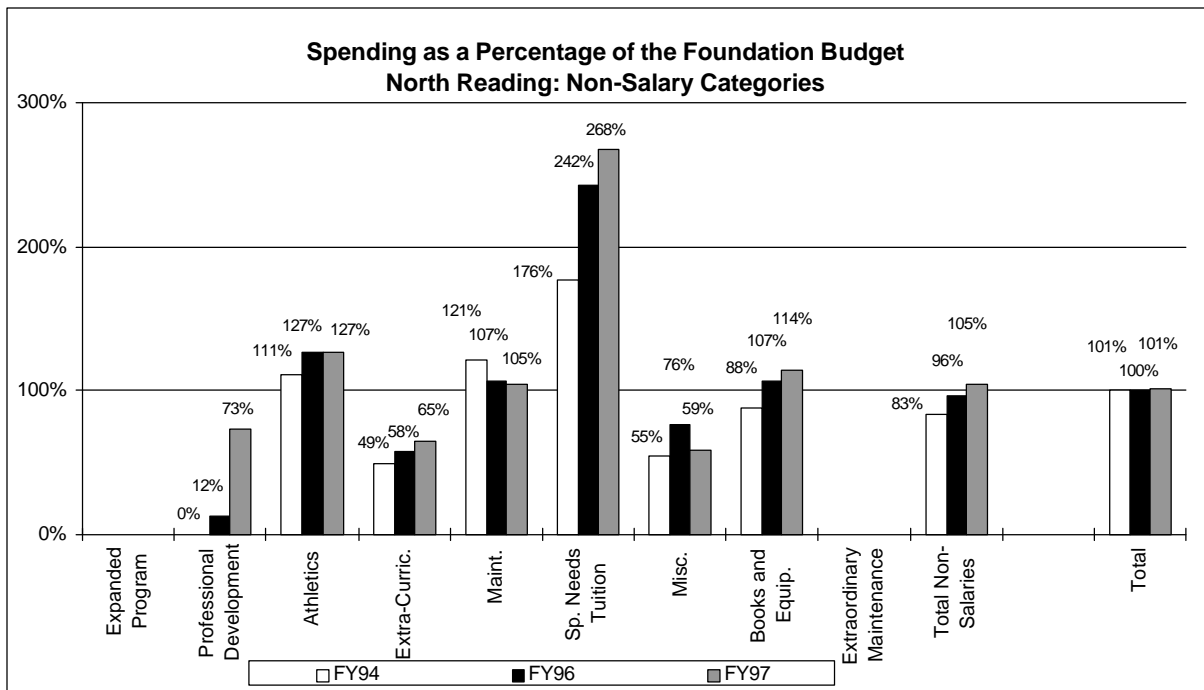
Note: Data interpreted from NRPS information.

North Reading Public Schools
Net School Spending According to Foundation Budget Categories
(in thousands of dollars)

