



# *Barnstable Public Schools Review*

## *Executive Order 393*

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*Education Management Accountability Board Report*  
*May 2000*

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Joseph J. Chessey, Jr., Deputy Commissioner  
Gerard D. Perry, Associate Deputy Commissioner

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### **Education Audit Bureau**

Dieter H. Wahl, Director

#### **Project Team**

Mark A. Tambascio  
Auditor - In - Charge

Brian Barry  
Auditor

Michael Karagosian  
Auditor

### **Department of Education**

Juliane Dow  
Associate Commissioner

#### **Project Team**

Claire DeMeo  
Supervisor Program Quality Assurance

Carol MacNeill  
Accountability and Targeted Assistance

Jake Shannon  
Targeted Assistance

Lynda Foisy  
Accountability and Targeted Assistance

Manthala George, Jr.  
Consultant

Administrative support was provided by  
Richard Sirignano

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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.

This audit was performed jointly with staff of the Department of Education (DOE). DOE staff used its own audit protocol to review and prepare sections 22 through 26: school improvement planning, student learning time, personnel evaluations, professional development, and curriculum alignment.

The Barnstable Public Schools (BPS) is the twentieth school district reviewed under Executive Order 393. The audit began October 1999 and fieldwork was completed in December 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 BPS' operations. When possible, the audit team has identified and presented best practices, which may be adapted by other school districts. The report includes all results, best practices and deficiencies, if any, in greater detail in the "General Conditions and Findings" section.

## **II. Executive Summary**

### **SUMMARY**

The Barnstable school district has made reasonable progress toward implementing some of the goals and objectives of education reform. This progress has come during a period in which the district had two years of deficit spending, three superintendents, and a significant increase in enrollment. The Town of Barnstable has more than doubled the school district's expenditures from \$22.8 million to \$45.7 million in a ten-year period in spite of limited state aid. BPS has completely rebuilt the secondary schools to accommodate student enrollment. The enrollment trend has been significantly above the state average and has increased from approximately 5,500 to 7,100 students during the period of October 1988 to October 1999. Even with this increased funding the BPS did not reach foundation budget spending in the four key areas, although total foundation budget spending was 100 percent in FY98.

In Fiscal Years 1995 and 1996 the school department incurred deficits of \$1.4 million and \$1.2 million respectively. This resulted in the Barnstable Town Council, School Committee, and the District Attorney for the Cape and Islands District requesting the assistance of the Department of Revenue's Division of Local Services (DLS) in reviewing the financial practices of the Barnstable School Department. During the review process, DLS noted an inappropriate level of fiscal oversights with regard to school expenditures among various local officials having spending authority for the School Department. It also appeared that for FY96 the town owned a computerized encumbrance system that was not being properly utilized within the School Department to track appropriations and liabilities. Changes in student population after adoption of the budget largely accounted for the overages especially in the area of special needs students. It appeared that the school department had not given proper consideration to the budget ramifications of these expenditures or made any offsetting cuts to prevent the resulting budget deficits. Based on the DLS study it became evident as well that some of the local officials did not seem to have a clear understanding of their legal duties and responsibilities with regard to overseeing and managing the school budget.

The district has made only slight improvements in the student to teacher ratio due mainly to a rapid increase in enrollment. Teachers' salary expenditures have increased 47.5 percent between FY93 and FY98. This increase in teacher salary expenditures is partially attributable to the hiring of additional teachers. The average BPS teacher salary remains below the state average. Test scores for MCAS, SAT, and MEAP approximate the state averages in all areas.

School improvement plans across the district need further development and should include greater planning detail. Goals are appropriately identified and included in the school improvement plans, but indications of specific actions, persons responsible, projected timelines, resources needed, and measures of success are not fully developed.

The Barnstable School District has renovated and expanded its high school to house approximately 2,700 students. As of our audit date there were 1,900 students housed in the high school.

## **THE FOUNDATION BUDGET**

- BPS has exceeded the net school spending requirements as determined by DOE from 1994 to 1999. The district's local and state percentages of actual net school spending were 90.0 percent and 10.0 percent in FY99. FY98 salaries accounted for 65.2 percent of school district expenditure, a 48.5 percent increase in salaries since FY93. [See Sections 5 and 9]
- SPED costs have increased by \$2.9 million or 82.9 percent from FY93 to FY98. [See Section 19]
- 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 programs, and extraordinary maintenance. BPS did not meet these levels for any years from FY 94 to FY98 and did not file a report as required by law nor did DOE direct it to do so. [See Section 7]

## **STUDENT ACHIEVEMENT**

- BPS test scores show mixed results when compared to state averages over the past several years. The Massachusetts Comprehensive Assessment System (MCAS) Score for 1999 showed BPS within one to five points above the state average scaled scores in all areas. Grade 10 scores showed that 59 percent of students need improvement or failed English, 80 percent need improvement or failed math, and 82 percent need improvement or failed science and technology. [See Section 13]
- Scores of the Scholastic Aptitude Test (SAT) results show that BPS students scored consistently above the state average in the verbal portion of the exam, but scores for the math portion of the exam fluctuated from below the state average in some years to slightly above state average in 1998. Overall these scores are close to the state average scores. [See Section 13]
- The 1996 MEAP scores also approximated the state averages. From 1988 through 1996 only 8th grade math and science improved by scores that were significant, reading by 100 points and math by 90 points. The Iowa grade 3 basic skill test showed that BPS was in the 73rd percentile while the state average was at the 65th percentile. [See Section 13]



## **GOVERNANCE AND MANAGEMENT POWERS**

- Under the direction of the Superintendent, the BPS District is managed by a team leadership approach. The executive management team consists of the Superintendent, Assistant Superintendent of Elementary Education, Assistant Superintendent of Secondary Education, the Business Manager, and the Director of SPED. The goal of this team is to assure fiscal stability in the district in light of prior year's budget overruns and to improve student achievement. In addition, the Superintendent through his leadership team strives to implement and maintain an overall management system to meet the needs of a system that has evolved from a small school district to a steadily growing district. The overall goal of the Superintendent is to move towards a decentralized management structure. With this premise in mind principals are given the task of managing their respective buildings including the development of the budget and the selection and hiring of teachers. [See Section 14]

## **STUDENT/FTE TEACHER STAFFING**

- The total number of FTE teachers increased between FY94 and FY00 by 53.3 or 12.7 percent, from 420.3 to 473.6. During this same period, the all students/all FTE teacher ratio decreased from 15.7:1 to 14.9:1. The FY98 ratio of 15.2:1 is higher than the FY98 state average of 14.2:1. The FY98 all student/all non-SPED FTE teacher ratio of 17.5:1 is below the state average of 18.1:1. [See Section 8]

## **TEACHER COMPENSATION**

- Between FY93 and FY98, expenditures for salaries increased \$9.7 million or 48.5 percent. Total teaching salaries rose \$6.7 million or 69.1 percent, reflecting additional spending for new staff as well as pay raises in teachers' contracts. Union contracts annual raises plus step increases for teachers have increased by 67.8 percent from 1993 to 1999. The district FY98 average teacher salary as reported to DOE of \$42,931 was \$1,120 or 2.5 percent lower than the state average of \$44,051. [See Section 9]

## **STUDENT LEARNING TIME**

- Time on Learning regulations are met or exceeded at all levels and in all schools in the Barnstable School district. [See Section 23]

## **PROFESSIONAL DEVELOPMENT**

- The Barnstable School District has developed a Professional Development Plan, which is aligned with the D.O.E. state plan. In 1997, the district adopted the structure of a Professional Development Board and procedures. This is reflected in the collective bargaining agreement between the Town of Barnstable School Committee and the Barnstable Teachers' Association (Sept. 1, 1996 through Aug. 31, 2000). The

Barnstable Professional Development Plan is based on guidelines, which are adapted from the National Staff Development Council. It includes a list of opportunities for staff members to pursue professional growth, with a wide range of options, which address district, school, and individual needs. [See Section 25]

## **TECHNOLOGY**

- BPS has an approved technology plan covering the period 1997 to 2002. The plan is currently in its third year with 1600 instructional-based computers of which 50 percent can run current levels of software. Much of the computer hardware and operating software is a result of school construction and renovation reimbursement programs. There are computer labs in all schools and computers in the classrooms, although the labs at the elementary level do not have sufficient PCs to handle a full class at one time. BPS also has a plan for budgeting 20 percent replacement of obsolete equipment each year as budget pressures allow. [See Section 11]

## **DISTRICT ISSUES**

- In verifying the accuracy of the expenditure numbers, the audit team noted a lack of an audit trail in verifying amounts on the DOE End of Year Reports. The account numbers used by the school system are set up to be compatible with the town accounts, and not DOE's line item numbers. A written procedure does not exist to explain how expenditure items as shown in the BPS accounting system were classified on the DOE end of year report. The school department's business office manually totals each account and enter the totals on the end of year reports submitted to DOE. [See Section 15 ]
- The district should re-institute a process for the annual review and approval of school improvement plans by the School Committee. The school improvement plans also need further development to include greater planning detail and an improved process for monitoring progress. [See Section 22 ]
- The teacher evaluation instrument has not been revised since 1989 and does not meet current regulations. [See Section 24]

## **BEST PRACTICES**

- Barnstable Public Schools has developed a five-phase procedure for the review, purchase, and implementation of new text materials. Phase I is the formation of Curriculum Study group, composed of teachers, parents, the department head, two administrators, and an assistant superintendent for curriculum at the appropriate level. Phase II focuses on evaluation of the current level of Curricula in respect to the frameworks and improved learning standards. Phase III is the gathering and evaluation of all available publishers materials and coordinating with the requirements of the

Barnstable Curriculum. All the data is then evaluated and rated by the committee members. Phase IV is the presentations by the top rated publishers. The presentations will include all the related backup and teacher support mechanisms for final evaluations. In Phase V the companies are solicited for sealed bids, which are opened and evaluated for costs, support materials, and staff development. All decisions are made maintaining the primary focus of student achievement and curriculum improvement within BPS.

- The Math/Science Academy provides talented students with an accelerated academic pathway in the areas of math and science. The Academy is a comprehensive and challenging program providing students with lasting opportunities throughout their entire middle school and high school careers. It is not just a series of standard math and science courses, but an intensive program about scientific thinking, problem solving, and the integration of math and science. The Academy continues and merges into the high school science and math curricula with specialty courses and extended opportunity. Students participating in this summer program earn high school credits. This opens up opportunities for students later on in their academic careers. Entrance into the program begins while students are in middle school or early in their high school years. The program is open, on a competitive basis, to selected students in grades seven through nine.

### Auditee's Response

The audit team held an exit conference with the Superintendent and his administrative staff on March 28, 2000. The team invited BPS to suggest specific technical corrections and make a formal written response. No major corrections or comments were offered. The Superintendent's response is included in Appendix F.

### 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, and 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 school Superintendent and his administrative staff, principals, teachers. 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 BPS, 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, state grants except for Equal Education Opportunity (EEO) and Per Pupil Education Aid, 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 BPS. However, this report is a matter of public record and its distribution is not limited.

### **III. General Conditions and Findings**

#### **1. Barnstable Overview**

Barnstable, incorporated as a town in 1639, is a middle income vacation community located on the Bicep of the Cape Cod Arm approximately 80 miles south of Boston. A population growth of close to 50.0 percent during the twenty-year period of 1980 through 2000 saw the community increase from 30,898 residents to the current population of approximately 46,000, with a seasonal population of over 130,000. In April 1989, Barnstable became the 6th community in Massachusetts and the first on Cape Cod to adopt a Town Council/Town Manager form of government. A growth community, Barnstable derives 62.8 percent of its revenues from tax levies, 23.2 percent from local receipts, and 8.9 percent from state aid. The unemployment rate is 5.2 percent with per capita income of \$17,376, slightly above the state average of \$17,200.

A unique aspect of Barnstable is that its five fire departments are not officially part of the town. Each department is part of an independent fire district created through special acts of the state legislature between 1895 and 1949. The Fire Districts have the authority to set and collect their own taxes, which is done in partnership with the Town of Barnstable.

From October 1988 to October 1999 the school district has seen enrollment increase steadily from 5,495 students to 7,080, an increase of 28.9 percent. This increase in student population has been absorbed into the district with the renovation and expansion of the Marston Mills Middle School, and the renovation and expansion of the high school to house approximately 2,700 students, currently 1,900 students are housed in the high school. The Hyannis Middle School is currently undergoing a major renovation and expansion program with a reopening scheduled for September 2000.

The Superintendent of BPS has presented to the school committee a major restructuring plan for the grade levels Pre-K through 8. The Marston Mills Middle School will house grades 5 and 6 and become a Horace Mann Charter School. Hyannis Middle School will house grades 7 and 8. A Kindergarten Learning Center will be established for an all day program, the elementary schools will become grade 1-4, and all regular education preschool will move to the high school. The school committee indicated that there will be further study and consideration for the 2000-2001 school year and thereafter.

Charts 1-1 and 1-2 present some key demographic and economic statistics for the Town of Barnstable.

*Charts 1-1 and 1-2*

### **Town of Barnstable Demographic Data**

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1996 Population	43,699
FY99 Residential Tax Rate	\$12.31
FY99 Average Single Family Tax	\$2,225
FY99 Avg. Assessed Value Per Single Family	\$180,775
FY99 Tax Levy	\$60,025,404
FY99 Levy Limit	\$60,040,393
FY99 Levy Ceiling	\$121,903,744
FY99 State Aid	\$8,474,379
FY99 State Aid as % of Revenue	8.9%
1989 Per Capita Income	\$17,376
<u>1996 Average Unemployment Rate</u>	<u>5.2%</u>

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Note: Data provided by DLS (At A Glance 09/17/99)

*Chart 1-2*

**Barnstable Public Schools**  
**Demographic Data**  
**School Year 1998/99**

	<b>BPS</b>	<b>State Average</b>
Enrollment: Race / Ethnicity		
White	87.8%	77.1%
African American	7.2%	8.6%
Hispanic	3.7%	10.0%
Asian	0.8%	4.2%
Native American	0.6%	0.2%
Limited English Proficiency	1.0%	4.7%
Special Education	14.9%	16.6%
Percentage Attending Private School - 97/98	4.5%	10.0%
High School Drop-Out Rate 96/97	5.3%	3.4%
Plan of Graduates Class of 1998		
4 Year College	51.9%	53.2%
2 Year College	22.9%	18.6%
2 or 4 Year College	74.8%	71.8%
Work	16.4%	16.2%

Note: Data provided by DOE school district profiles.

The Superintendent of Schools has been in the BPS system for three years being appointed to the position of Superintendent in October 1996. The administrative staff includes two Assistant Superintendents, a Director of Special Education and Pupil Services, and a Finance Director. The school administration is housed in what was formerly the dormitory of the Old State Teachers College.

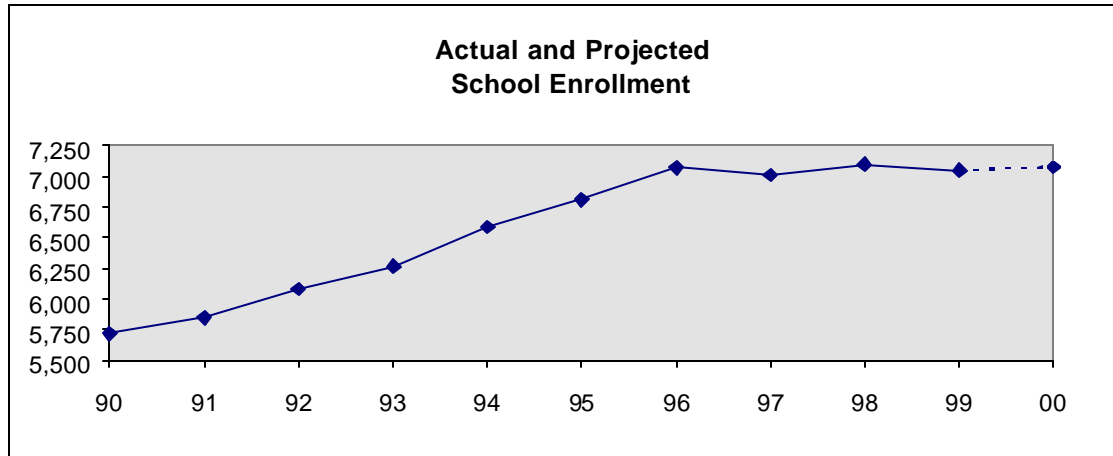
The BPS district consists of one high school, two middle schools, seven elementary schools, and one Horace Mann Charter School for the entire fifth grade population. The graduating class of 1998 indicated that 74.8 percent plan on attending a 2 or 4 year college, above the state average of 71.8 percent. Those graduates who are planning to

work after graduation represents 16.4 percent of the graduating class, also above the state average of 16.2 percent.

Chart 1-3 illustrates BPS enrollment trend from October 1988, the 1988/89-school year, to October 1999, the 1999/2000 school year. The enrollment numbers for 1988 through 1992 were supplied by Pupil Services and are unaudited, while the enrollment numbers for 1993 to 1999 were from the October 1 reports filed with DOE.

*Chart 1-3*

**Barnstable Public Schools  
Actual and Projected Student Enrollment  
School Years 1989/90 to 1999/2000**



Note: Enrollment as of October 1 reports as submitted to DOE by BPS.