	Reported Expenditures			Foundation Budget			Variance		
	FY94	FY96	FY97	FY94	FY96	FY97	Expend. over(under)	Foundation	FY97
Teaching Salaries	\$5,031	\$5,444	\$5,868	\$3,753	\$4,228	\$4,462	\$1,278	\$1,215	\$1,406
Support Salaries	\$244	\$321	\$291	\$1,157	\$1,377	\$1,474	(\$913)	(\$1,056)	(\$1,183)
Assistants' Salaries	\$314	\$339	\$363	\$182	\$213	\$226	\$132	\$126	\$138
Principals' Salaries	\$353	\$446	\$438	\$371	\$421	\$448	(\$18)	\$25	(\$9)
Clerical Salaries	\$330	\$397	\$410	\$218	\$248	\$264	\$112	\$149	\$146
Health Salaries	\$72	\$83	\$98	\$80	\$92	\$98	(\$8)	(\$9)	\$0
Central Office Salaries	\$185	\$164	\$145	\$351	\$399	\$425	(\$166)	(\$236)	(\$280)
Custodial Salaries	\$481	\$541	\$581	\$323	\$369	\$391	\$158	\$172	\$191
Total Salaries	\$7,011	\$7,735	\$8,194	\$6,436	\$7,348	\$7,785	\$575	\$387	\$408
Benefits	\$715	\$725	\$686	\$898	\$1,027	\$1,088	(\$183)	(\$302)	(\$402)
Expanded Program	\$0	\$0	\$0	\$19	\$33	\$28	(\$19)	(\$33)	(\$28)
Professional Development	\$0	\$21	\$130	\$147	\$168	\$178	(\$147)	(\$147)	(\$48)
Athletics	\$135	\$154	\$163	\$122	\$122	\$128	\$13	\$33	\$34
Extra-Curricular	\$28	\$36	\$44	\$57	\$63	\$67	(\$29)	(\$27)	(\$24)
Maintenance	\$505	\$506	\$525	\$418	\$474	\$501	\$87	\$32	\$24
Special Needs Tuition	\$430	\$651	\$774	\$244	\$269	\$289	\$186	\$382	\$485
Miscellaneous	\$95	\$149	\$122	\$173	\$196	\$208	(\$78)	(\$47)	(\$86)
Books and Equipment	\$476	\$637	\$721	\$541	\$597	\$632	(\$65)	\$40	\$89
Extraordinary Maintenance	\$0	\$0	\$0	\$279	\$316	\$334	(\$279)	(\$316)	(\$334)
Total Non-Salaries	\$1,669	\$2,154	\$2,479	\$2,000	\$2,237	\$2,366	(\$331)	(\$83)	\$113
Total	\$9,395	\$10,613	\$11,359	\$9,335	\$10,611	\$11,239	\$60	\$2	\$120
Revenues	\$3	\$43	\$17				\$3	\$43	\$17
Net School Spending	\$9,392	\$10,570	\$11,342	\$9,335	\$10,611	\$11,239	\$58	(\$41)	\$103

Note: Data obtained from DOE and NRPS. Totals may not add due to rounding.





**North Reading Public Schools
Massachusetts Educational Assessment Program (MEAP) Scores**

	Grade	1988	1990	1992	1994	1996	1988-96 Change	1996 State Average	1996 NRPS Over/(Under) State Avg.
Reading	4	1380	1430	1430	1460	1430	50	1350	80
	8	1350	1320	1500	1510	1530	180	1380	150
	10	N/A	N/A	N/A	1390	1400		1310	90
Math	4	1390	1400	1460	1470	1450	60	1330	120
	8	1360	1310	1450	1400	1460	100	1330	130
	10	N/A	N/A	N/A	1350	1380		1310	70
Science	4	1380	1460	1460	1470	1510	130	1360	150
	8	1340	1290	1510	1500	1530	190	1330	200
	10	N/A	N/A	N/A	1380	1400		1310	90
Social Studies	4	1390	1420	1460	1450	1470	80	1340	130
	8	1350	1300	1480	1470	1480	130	1320	160
	10	N/A	N/A	N/A	1380	1360		1300	60

Note: N/A indicates that test was not given to all grades in all years. Data obtained from DOE

EMPLOYEE SURVEY - North Reading**Teachers**

Note: Percentages may not add to 100% due to rounding

Rating Scale		
Yes/No Questions		Opinion
yes	1 & 2	Good to Excellent
No	4 & 5	Not good, inadequate
Not sure, one way or the other	3	OK - could be better, could be worse

1 Education Reform		1 & 2	4 & 5	3
1.a.	Are you familiar with the issues of Education Reform, the Law passed in 1993?	91%	4%	4%
1.b.	Do you feel you have a good understanding of the purpose and the goals of the law?	85%	6%	9%
1.c.	Do you feel that there is a lot of confusion about what Education Reform is all about?	54%	29%	16%
1.d.	Do you feel the issues of Education Reform are considered when school district plans are made?	79%	6%	15%
1.e.	Do you feel the issues of Education Reform are considered when school-based plans are made?	84%	3%	13%
1.f.	In your opinion is the school district taking positive steps to improve education?	84%	10%	6%
1.g.	Do you feel your job has changed because of Education Reform?	85%	8%	8%
1.h.	Do you think there has been an improvement in student achievement in your school due to Education Reform?	30%	27%	44%
1.i.	Do you think the improvements in education at the school would have happened without Education Reform?	65%	6%	29%
1.j.	Have you perceived an increase in school funding tied directly to improvements in education in your district?	24%	48%	29%