A solid line represents actual enrollment; a dotted line represents projected enrollment

A Barnstable School Enrollment Forecast dated September 13, 1995, was conducted by the University of Massachusetts' Institute for Social and Economic Research. Two forecasts were produced which shows the combined enrollment for public and private students increasing from 6,697 students in 1993 to between 8,276 – 8,564 students in the year 2005. Chart 1-4, depicting historical growth levels, and current public school enrollment for school year 2000 to be 7,080. The decrease in the reported Ungraded/SPED from earlier years is mainly due to increases in inclusion for SPED students.

Chart 1-4

**Barnstable Public Schools  
Actual and Projected Student Enrollment**

School Year	Elementary School		Middle School	High School	Ungraded 89-93	Total
	Pre K & K	1 - 5	6 - 8	9 - 12	SPED	Enrollment
88-89	524	2,260	1,164	1,457	90	5,495
89-90	503	2,444	1,229	1,445	96	5,717
90-91	533	2,569	1,277	1,381	84	5,844
91-92	538	2,678	1,326	1,449	89	6,080
92-93	584	2,759	1,378	1,483	60	6,264
93-94	703	2,874	1,491	1,514	3	6,585
94-95	698	2,905	1,613	1,596	0	6,812
95-96	695	2,976	1,671	1,668	62	7,072
96-97	654	2,961	1,648	1,706	44	7,013
97-98	619	3,008	1,636	1,790	45	7,098
98-99	569	2,958	1,651	1,801	71	7,050
99-00	642	2,805	1,662	1,903	68	7,080
BPS 89-99						
% Change	22.5%	24.1%	42.8%	30.6%		28.8%
State 89-98						
% Change	20.7%	22.1%	21.8%	2.8%		15.1%

Note: Data obtained from BPS. Projections for grades 1-5 include Pre K & K.  
Ungraded students shown as reported by district.

## 2. School Finances

Overall, BPS has benefited from additional funds available due to education reform. State aid increased from \$1.6 million in FY94 to \$4.0 million in FY99. The combination of state education aid and the local share allowed the district to hire more teachers, fund additional SPED costs, increase salaries, and 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.

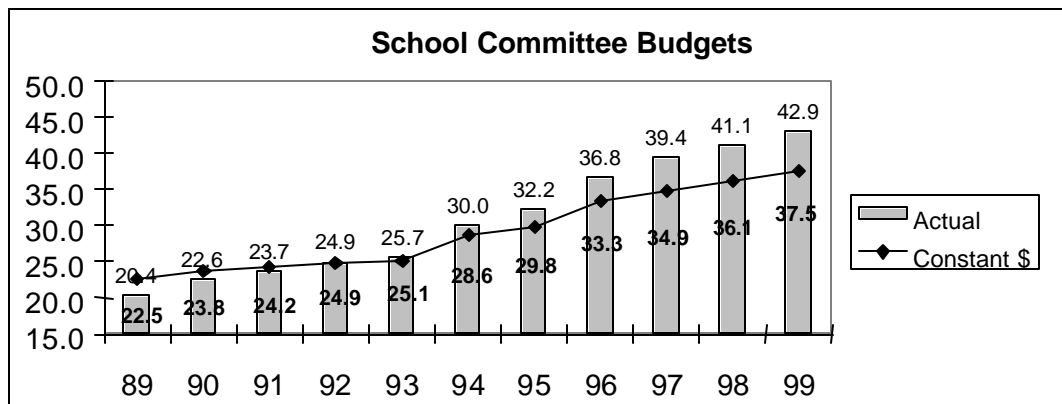
The foundation budget is a school spending target under Education Reform which the school district should meet. Calculated on the basis of pupil characteristics and community demographics, it is designed to ensure that a minimum level of educational resources is available per student in each school district. 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 FY99. For this purpose, the budget includes annual and special town meeting appropriations for support of the schools, plus annual appropriation in support of the Regional Vocational School District.

*Chart 3-1*

**Barnstable Public Schools**  
**School Budgets in Actual and Constant Dollars**  
**FY89 - FY99**  
**\$ millions**



Note: Data obtained from BPS and Town of Barnstable. Years fiscal years.

The BPS has received excellent support from the School Committee and the community at large. The budget has increased in all years from FY89 to FY99. The period from FY89 to FY93 shows a 25.9 percent increase in the School Committee's approved budget and a 66.9 percent increase in the budget from FY93 to FY99. The overall increase in the budget from FY89 to FY99 is 110.3 percent, validating the tremendous support shown by the Town of Barnstable for its schools. During the period of FY93 to FY99, Chapter 70 aid increased as a percent of the total School Committee budget from 5.1 percent to 9.3 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 FY99, the school committee budget as defined above increased from \$22.5 million to \$37.5 million, a 66.7 percent increase in constant dollars. The period of FY93 to FY99 also increased by \$12.4 million or 49.4 percent in constant dollars, from \$25.1 million to \$37.5 million. In constant dollars BPS experienced a budget increase every year from FY89 to FY99.

#### 4. Total School District Expenditures

Total school district expenditures includes expenditures by the School Committee and by the town for school purposes as reported in the DOE end-of-year report. FY93 expenditures include state per pupil aid. Total school district expenditures increased from FY89 to FY93 by \$2.9 million or 12.7 percent. Expenditures increased from FY93 to FY98 by \$20.0 million or 77.8 percent.

The Town of Barnstable did not contribute any dollars to the school district in FY93, contributed \$4.6 million in FY94, increasing this expenditure to \$6.0 million in FY98. During FY96 the Town contributed \$8.1 million to the total school district expenditures in part to help fund a deficit in the school budget. In FY98, the major components were \$2.4 million for long-term debt for school construction, \$.7 million for retired employee insurance, \$1.4 million for the regional school assessment and \$0.5 million for retirement contributions. Chart 4-1 illustrates the Town of Barnstable's total school district expenditures from FY89 to FY98.

*Chart 4-1*

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

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	<u>FY89</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>
School Committee	\$22.8	\$25.7	\$28.9	\$30.9	\$35.6	\$38.1	\$39.7
Town	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$4.6</u>	<u>\$5.0</u>	<u>\$8.1</u>	<u>\$5.5</u>	<u>\$6.0</u>
Total	\$22.8	\$25.7	\$33.5	\$35.9	\$43.7	\$43.6	\$45.7

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Note: Data obtained from BPS EOY Reports

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 \$4,486 in FY94 to \$5,406 in FY98, or 20.5 percent. The inflation-adjusted figures have increased modestly from \$4,276 in FY94 to \$4,742 in FY98, or 10.9 percent in 1992 dollars.

*Chart 4-2*

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

	FY94	FY95	FY96	FY97	FY98	FY94-FY98 Change
Expenditures / Student in Actual \$	\$4,486	\$4,589	\$5,077	\$5,242	\$5,406	20.5%
Expenditures / Student in 1992 \$	\$4,276	\$4,245	\$4,595	\$4,639	\$4,742	10.9%

Note: Data obtained from BPS

## 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 \$31.2 million in FY94 to \$38.5 million in FY99, a 23.4 percent increase. During the same period, required net school spending, the amount the district must spend to move towards the foundation budget target, increased by 31.2 percent, from \$29.5 million in FY94 to \$38.7 million in FY99. Actual net school spending increased by 35.9 percent, from \$29.5 million in FY94 to \$40.1 million in FY99. Actual net school spending as a percentage of foundation budget shows an increase from 94.6 percent in FY94 to 104.2 percent in FY99.

*Chart 5-1*

**Barnstable Public Schools  
Foundation Budget and Net School Spending (NSS)  
(in millions of dollars)**

	<b>FY94</b>	<b>FY95</b>	<b>FY96</b>	<b>FY97</b>	<b>FY98</b>	<b>FY99</b>
Foundation Budget Target	\$31.2	\$32.0	\$33.8	\$35.5	\$36.4	\$38.5
Required NSS as % of Foundation	94.6%	97.5%	96.0%	96.2%	100.4%	100.5%
Required Net School Spending	\$29.5	\$31.2	\$32.5	\$34.1	\$36.5	\$38.7
Actual Net School Spending	\$29.5	\$31.4	\$35.9	\$36.8	\$38.4	\$40.1
Variance \$	\$0.0	\$0.2	\$3.4	\$2.7	\$1.9	\$1.4
Variance %	0.0%	0.6%	10.5%	7.9%	5.2%	3.6%
Actual NSS as % of Foundation	94.6%	98.1%	106.1%	103.8%	105.6%	104.2%

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

*Chart 5-2* indicates that state aid, as a percent of actual net school spending, increased from 5.4 percent in FY94 to 10.0 percent in FY99, while the local share decreased from 94.6 percent in FY94 to 90.0 percent in FY99. The chart also indicates that from FY94 to FY99, the actual local contribution equaled or exceeded the required local.

*Chart 5-2*

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

	<b>FY94</b>	<b>FY95</b>	<b>FY96</b>	<b>FY97</b>	<b>FY98</b>	<b>FY99</b>
Required Local Contribution	\$27.9	\$29.5	\$30.3	\$31.3	\$33.2	\$34.7
Actual Local Contribution	\$27.9	\$29.6	\$33.7	\$34.0	\$35.1	\$36.0
Variance \$	\$0.0	\$0.1	\$3.4	\$2.7	\$1.9	\$1.3
Variance %	0.0%	0.3%	11.2%	8.6%	5.7%	3.7%
Required Net School Spending	\$29.5	\$31.2	\$32.5	\$34.1	\$36.5	\$38.7
Actual Net School Spending	\$29.5	\$31.4	\$35.9	\$36.8	\$38.4	\$40.1
Local Share \$	\$27.9	\$29.6	\$33.6	\$34.0	\$35.1	\$36.1
State Aid \$	\$1.6	\$1.8	\$2.3	\$2.8	\$3.3	\$4.0
Local Share %	94.6%	94.3%	93.6%	92.4%	91.4%	90.0%
State Aid %	5.4%	5.7%	6.4%	7.6%	8.6%	10.0%

Note: Data obtained from DOE and BPS. 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. 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.

BPS produces a detailed chart of accounts that does not follow DOE's spending categories (1000 series for administration, 2000 series for instruction, etc.). The accounting system for the school district has produced a chart of accounts that is compatible with the Town of Barnstable accounting system. Thus the district is unable to provide verifiable internal documentation for the individual line items for the End of Year reports filed with DOE, or their own budgeted line items.

Chart 6-1 shows the major components of the Barnstable School Committee program budget. The largest budget items are teacher salaries and SPED costs, which also show the largest dollar, and percentage increases. In FY97 District Administration and School Administration was combined into one District Administration category.

Chart 6-1

**Barnstable Public Schools**  
**School Committee Program Budget**  
(in thousands of dollars)

	FY96	FY97	FY98	FY99	FY93 - FY99		
					\$ Diff	% Diff	% of Tot
Salaries: Elementary	\$6,375.3	\$ 6,604.4	\$6,693.2	\$8,367.1	\$1,992	31.2%	47%
Middle School	\$ 3,868.7	\$ 4,329.5	\$ 4,155.3	\$ 4,473.3	\$605	15.6%	14%
High School	\$ 4,637.2	\$ 5,009.4	\$ 4,799.6	\$ 4,859.1	\$222	4.8%	5%
District Admin.	\$2,388.4	\$ 2,626.4	\$604.8	\$2,905.7	\$517	21.7%	12%
School Admin.	\$1,834.1		\$1,942.6	\$1,364.0	(\$470)	-25.6%	-11%
System-wide	\$1,773.3	\$ 1,572.8	\$2,849.3	\$902.2	(\$871)	-49.1%	-20%
Maint & Cust	\$1,983.3	\$ 1,961.3	\$1,954.1	\$2,211.1	\$228	11.5%	5%
SPED	\$4,854.2	\$ 4,676.1	\$4,160.4	\$5,126.5	\$272	5.6%	6%
Other	\$1,343.9	\$ 1,147.4	\$2,216.1	\$593	(\$751)	-55.9%	-18%
Sub-Total	\$29,058.4	\$ 27,927.3	\$29,375.4	\$30,801.7	\$1,743	6.0%	41%
Expenses: Sped	\$970.7	\$ 1,765.7	\$700.8	\$2,042.0	\$1,071	110.4%	25%
Utilities	\$1,196.1	\$ 1,435.3	\$1,370.5	\$1,370.0	\$174	14.5%	4%
Maint & Supplies	\$969.2	\$ 1,060.6	\$593.2	\$1,127.5	\$158	16.3%	4%
Transportation	\$1,956.6	\$ 2,095.9	\$2,555.8	\$2,157.5	\$201	10.3%	5%
Employee Benefits	\$1,698.4	\$ 1,982.8	\$1,724.6	\$2,000.0	\$302	17.8%	7%
All Other	\$1,446.7	\$ 1,660.5	\$3,289.8	\$2,068.5	\$622	43.0%	15%
Sub-Total	\$8,237.7	\$ 10,000.8	\$10,234.7	\$10,765.5	\$2,528	30.7%	59%
Total	\$37,296.1	\$ 37,928.1	\$39,610.1	\$41,567.2	\$4,271	11.5%	

Note: Data obtained from BPS and Town of Barnstable.

Chart 6-1a shows the same program budget data on a percentage distribution basis to illustrate how particular budget items have changes since FY96 in certain areas.

Chart 6-1a

**Barnstable Public Schools  
School Committee Program Budget  
Percentage Distribution**

	FY96	FY97	FY98	FY99	% Point Incr / Decr. FY96 - FY99
Salaries:Elementary	17.1%	17.4%	16.9%	20.1%	3.0%
Middle	10.4%	11.4%	10.5%	10.8%	0.4%
High School	12.4%	13.2%	12.1%	11.7%	-0.7%
District Admin.	6.4%	6.9%	1.5%	7.0%	0.6%
School Admin.	4.9%	0.0%	4.9%	3.3%	-1.6%
System-wide	4.8%	4.1%	7.2%	2.2%	-2.6%
Maint & Cust	5.3%	5.2%	4.9%	5.3%	0.0%
SPED	13.0%	12.3%	10.5%	12.3%	-0.7%
Other	3.6%	3.0%	5.6%	1.4%	-2.2%
Sub-Total	77.9%	74%	74.2%	74.1%	-3.8%
Expenses: Sped	2.6%	4.7%	1.8%	4.9%	2.3%
Utilities	3.2%	3.8%	3.5%	3.3%	0.1%
Maint & Supp	2.6%	2.8%	1.5%	2.7%	0.1%
Transportation	5.2%	5.5%	6.5%	5.2%	-0.1%
Employee Benefits	4.6%	5.2%	4.4%	4.8%	0.3%
All Other	3.9%	4.4%	8.3%	5.0%	1.1%
Sub-Total	22.1%	26.37%	25.8%	25.9%	3.8%
Total	100%	100%	100%	100%	

Note: Data obtained from BPS and Town of Barnstable.

## 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 A* 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 did not reach foundation budget in any of the expenditure categories for the fiscal years shown. BPS did not file a report with the Commissioner's office as required by Ch.70, §9 for these fiscal years nor did DOE direct BPS to submit such report. It is also noted that BPS reported expenditures that indicate BPS did not meet the minimum per pupil spending requirements for professional development from FY95 to FY98.

#### *Chart 7-1*

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

	FY95		FY96		FY98	
	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Professional Development	\$4	\$500	\$97	\$528	\$478	\$565
Books and Equipment	\$1,482	\$1,876	\$1,521	\$1,988	\$1,895	\$2,173
Expanded Program	\$0	\$366	\$0	\$359	\$0	\$326
Extraordinary Maintenance	\$0	\$1,052	\$0	\$1,117	\$0	\$1,201

**Expenditures As Percentage of Foundation Budget**

	FY95	FY96	FY98
	<u>NSS/FND</u>	<u>NSS/FND</u>	<u>NSS/FND</u>
Professional Development	0.8%	18.4%	84.6%
Books and Equipment	79.0%	76.5%	87.2%
Expanded Program	0.0%	0.0%	0.0%
Extraordinary Maintenance	0.0%	0.0%	0.0%

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

The audit team attempted to report FY94 foundation budget amounts, but neither BPS nor DOE could provide the budgeted foundation amounts for FY94. *Appendix A* shows the BPS foundation budget for FY95 through FY98. For each year, the chart shows expenditures and variances from the foundation budgets as well as how expenditures compare with the foundation budgets. In FY98, the data indicates that spending was greater than the



foundation budget target for teaching salaries by \$6.4 million but was less than the foundation budget target for support salaries by \$2.9 million and for extraordinary maintenance by \$1.2 million.

## 8. Staffing – Full Time Equivalent (FTE) Trends

Salaries comprise approximately 65.2 percent of FY98 total school district expenditures and budget changes closely reflect changes in staffing or FTEs. A major priority of the BPS is to keep the student/teacher ratio as low as possible within fiscal constraints. It appears that BPS is somewhat successful in this area with the aid of the teachers' contract, which limits class size to 25 students.

BPS was not able to produce verifiable staffing reports prior to the October 1, 1993 School System Summary Report. Also, the October 1, 1998 report, supplied by BPS is incorrect in the reporting of FTE's. BPS was unable to determine where the error occurs although it is believed to be in the categories of Instructional Assistants and All Other.