2 Educational Goals and Objectives		1 & 2	4 & 5	3
2.a.	Are the school administration's goals and objectives generally clear and understandable?	66%	16%	18%
2.b.	Are you clear about the school district's goals and objectives as they relate to your own job?	66%	15%	19%
2.c.	Are there indicators issued to measure progress toward goals and objectives generally?	54%	12%	34%
2.d.	Are there indicators used to measure your progress toward goals and objectives?	66%	13%	21%
2.e.	Do you have a role in developing these goals and objectives?	67%	24%	9%

EMPLOYEE SURVEY - North Reading**Teachers**

Note: Percentages may not add to 100% due to rounding

Rating Scale		
Yes/No Questions		Opinion
yes	1 & 2	Good to Excellent
No	4 & 5	Not good, inadequate
Not sure, one way or the other	3	OK - could be better, could be worse

3 Curriculum		1 & 2	4 & 5	3
3.a.	Do you believe that your district's curriculum is coherent and sequential?	74%	9%	18%
3.b.	Do you believe that your curriculum is challenging and tied to preparing students for life after secondary school?	85%	6%	9%
3.c.	Is there a coherent, on-going effort within the district to keep curriculum current with evolving trends and best practices in pedagogy and educational research?	91%	6%	3%
3.d.	Do teachers play an important role in reviewing and revising curriculum in the district?	65%	22%	13%
3.e.	Will the curriculum now in use in your school improve student test scores?	66%	9%	25%
3.f.	Do you believe that the curriculum content does not impact test scores as much as how a subject is taught by a teacher?	72%	19%	9%

4 Planning		1 & 2	4 & 5	3
4.a.	Is the planning for important issues (e.g. curriculum, budgetary, etc.) within the district a top-down process?	81%	9%	10%
4.a.1.	If the answer is "Definitely yes" (1) or "Generally yes" (2), is there an important role for teachers and professional staff in the planning process?	40%	35%	25%
4.b.	If staff does not have an important role in developing plans, are decisions made by the central office/school committee explained so that you can understand the basis for the decision/policy?	19%	40%	40%

5 Communications and Mission Statement		1 & 2	4 & 5	3
5.a.	Is there adequate on-going communication between teachers and district administrators? In other words, do you think that you know what is going on in the district?	38%	31%	31%
5.b.	Is there adequate communication between you and your superiors?	58%	25%	16%
5.c.	Is there a mission statement in place for your school district?	78%	4%	18%
5.d.	Is there a mission statement in place for your school?	65%	9%	26%
5.e.	Does the mission statement define how the school is run, and how students are taught?	51%	13%	37%
5.f.	Are these mission statements applied in the operation of the school and the teaching of students?	48%	14%	38%

EMPLOYEE SURVEY - North Reading**Teachers**

Note: Percentages may not add to 100% due to rounding

Rating Scale		
Yes/No Questions		Opinion
yes	1 & 2	Good to Excellent
No	4 & 5	Not good, inadequate
Not sure, one way or the other	3	OK - could be better, could be worse

6 Budget Process		1 & 2	4 & 5	3
6.a.	Do you understand your school budget process?	47%	29%	24%
6.b.	Do you understand how the budget process impacts your department?	65%	19%	16%
6.c.	Is the school budgeting process fair and equitable?	28%	16%	56%
6.d.	Are budgetary needs solicited and adequately addressed in the budget process?	42%	18%	40%
6.e.	Once the budget is approved and implemented, does the allocation and use of funds match the publicly stated purposes?	40%	7%	52%
6.f.	Given the circumstances, the school department seems to be doing the best it can with in the school budget process.	60%	10%	30%
6.g.	Are there deficiencies in this process?	37%	13%	49%

7 Professional Development		1 & 2	4 & 5	3
7.a.	Is there an adequate professional development program in your school?	91%	0%	9%
7.b.	Is the program designed to meet school needs and tied to the new frameworks and assessments?	90%	0%	10%
7.c.	Is the program designed to change the content of pedagogy in classrooms?	64%	10%	25%
7.d.	Are there deficiencies in the professional development program?	32%	43%	25%
7.e.	Did you participate in the professional development program in 1997/98?	94%	5%	2%
7.f.	Professional development is making a difference and will improve education in my school district.	72%	9%	19%