As indicated in *Chart 8-1*, BPS had a total of 828.5 FTEs including 420.3 teachers in FY94. By FY00, these numbers had increased to 847.2 and 473.6 respectively, even as fiscal pressures mounted during this period. While the increase in student population increased 7.5 percent during FY94 and FY00, the number of teachers increased 12.7 percent. In this context, teachers exclude instructional assistants. Para-professionals, guidance counselors, psychologists, occupational and physical therapists, cafeteria, custodians and maintenance personnel are included as all others in Chart 8-1. BPS has increased the number of teachers while decreasing numbers in the three other categories listed in Chart 8-1.

*Chart 8-1*

### **Barnstable Public Schools Staffing Trends Full Time Equivalent (FTE)**

	Total FTEs	Teachers	Teachers as % of FTEs	Instruct. Assists.	Administrators	All Others
FY94	828.5	420.3	50.7%	169.5	35.0	203.7
FY98	839.7	465.7	55.5%	145.0	32.0	197.0
FY99	922.2	482.1	52.3%	175.5	32.0	232.6
FY00	847.2	473.6	55.9%	141.0	31.5	163.1
FY94-00	18.7	53.3		-28.5	-3.5	-40.6
Incr./ Decr.	2.3%	12.7%		-16.8%	-10.0%	-19.9%

Note: Data obtained from BPS Oct 1 School System Summary Report.

Chart 8-2 shows changes in teaching FTEs by type of school or program.

Chart 8-2

**Barnstable Public Schools  
Teachers By Program  
Full Time Equivalents  
(excluding teaching aides)**

	FY94	FY98	FY99	FY00	FY94 - FY00	
				Increase	% Incr / Decr	
Early Childhood	0.0	5.0	8.5	9.0	9.0	
Elementary (K-5)	182.0	154.5	156.5	158.5	-23.5	-12.9%
Secondary (6-12)	182.7	243.2	253.3	252.1	69.4	38.0%
Systemwide	0.0	0.0	0.0	0.0	0.0	0.0%
Subtotal	364.7	402.7	418.3	419.6	54.9	13.6%
Bilingual	0.0	0.0	0.0	0.0	0.0	0.0%
ESL	3.0	2.0	2.8	2.0	0.8	26.7%
Special Education	52.7	61.0	61.0	52.0	0.0	0.0%
Subtotal	55.7	63.0	63.8	54.0	-1.7	-3.0%
Total	420.4	465.7	482.1	473.6	53.3	12.7%

Note: Data obtained from BPS Oct 1 School System Summary Report.

All students to teacher ratios decreased slightly between FY94 and FY00 from 15.7 to 14.9. The student to teachers' ratios for PreK- 5 increased slightly from 16.6 to 17.5 and decreased at the secondary level from 15.0 to 13.0.

Chart 8-3

**Barnstable Public Schools  
Students Per Teacher**

	FY94	FY98	FY99	FY00
All Students / All Teachers	15.7	15.2	14.6	14.9
<b>All Students / All Teachers - State Average</b>	<b>13.1</b>	<b>14.2</b>	<b>N/A</b>	<b>N/A</b>
All Students / Non-SPED, ESL & Bilingual	18.0	17.5	16.7	16.7
<b>All Students / Non-SPED, ESL &amp; Bilingual State Average</b>	<b>16.5</b>	<b>18.1</b>	<b>N/A</b>	<b>N/A</b>

Kindergarten & Elementary (K-5)	16.6	19.1	18.4	17.5
Middle, High (6-12)	15.0	12.9	12.4	13.0

Note: Data obtained from BPS and DOE

Teaching staff increased 37.0 percent in all core subject areas such as English, science, social studies and mathematics as shown in *Chart 8-4*. These increases are less than the increase in enrollment at the secondary level, which equaled 47.7 percent in FY89 to 48.2 percent in FY98.

#### *Chart 8-4*

#### **Barnstable Public School Teachers - Core Subjects High and Middle School FTEs**

	FY94 - FY00					
	FY94	FY98	FY99	FY00	Increase	% Incr / Decr
English	30.5	34.0	36.0	37.0	6.5	21.3%
Mathematics	26.4	40.0	39.5	35.0	8.6	32.6%
Science	26.1	36.0	37.0	38.0	11.9	45.6%
Social Studies	21.4	26.5	27.5	33.0	11.6	54.2%
Total	104.4	136.5	140.0	143.0	38.6	37.0%

Note: Data obtained from BPS Oct 1 Summary Reports

## 9. Payroll – Salary Levels, Union Contracts

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

Chart 9-1 shows salary increases in comparison to total district expenditures. BPS increased its expenditures for salaries by \$9.7 million between FY93 and FY98, an increase of 48.3 percent. This increase is 29.5 percentage points less than the 77.8 percent increase in total school district expenditures during the same period. Total salaries made up 78.2 percent of these expenditures in FY93 and decreased to 65.2 percent in FY98. The salary expenditures exclude fringe benefits while total district expenditures includes fringe benefits, all other municipal expenditures relating to schools including department services, municipal administrative costs, and regional school assessment.

*Chart 9-1*

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

	FY93	FY94	FY95	FY96	FY97	FY98	FY93 - FY98	
							\$ Incr. / Decr.	% Incr. / Decr.
Total School District Expenditures	\$25.7	\$33.6	\$36.0	\$43.7	\$43.6	\$45.7	\$20.0	77.8%
Total Salaries	\$20.1	\$22.3	\$24.1	\$29.2	\$28.3	\$29.8	\$9.7	48.3%
as % of Total Expenditures	78.2%	66.4%	66.9%	66.8%	64.9%	65.2%	48.5%	
Teaching Salaries	\$14.1	\$15.7	\$16.5	\$20.2	\$19.7	\$20.8	\$6.7	47.5%
as % of Total Salaries	54.9%	46.7%	45.8%	46.2%	45.2%	45.5%	69.1%	
Non-Teaching Salaries	\$6.0	\$6.6	\$7.6	\$9.0	\$8.6	\$9.0	\$3.0	50.0%
as % of Total Salaries	29.9%	29.6%	31.5%	30.8%	30.4%	30.2%	30.9%	

Note: Data obtained from BPS End-of-Year Reports.

Of the \$20.0 million total school district expenditure increase from FY93 to FY98, and \$9.7 million increase in salaries, \$6.7 million or 69.1 percent is attributable to teaching salaries and \$3.0 million or 30.9 percent applies to non-teaching salaries. The latter group includes administrators, para-professionals, clerical staff, custodial staff, etc.

Chart 9-2 shows that the average teacher's salary increased from \$36,863 in FY93 to \$42,931 in FY98. Fiscal Year 1997 saw a reduction in teacher FTE by 9.0, with 1998 showing an increase 24.6 teaching FTEs. The FY98 average teacher's salary of \$42,931 is below the state average of \$44,051.

*Chart 9-2*

**Teaching Salaries and Teachers (FTE)**  
**Average Salary Comparison**

	FY94	FY95	FY96	FY97	FY98
Teaching Salaries ( \$ in mil )	\$15.7	\$16.5	\$20.2	\$19.7	\$20.8
FTE - Teachers	397.5	448.6	468.9	459.9	484.5
FTE Incr. / Decr. from Previous Year	21.5	51.1	20.3	-9.0	24.6
Average Salary per FTE	\$39,497	\$36,781	\$43,080	\$44,439	\$42,931
DOE Reported State Average	\$ 39,012	\$ 40,718	\$ 41,760	\$ 42,874	\$ 44,051

/ Board

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

Referring to Chart 9-2a, of the additional \$6.7 million spent for teaching salaries between FY93 and FY98, \$3.1 million or 46.3 percent represents cost of new positions and \$3.2 million or 47.8 percent represents salary increases for existing staff.

*Chart 9-2a*

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

	FY93	FY98	% of Cum. Incr
Total Teaching Salary Exp.	\$14.1	\$20.8	
Cumulative Increase from FY93		\$6.7	100%
Cost of 3% Inflationary Increase		\$0.4	6.0%
FY93-FY98 Cost of New Positions		<u>\$3.1</u>	<u>46.2%</u>
Subtotal		\$3.5	52.2%
Amount above 3% Annual Increase		<u>\$3.2</u>	<u>47.8%</u>

Note: Analysis based on data obtained from BPS

Chart 9-2b indicates that increases in annual and step raises due to contract provision had a low of 5.1 percent in FY93 and increased to 9.2 percent in FY94. From FY95 to FY99 the average increases remained stable between 7.1 percent and 8.1 percent while there were two increases in FY96 totaling 15.0 percent and FY99 totaling 15.2 percent.

*Chart 9-2b*

**Barnstable Public Schools  
Teachers Salaries -  
Step and Contract Percent**

Period (FY)	1993	1994	1995	1996	1996	1997	1998	1999	1999	Total
Annual Contract Increase	0.0%	4.0%	3.0%	3.0%	1.75%	3.0%	2.0%	2.0%	3.0%	21.8%
Step Increase(AVE. ALL STEPS)	5.1%	5.2%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	46.0%
Total	5.1%	9.2%	8.1%	8.1%	6.85%	8.1%	7.1%	7.1%	8.1%	67.8%

Note: Data obtained from BPS. Two increases in FY96 and FY99.

Chart 9-3 shows how BPS salary schedules might apply to a particular teacher for the period of FY93 to FY98 depending on the step and academic degree. Various examples outline different situations. The chart illustrates so-called lane changes due to academic credit hours or degree earned such as BA to MA and an MA to MA+30.

For example, as of FY93, teacher A was on the maximum step 10 and had a BA. By FY98, this teacher, now at step 11, has received salary increases totaling to 31.0 percent. If this teacher had earned an MS during this period, the increase would have amounted to 41.5 percent.

Teacher B had a BA, step 5, in FY93. In FY98, this teacher is on step 10 and has received a salary increase of 44.6 percent. Had this teacher earned an MS and changed salary lane during this period, the increase would have amounted to 57.7 percent.

Also apparent in chart 9-3, a review of salary changes over the FY93 to FY98 period indicates that Teacher B received the highest step increase in the salary chart of 51.1 percent without any lane changes.

Teacher C entered BPS with a BA at step 1 in FY93. By FY98, this teacher had reached step 6 and had received 49.7 percent increase in pay. By earning an MS Teacher C could have jumped two salary lanes and receive a 60.2 percent increase in salary.

### Chart 9-3

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

	FY93 Base Pay		FY98 Base Pay			FY93-98 % Change	
	Step	Base Pay	Step	Base Pay	Base Pay	BA	MA
		BA		BA	MA		
Teacher A	10	\$34,300	BA11-MA11	\$44,945	\$48,540	31.0%	41.5%
Teacher B	5	\$27,978	10	\$40,455	\$44,127	44.6%	57.7%
Teacher C	1	\$22,864	6	\$34,225	\$36,627	49.7%	60.2%
		MA		MA	MA + 30	MA	MA + 30
Teacher A	11	\$41,155	11 - 12	\$48,540	\$49,440	17.9%	20.1%
Teacher B	7	\$32,124	11 - 12	\$48,540	\$49,440	51.1%	53.9%
Teacher C	1	\$24,387	6	\$36,627	\$37,889	50.2%	55.4%

Note: BPS has 6 salary lanes: BA, BA+15; MA, MA+15, MA+30, PhD.  
Data obtained from BPS.

## 10. Courses and Class Sizes

Chart 10-1 summarizes selected high school core class sizes for FY99. The school's average enrollment in core subject sections consisted of less than 21 students per class. Social Studies had the smallest average class size with 15.1 students, while math had the largest average with 20.6 students. Five sections had 30 or more students enrolled.

Chart 10-1

**Barnstable Public Schools  
High School Classes  
1998/99 School Year**

Subject	Number of Sections	Total Enrollment	Avg. Enroll. Per Section	Sect. w/ 25-29	Sect. w/ 30 or more	30+ %
English	125	2297	18.4	28	0	0.0%
Math	68	1403	20.6	12	3	4.4%
Science	82	1558	19.0	19	1	1.2%
Social Studies	114	1724	15.1	33	1	0.9%

Note: Data obtained from BPS

## 11. Technology

DOE approved BPS's five-year technology plan in 1997. The BPS Technology Group prepared the plan for the period 1997 through 2002. Funding for technology improvements and upgrades has generally been provided by a combination of school budget appropriation and school construction reimbursements.

Until recently, the majority of computers utilized by students within BPS were older models that had little memory and could not run current software applications. Currently there are approximately 1600 computers, 14 servers and peripheral components throughout the district. Each school has at least one computer lab with additional computers and Internet access found in each school. Since the issuance of the technology plan in 1997 technology equipment has improved. Currently about 50% of the computers are instructional type A/B that can accommodate the most current software. The district has 4.3 students per computer, better than the state average of 7.2.

The plan projects that each year approximately 20 percent of the computers; printers and peripherals will be replaced on a rotating basis. As of FY98 the appropriated technology budget was only \$330,486. This includes hardware replacement costs, salaries for coordinators, software purchases, and Internet connection costs and staff development. The increase in the quality and quantity of computer hardware since the Technology report was completed in 1997 has been due largely to school construction reimbursements. The schools are connected to a Wide Area Network (WAN), each school has its own Local Area

Network (LAN) and each school has Internet access. The Internet is provided to BPS through MediaOne.

The High School has 8 instructional computer labs and up to 3 computers in each classroom. The middle school also has a computer lab and 3 computers in each classroom. The elementary schools have a series of mini-labs that provide lab instruction for 45 minutes every other week. The mini-labs are split between library or computer technology every other week. Each week half the class takes library and the other half takes computer lab. There are also older computers in each classroom within the elementary level facilities.

## 12. Supplies and Textbooks

BPS has an ongoing policy regarding the revision and replacement of text materials utilized for classroom instruction. Textbooks are reviewed when a consensus is reached by teachers and curriculum personnel as to the need to update a particular program of instruction and curriculum alignment. BPS has a 5-step process as discussed in best practices for the replacement of classroom texts and related instructional materials.

The audit team's review of texts revealed that texts are recent to the mid 1990's and that all students in all grades and schools have a complete set of texts and sufficient materials. Texts, trade books, and other instructional materials are reviewed as to grade level content, consistency across grades and school buildings and alignment to frameworks. BPS has made considerable expenditures to maintain updated texts and instructional materials as shown in chart 12-1 below.

*Chart 12-1*

**Barnstable Public Schools**  
**Textbooks and Other Instructional Expenditures**  
(in thousands of dollars)

	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY93 - FY99	
								\$ Incr.	% Incr.
High School	\$132.9	\$164.4	\$179.2	\$166.9	\$183.2	\$197.7	\$213.3	\$80.4	60.5%
Middle Schools	\$138.2	\$171.0	\$186.4	\$199.2	\$211.4	\$205.0	\$176.2	\$38.0	27.5%
Elementary	\$261.4	\$323.3	\$352.6	\$366.6	\$371.5	\$371.3	\$388.1	\$126.7	48.5%
<b>Total</b>	<b>\$532.5</b>	<b>\$658.7</b>	<b>\$718.2</b>	<b>\$732.7</b>	<b>\$766.1</b>	<b>\$774.1</b>	<b>\$777.6</b>	<b>\$245.1</b>	<b>46.0%</b>
Textbooks Only	\$102.9	\$140.6	\$164.4	\$284.6	\$406.4	\$459.4	\$370.6	\$267.7	260.2%
Other Expenditures	\$429.6	\$518.1	\$553.8	\$448.1	\$359.7	\$314.7	\$407.0	(\$22.6)	-5.3%
Textbooks / Student	\$16	\$21	\$24	\$40	\$58	\$65	\$53	\$37	176.2%
Exp / Student	\$67	\$77	\$81	\$63	\$51	\$44	\$58	(\$9)	-11.7%

Note: Data obtained from BPS. Kindergarten in elementary.



### 13. Test Scores

BPS test scores approximate the state average. The recently released MCAS scores show BPS scoring slightly above the state average scaled scores for all grades in all areas. SAT scores for 1998 exceeded the state average by 49 points. MEAP scores for 1996 generally approximate the averages except in Grade 8 Reading and Math where increases were fifty and sixty points respectively. The 1998 statewide Iowa tests indicated that 87 percent of BPS grade 3 students scored at the higher reading skill levels of “proficient” and “advanced” versus the state average of 75 percent. BPS grade 10 students scored at the 65th percentile in the achievement test when compared to a representative national sample of students.

The district uses standardized test scores as an indicator for corrective action. BPS will look at these results to assess strengths and weaknesses at the various levels. BPS goal is to assure all frameworks topics are being introduced into the classrooms. Presently, BPS has no required remedial action plan for students failing the MCAS tests. On a voluntary basis, BPS offers selective after school programs and summer courses.

#### Massachusetts Comprehensive Assessment System (MCAS)

The recently released MCAS scores show that BPS scored at or above the state average scaled scores for all grades in all areas for both the 1998 and 1999 testing cycle. The single exception was Grade 10 science in 1998 which was one point below the state average

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, need improvement or failing based on their total scaled score for each test completed. There is no overall classification of student performance across content areas. However, school, district, and state levels are reported by performance levels. *Chart 13-1* reflects performance level percentages for all BPS students in tested grades. *Appendix C* provides additional detail for students who have attended schools in the school district for at least three years.