8 Supplies		1 & 2	4 & 5	3
8.a.	Have you generally received sufficient and appropriate supplies to do your job?	79%	12%	9%
8.b.	Have you generally received sufficient and appropriate basic educational supplies (e.g. chalk, paper, pens, pencils, etc.) to do your job?	88%	3%	9%
8.c.	Have you generally been supplied with a sufficient number of a current edition of textbooks?	86%	3%	11%
8.d.	Are students given a copy of these textbooks to keep at home during the year?	3%	92%	5%
8.e.	Have you generally been supplied with sufficient ancillary curriculum materials (e.g. current maps, lab supplies, videos, etc.)?	75%	11%	14%
8.f.	Is the process for obtaining supplies and materials effective, time sensitive and responsive to your classroom needs?	75%	18%	7%

EMPLOYEE SURVEY - North Reading**Teachers**

Note: Percentages may not add to 100% due to rounding

Rating Scale		
Yes/No Questions		Opinion
yes	1 & 2	Good to Excellent
No	4 & 5	Not good, inadequate
Not sure, one way or the other	3	OK - could be better, could be worse

9 Facilities		1 & 2	4 & 5	3
9.a.	How would you rate the overall state of school facilities (e.g. cleanliness, security, maintenance, structural integrity)?	53%	26%	21%
9.b.	How would you rate the overall state of classrooms, labs, and other teaching rooms/areas?	52%	24%	24%
9.c.	How would you rate the overall state of the common areas (e.g. hallways, stairwells, and cafeteria)?	57%	24%	19%
9.d.	How would you rate the overall state of the areas outside of the building (e.g. playgrounds, walk-ways and grounds)?	65%	9%	26%
9.e.	Would you agree with the following statement: "The school administration makes an effort to provide a clean and safe working environment."	71%	9%	21%

10 Computers and other Educational Technology		1 & 2	4 & 5	3
10.a.	Are the usage of computers and other technological tools a significant part of the management practices at the school?	70%	9%	21%
10.b.	Are the usage of computers and other technological tools a significant part of the instructional practices at the school?	60%	12%	28%
10.c.	In terms of student usage, are computers generally available only in a computer laboratory setting or library/media center?	76%	15%	9%
10.d.	How many computers are located in your classroom?	Avg. of 1.7		
10.e.	Do you have a school computer provided for and dedicated for your usage?	42%	55%	3%
10.f.	Is there a school computer provided for and shared by you and other teachers?	58%	28%	14%
10.g.	Are there computers available for and used on a regular basis by students?	73%	12%	15%
10.h.	About how many minutes a week does each student use a computer? (Estimated) _____ min.	37 minutes		
10.i.	Is the number of available computers sufficient for the number of students?	40%	38%	22%
10.j.	Are the computers in good working order?	57%	15%	28%
10.k.	Are the software packages in the computers uniform and consistent with the instructional level to be provided?	56%	20%	24%
10.l.	Is there a policy or program providing for computer training for teachers on software and computers used by students?	65%	15%	21%

NORTH READING PUBLIC SCHOOLS**SUPERINTENDENT'S STATEMENT - EDUCATION REFORM****1. School District Progress and Education Reform Since 1993**

Education Reform has had a significant impact on the North Reading Public Schools. In many respects, the elements of Education Reform were underway in North Reading prior to the formal implementation of the Education Reform Law in 1993. As Superintendent of Schools, I am particularly pleased with the manner in which the North Reading staff has worked tirelessly to understand the tenets of Education Reform and to implement many new programs and practices that are designed to reflect effective practices in teaching and learning. I believe that much of the credit for our successes as a school district are due the North Reading staff. This spirit of renewal and commitment to quality education is matched by the interest in education and involvement in our schools demonstrated by North Reading parents and community members. Finally, I am fortunate, as Superintendent, to work with a School Committee that values the Education Reform initiatives. The North Reading School Committee desires the best for students in North Reading and commits itself to the attainment of this goal.