Chart 13-1

**Barnstable Public Schools  
1998 and 1999 MCAS Test Scores  
Percentage of Students at Each Performance Level**

Subject		Year	Average Scaled Score	Advanced	Proficient	Needs Improve- ment	Failing (Tested)	Failing (Absent)
Grade 4	English Lang. Arts	1999	232	0	18	70	11	0
		1998	230	0	14	75	11	0
Grade 4	Mathematics	1999	236	13	26	45	15	0
		1998	235	11	25	45	19	0
Grade 4	Science and Technology	1999	242	11	51	35	3	0
		1998	239	5	47	42	6	0
Grade 8	English Lang. Arts	1999	239	3	56	31	10	0
		1998	239	4	60	25	11	0
Grade 8	Mathematics	1999	229	6	28	34	32	0
		1998	231	10	29	29	32	0
Grade 8	Science and Technology	1999	226	4	25	29	42	1
		1998	228	1	29	39	31	0
Grade 8	History	1999	221	0	9	44	46	1
		1998	N/A	N/A	N/A	N/A	N/A	N/A
Grade 10	English Lang. Arts	1999	231	4	37	33	25	1
		1998	233	4	36	40	19	0
Grade 10	Mathematics	1999	226	9	19	31	40	2
		1998	222	5	15	30	50	0
Grade 10	Science and Technology	1999	230	4	27	43	25	2
		1998	224	1	18	44	38	0

Note: Data provided by DOE

### Scholastic Aptitude Test (SAT)

SAT scores generally hover around the state average as shown in *Chart 13-2*. Scores from 1994 and 1995 cannot be compared to 1996, 1997 and 1998 scores since SAT scores were “recentered” in 1996 resulting in a higher score for those years for all schools and

consequently, a higher state average. Over the previous three years the percentage of graduating students that were administered the SAT exam has decreased from 79% in 1996 to 68% in 1998. BPS encourages all students to take the SAT exams.

*Chart 13-2*

**Barnstable Public Schools  
Scholastic Aptitude Test (SAT) Results**

SAT Content Areas	1994		1995		1996		1997		1998	
	BPS	State Avg.	BPS	State Avg.	BPS	State Avg.	BPS	State Avg.	BPS	State Avg.
Verbal	444	426	443	430	522	507	509	508	530	502
Math	473	475	485	477	499	504	497	508	525	502
Total	917	901	928	907	1021	1011	1006	1016	1055	1004
BPS - % of State Avg.	101.8%		102.3%		101.0%		99.0%		105.1%	

Note: Data obtained from BPS and DOE

Massachusetts Educational Assessment Program (MEAP)

An analysis of Barnstable's MEAP scores is in *Appendix B*. MEAP scores are reported in two ways: scaled scores, which range from 1000 to 1600; and proficiency levels, which are reported as 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 shown in *Chart 13-3* indicate that scores for BPS students in Grade 4 were mixed in that Reading, showed a slight improvement at advanced Levels 3 & 4 but a slight decrease in the lower levels of 2, 1 or below, signifying a general decline in reading abilities when comparing 1992 and 1996 scores. Those students at the lower Levels of 2, 1 or below have not improved reading skills during this 4 year comparison period. Grade 4 Science and Social Studies showed a slight decline at the proficient and advanced Levels of 3 or 4 but showed a gain in the lower Levels of 2, 1 or below signifying an improvement in those subject areas in the 4 year comparison. The review of Grade 8 data shows that there was solid improvement from the lower Level 1 or below to Level 2 passing in all subject areas but large declines in the proficient and advanced performance Levels 3 or 4.

This comparison shows that there has been little system wide improvement in test scores from 1992 to 1996 fourth and eighth grades. These percentages show an increased level of passing which is an improvement from the lowest levels as well as a decrease in the advanced levels of skill and accomplishment. Also it should be noted that this comparison is a four grade span, over a four year period, and compares the same base of students from Grade 4 levels to Grade 8 levels. Overall the changes from the mid-level 2 to higher levels 3 & 4 in both Grade 4 and Grade 8 from 1992 to 1996 declined between 1992 and 1996. Mid-level to

upper level percentage declines were noted in most areas for both grades when 1992 and 1996 data were compared.

*Chart 13-3*

**Barnstable 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	34%	40%	26%	36%	35%	28%
Mathematics	35%	46%	20%	36%	47%	17%
Science	36%	40%	25%	32%	48%	20%
Social Studies	39%	40%	20%	37%	48%	15%
Eighth Grade	1992			1996		
	Level 1 or Below	Level 2	Levels 3 & 4	Level 1 or Below	Level 2	Levels 3 & 4
Reading	37%	24%	38%	22%	43%	34%
Mathematics	35%	35%	30%	27%	49%	25%
Science	36%	24%	40%	34%	44%	22%
Social Studies	38%	27%	35%	35%	43%	22%

Note: Data provided by DOE and BPS

Between 1988 and 1996, MEAP scores for students in Grades 4 and 8 improved significantly in only eighth grade reading by 100 points and eighth grade math by 90 points. According to *Appendix B*, for Grade 8 alone, Reading scores improved by 100 points, math by 90 points, science by only 20 and social studies by 20 points each. Between 1994 and 1996, MEAP scores for Grade 10 students showed little improvement. BPS's 1996 MEAP scores for all subjects in all grades were approximated the state average.

*Chart 13-4* shows Grade 4 Reading scores for selected school districts whose scores in 1988 ranged from 1340 to 1360 as compared to BPS's score of 1350. The scores for Grade 4 students are particularly significant, because by 1996, these students had experienced education reform initiatives in the early stages of formal education. The greatest impact of education reform should initially be seen in the performance of these students. The reading scores for BPS Grade 4 students have shown an improvement in three of the four successive administrations of the test except for 1996. Note that 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.

*Chart13-4***MEAP Reading Scores - 4th Grade- 1988 Scores from 1340-1360**

	1988	1990	1992	1994	1996	1992 - 1996 Change
Shrewsbury	1340	1370	1420	1400	1480	60
Boylston *	1340	1390	1460	1510	1460	0
Topsfield	1340	1480	1490	1450	1460	-30
Lincoln	1340	1350	1440	1460	1450	10
Beverly	1340	1390	1400	1440	1420	20
Plainville	1340	1290	1310	1360	1420	110
Wilmington	1340	1400	1380	1430	1420	40
Framingham	1340	1300	1350	1410	1400	50
Foxborough	1340	1420	1400	1380	1380	-20
Norton	1340	1350	1350	1370	1380	30
Seekonk	1340	1360	1330	1360	1380	50
Berkshire Hills	1340	1320	1350	1350	1370	20
Hampshire	1340	1380	1400	1320	1370	-30
Southampton *	1340	1380	1400	1320	1370	-30
Westhampton *	1340	1380	1400	1320	1370	-30
Williamsburg *	1340	1380	1400	1320	1370	-30
Mohawk Trail	1340	1300	1360		1360	0
Saugus	1340	1300	1370	1370	1350	-20
Hopedale	1340	1430	1400	1380	1340	-60
Spencer East Brookfield	1340	1350	1340	1270	1340	0
Avon	1340	1300	1370	1360	1330	-40
Shutesbury *	1340	1250	1410	1410	1330	-80
Mansfield	1340	1340	1350	1360	1320	-30
East Longmeadow	1350	1310	1440	1490	1530	90
Arlington	1350	1370	1430	1410	1430	0
Hopkinton	1350	1380	1380	1450	1430	50
Sutton	1350	1360	1260	1280	1420	160
Chatham *	1350	1420	1470	1390	1370	-100
<b>Barnstable</b>	<b>1350</b>	<b>1360</b>	<b>1370</b>	<b>1370</b>	<b>1360</b>	<b>-10</b>
Hawlemont *	1350	1360	1390	1360	1320	-70
Sharon	1360	1410	1420	1450	1460	40
Franklin	1360	1360	1410	1400	1450	40
Northborough	1360	1460	1440	1450	1440	0
Canton	1360	1340	1420	1420	1410	-10
Falmouth	1360	1310	1410	1400	1390	-20
Lenox	1360	1320	1330	1370	1390	60
North Middlesex	1360	1360	1350	1380	1380	30
Granby	1360	1260	1280	1340	1370	90
Brimfield *	1360	1340	1330	1340	1360	30
Brookfield *	1360	1340	1330	1340	1360	30
Holland *	1360	1340	1330	1340	1360	30
Sturbridge	1360	1340	1330	1340	1360	30
Triton	1360	1380	1370	1370	1360	-10
Wales *	1360	1340	1330	1340	1360	30
Dennis-Yarmouth	1360	1330	1340	1350	1350	10
Waltham	1360	1330	1370	1370	1350	-20
Westport	1360	1400	1380	1410	1320	-60
<b>State Average</b>	<b>1300</b>	<b>1310</b>	<b>1330</b>	<b>1300</b>	<b>1350</b>	<b>20</b>

Note: A significant change in a score is considered to be 50 points in either direction.