Some highlights of our school district's efforts to provide quality education in North Reading include:

- Alignment of our curriculum to match the Curriculum Frameworks
- Focus on on-going professional development for all staff members
- Implementation of a model program for teacher professional growth and evaluation
- Use of multiple strategies to assess student learning with a focus on performance assessment
- Integration of technology with teaching and learning
- Increase in the length of the school year and day
- Community support for the elementary schools building projects
- Community support for the school budget
- Implementation of a systemwide leadership position for Curriculum and Technology
- School and community involvement in the development of a Strategic Plan
- Opportunities for staff, parent, and community involvement in decision-making
- Budget focus on the maintenance of a low student/faculty ratio
- Positive relationship with the North Reading Education Association
- Administrative leadership that supports site-based management
- Annual development of School Committee and Superintendent Goals
- Implementation of standardized testing (Terra Nova) in grades 6 and 9
- New instructional programs in core curriculum areas
- Encouragement of pilot projects (looping, elementary world languages, structured learning time)

- Expanded partnerships (Lotus/IBM, School to Career, American Nicaraguan School)
- School district participation in the statewide IMS (Information Management System) pilot project
- Review of School Committee Policies with focus on school attendance, use of Internet, school safety, zero tolerance

2. Barriers to Education Reform

While our school district continues to make significant progress toward the goals of Education Reform and is recognized for the effectiveness of our educational program, there are several barriers that may impede our continued progress. Those factors, many of which directly relate to school finances, that may have a negative impact on our ability to move forward include:

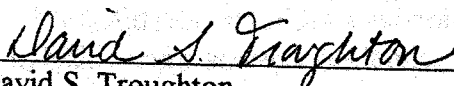
- Growth in student enrollment is expected to continue at a rate higher than the state average. There will be a need to support this increase in enrollment with additional facilities, instructional material, staff, technology, and support services.
- Currently, North Reading is at "Foundation Budget." Unfortunately, this budget does not reflect the current enrollment. There is a need for additional financial support in order to maintain the level of educational services that are provided currently. It will be difficult, if not impossible, to implement new programs without additional revenue sources.
- The school district cannot continue to support nor can it improve upon the current level of technology in our schools. Additional staffing, hardware, and soft ware will be needed.
- While the community has supported two elementary school building projects (classroom additions and renovations), there is a need to build a new elementary school and to consider expansions and/or renovation at the secondary school level. Without additional state funding, it is unlikely that the community will support all of the needed projects. Currently, North Reading utilizes four modular classrooms at the elementary level and one of its elementary schools was constructed in 1914 and the 1940's
- Staff members who will retire will need to be replaced by new teachers. The supply of qualified teachers, particularly in the areas of world languages, sciences, and math, is low. There is a need to attract new teachers to the profession.
- Although many North Reading students have demonstrated high proficiency on the MCAS tests, the use of MCAS scores to compare schools and school districts may have detrimental impact on the quality of education in our schools and stifle creativity in our teachers and students. Individual schools and teachers may focus on test scores to the detriment of quality learning. The goal of high test scores should not be the goal of learning.
- The inability to reform Special Education in Massachusetts will continue to divert additional funding for Education Reform initiatives,

The efforts to compare schools and school districts, to measure and quantify teaching and learning, and to promote conformity and limit flexibility in our schools, students, and teachers, may, in the end, serve as a barrier to the noble and worthy goals of Education Reform.

3. Plans for the Next 3 - 5 years:

Our school district is guided by our Strategic Plan. This plan lays out specific action plans for restructuring and changes; curriculum, assessment, and high standards; professional standards; technology, facilities, resources and budget; partnerships and communication; and environment and culture. New initiatives that we expect to implement include:

- Macro (block) scheduling at the High School
- Continued increase in the length of school day and year
- Expanded use of technology for teaching and learning, including on-line instruction
- Implementation of the study of foreign language at the elementary level
- Implementation of an extended day kindergarten program
- Expansion of the integrated pre-school program
- Expansion of partnerships with Lotus/IBM, School-to-Career, and the American Nicaraguan School and other cultural exchanges
- Completion of the Elementary Schools Building Projects including additions and renovations to two schools and the construction of a new elementary school to replace the aging Batchelder School
- Completion of the computer network and acquisition of new computer hardware
- Increased staffing for technology, libraries/media, counseling, reading, nursing, and world languages
- Continued efforts to renew the curriculum and instructional programs at all levels
- Implementation of a mentor program for new teachers
- Continued focus on quality professional development for all staff with an emphasis on technology, curriculum development, assessment of learning, and issues of diversity
- Expansion of high challenge learning opportunities for all students
- Expansion of student understanding of diversity, global perspectives, and technology
- Additional funding for education

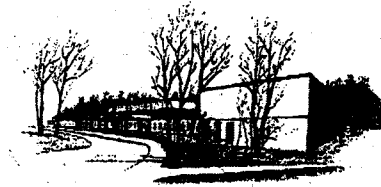


David S. Troughton
Superintendent of Schools

Comparison of MCAS Average Scaled Scores

All Students	North Reading Average Scaled Scores	State Average Scaled Scores	Point Difference
Grade 4:			
English Language Arts	238	230	8
Mathematics	249	234	15
Science & Technology	249	238	11
Grade 8:			
English Language Arts	247	237	10
Mathematics	243	227	16
Science & Technology	242	225	17
Grade 10:			
English Language Arts	240	230	10
Mathematics	230	222	8
Science & Technology	236	225	11
<u>All students attending this district for three years or more</u>			
Grade 4:			
English Language Arts	238	232	6
Mathematics	249	235	14
Science & Technology	249	239	10
Grade 8:			
English Language Arts	247	238	9
Mathematics	243	228	15
Science & Technology	242	227	15
Grade 10:			
English Language Arts	241	234	7
Mathematics	231	225	6
Science & Technology	237	228	9

Note: Data provided by DOE



North Reading Public Schools

NORTH READING, MASSACHUSETTS 01864

David S. Troughton
Superintendent of Schools

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May 14, 1999

Joseph J. Chessey, Jr.
Deputy Commissioner
Massachusetts Department of Revenue
Division of Local Services
Post Office Box 9655
Boston, MA 02114-9655

Dear Mr. Chessey:

The draft copy of the Education Management Accountability Board Report for the North Reading Public Schools has been reviewed by my administrative team. Dieter Wahl and the members of the Audit Team met with North Reading's Administrative Council on May 13, 1999 to discuss the draft report.

Overall, we are satisfied with the general tone of the report and feel that it reflects our efforts in North Reading to implement Education Reform. Dieter Wahl indicated to us that the report was a "positive one." Aside from several minor questions and technical corrections we are concerned about two issues:

1. The final paragraph of the Executive Summary states that the School Improvement Plans "were found to vary widely in quality and in content." Further comments on the School Improvement Plans are made in Section 11 (School Improvement Plans). North Reading's Administrative Team took strong exception to this statement and asked the Auditors to further study our School Improvement Plans. We feel that the quality is excellent and that the School Improvement Plans respond to the requirements of Education Reform.
2. The statements made in the last two sentences of the final paragraph of Section 15 (Supplies and Textbooks) are erroneous. The three elementary schools DO coordinate their selection process. All of our schools follow a systemwide textbook selection process. The textbook inventory is up-to-date in terms of major textbooks used in North Reading.

As Superintendent, I am pleased with the overall outcome of the Education Management Accountability Audit. We believe that the Audit Report reflects the current conditions in

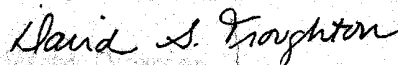
ACKNOWLEDGEMENTS

Appendix G

North Reading. I would like to commend the work of the Audit Team (Bob Taylor, Kimberly Penta, Tony Rassias, and Bryant Ayles). Each of the four auditors was sensitive to our needs in North Reading. They conducted themselves in a truly professional manner. Bob Taylor provided excellent leadership as the Auditor-in-Charge.

I look forward to my attendance at the Board Meeting on June 1. Stephen Jervey, Chairman of the North Reading School Committee, and Roger Young, Business Manager, will join me at the meeting. Please contact my office if additional information is required.

Sincerely,



David S. Troughton

cc. Dieter Wahl, Director Education Audit Bureau
Robert Taylor, Auditor-in-Charge

The Division of Local Services would like to thank the professional staff of the Department of Education, North Reading Public Schools, and the staff of the Department of Education.

ACKNOWLEDGMENTS

This report was prepared by the staff of the Education Audit Bureau, Department of Revenue, Division of Local Services.

Education Audit Bureau

Dieter H. Wahl, Director

Project Team

Chesley R. Taylor, Jr.
Auditor - In - Charge

Kimberly Penta
Auditor

Anthony Rassias
Auditor

Bryant Ayles
Auditor

Administrative support was provided by
Dawn Mackiewicz and Richard Sirignano

The Division of Local Services would like to acknowledge the professional cooperation extended to the audit team by the Department of Education, North Reading Public Schools Superintendent Dr. David S. Troughton and the school department staff.