Iowa Tests

The Iowa Tests of Basic Skills (Iowa tests) for grade 3 students were administered throughout Massachusetts in the spring of 1999. BPS was at the 73rd percentile in Reading for all students tested under routine conditions. The state score was at the 65th percentile. The test

defines four different levels of reading comprehension: pre-reader, basic reader, proficient reader and advanced reader. Thirteen percent of students tested as pre- or basic readers while 86 percent tested as proficient or advanced. Students tested under routine conditions, students with disabilities tested under non-routine conditions and students with limited English proficiency categorize results. Students who did not take the test or who were given extra time to finish were excluded. About 80.5 percent of the tested students have attended BPS since the first grade.

## 14. Management

### Management Practices

Under the direction of the Superintendent, the BPS district is managed using a team leadership approach. The District Leadership Team consists of the Superintendent, Assistant Superintendent of Elementary Education, Assistant Superintendent of Secondary Education, the Business Manager, and the Director of SPED. The goal of this team is to assure fiscal stability in the district in light of prior year's budget overruns and to improve student achievement. In addition, the Superintendent through his leadership team strives to implement and maintain an overall management system to meet the needs of a system that has evolved from a small school district to a fast growing district. A major goal of the Superintendent is to move towards a decentralized management structure. With this premise in mind principals are given the task of managing their respective buildings including the development of the budget and the selection and hiring of teachers.

The current Superintendent has been employed by BPS since October 1996. The previous Superintendent was employed by the district from July 1994 to January 1996; he replaced a Superintendent who was in the district for 24 years.

The Superintendent conducts weekly meetings with his leadership team to cover school issues. During the month topic specific meetings are also held. All principals report directly to their respective Assistant Superintendent and keep them informed of the issues relating to their individual buildings.

To fill a vacancy for the position of a principal, the Superintendent convenes a selection team. The members of the team are teachers, parents, the respective Assistant Superintendent, an administrator, and a School Committee member. This selection team interviews all candidates and recommends three to the Superintendent. He in turns then interviews these three candidates and makes a selection. The respective Assistant Superintendent evaluates all principals.

## 15. Accounting and Reporting

In Fiscal Years 1995 and 1996 the school department incurred deficits of \$1.4 million and \$1.2 million respectively. This resulted in the Barnstable Town Council, School Committee and the District Attorney for the Cape and Islands District requesting the assistance of the Department

of Revenue's Division of Local Services (DLS) in reviewing the financial practices of the Barnstable School Department. During the review process, DLS noted an inappropriate level of fiscal oversights with regard to school expenditures among various local officials having spending authority for the School Department. It also appeared that for FY96 the town owned a computerized encumbrance system that was not being properly utilized within the School Department to track appropriations and liabilities. Changes in student population after adoption of the budget largely accounted for the overages especially in the area of special needs students. It appeared that the school department had not given proper consideration to the budget ramifications of these expenditures or made any offsetting cuts to prevent the resulting budget deficits. Based on the DLS study it became evident as well that some of the local officials did not seem to have a clear understanding of their legal duties and responsibilities with regard to overseeing and managing the school budget.

DLS made formal recommendations that focused on the statutory responsibilities of the various managers and local officials in overseeing and managing the school budget process. The recommendations and procedures were intended to provide formal channels of fiscal oversight.

The audit team, as of December 1999, followed up on these recommendations to assure that they were properly implemented by BPS. The results of the review disclosed that under the current Superintendent and Business Manager these recommendations have been implemented. In addition, there were no further deficits in fiscal years 1997, 1998 and 1999. Under the present computerized accounting system the School Department's accounts are included in the town's overall accounting system. This in turn provides additional oversight of school expenditures by the town account.

The audit team attempted to trace a sample of expenditures reported on the DOE end-of-year reports to BPS accounting and budget records. The audit team also met separately with several BPS staff, the Town Accountant and the Assistant Town Manager. Based upon a sample, expenditure reports were generally an accurate representation of BPS expenditures. However, in verifying the accuracy of expenditure reports submitted to DOE, the audit team noted that a written procedure does not exist explaining how expenditure items as shown in the BPS accounting system were classified on the DOE End of Year Report. Such a procedure would appear warranted by the Business Manager, as the BPS chart of accounts does not correspond to DOE's End of Year Report. There appears to be a good relationship between the Town and the School Department.

Finally, in reviewing principals' authority over their respective school building as it pertains to fiscal matters, it was noted that they are given a certain level of funds to expend based on the school's needs. These funds can be used to meet individual school building needs. Fiscal oversight remains at the central business office to prevent overspending. Also, fixed costs such as heat, electricity and employee benefits are also monitored at the central business office.

## 16. Review of Expenditures

The audit team completed a review of BPS expenditures and purchasing controls. The team reviewed the purchasing controls and procedures and analyzed the accounting system utilized by the School Department. The review included a select sampling of accounts to be tested to insure that compliance with appropriate accounting procedures and controls were in place and operating. Discussions were held with Barnstable Town Managers that expressed concern over particular areas of school department spending. Those areas of concern were reviewed by the audit team and found to be justified and reasonable in both amount and purpose. The separation of functions concerning purchasing, receiving, and authorization for payment are in place and the Town Auditor reviews warrants and the Town Treasurer issues checks for payroll and vendors. An overall review of expenditures was also conducted to insure that expenditures were educationally oriented and justifiably reasonable.

## 17. High School Accreditation

Barnstable High School (BHS) is accredited. The accreditation visit by the New England Association of Schools and Colleges (NEASC) took place in November 1992. BHS submitted the interim status reports due in July of 1995, April of 1996 and the five year report in March of 1997. NEASC voted to accept the high school's five-year progress report in June 1997, stating that it was particularly pleased with the thoroughness of the five year report and with the steps taken to address goals and expectation for performance and in utilizing assessment data to improve both learning and teaching.

The accreditation report contained 249 recommendations, and BHS completed 246 of the recommendations, two are in process and one was rejected. The recommendation that was rejected concerned the potential of offering Graduate Level College Courses at the high school. The next accreditation visit is scheduled to take place in 2002.

## 18. Grade 3 Transiency

Student transiency is generally defined as the percentage of students who enter and/or leave a district 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 within the district. Barnstable has a relatively stable student population in the lower grades as measured by the 1997-1998 3rd grade Iowa Reading Test. Students who have taken the test under routine conditions categorize results from that test. Students who did not take the test or were given extra time to finish the test are excluded. Of fifteen communities with similar populations, Barnstable is in the middle at number seven with a



transiency rate of 18.8 percent, below the state average of 19.6 percent. The District's stable population rate of 81.2 percent is above the state average of 80.4 percent.

*Chart 18-1*

**Transiency and Stability - 3rd Grade  
Selected Communities by 1996 Population  
Student Population Participating in the 1998 Iowa 3rd Grade Reading Test**

Community	Stable Population	Total Population	Stable Population Percent	Transiency Percent	1996 Population
Attleboro	421	501	84.0%	16.0%	39,070
Leominster	316	424	74.5%	25.5%	39,263
Fitchburg	326	416	78.4%	21.6%	39,843
Methuen	342	425	80.5%	19.5%	41,029
Holyoke	259	344	75.3%	24.7%	41,461
Revere	350	411	85.2%	14.8%	41,761
Arlington	276	337	81.9%	18.1%	43,656
<b>Barnstable</b>	<b>450</b>	<b>554</b>	<b>81.2%</b>	<b>18.8%</b>	43,699
Pittsfield	401	475	84.4%	15.6%	46,315
Plymouth	577	668	86.4%	13.6%	48,329
Peabody	434	512	84.8%	15.2%	48,365
Taunton	484	608	79.6%	20.4%	51,937
Malden	288	406	70.9%	29.1%	52,749
Haverhill	548	710	77.2%	22.8%	53,952
Brookline	301	412	73.1%	26.9%	54,137
<b>Statewide</b>	<b>54057</b>	<b>67233</b>	<b>80.4%</b>	<b>19.6%</b>	

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

## 19. Special Education

Barnstable Public Schools had a Special Education participation rate of 15.7 percent, 0.9 percent lower than the state average of 16.6 percent reported to DOE for school year ending 1999. Total SPED enrollment in the 1990's has averaged 976 students each year. As a percentage of the total enrollment, SPED enrollment has averaged 14.7 percent during the 1990's but has shown an increase in the total enrolled students from a low of 836 students in school year 1990/91 to the current level of 1109 students during the 1998/99 school year. The number of students who fall into the substantially separate categories has decreased considerably, from a high of 12.8 percent of total SPED students to the current level of 3.2 percent for the school year 1998/99.

**Barnstable Public Schools  
SPED Enrollment  
Based on October 1 Reports**

School Year Ending	Total Enrollment	Total SPED	SPED as % of Total Enrollment	Substantially Separated	Substantially Separated as % of SPED
1991	5,795	836	14.4%	107	12.8%
1992	6,008	894	14.9%	112	12.5%
1993	6,330	933	14.7%	82	8.8%
1994	6,748	904	13.4%	54	6.0%
1995	6,812	935	13.7%	44	4.7%
1996	7,072	1058	15.0%	46	4.3%
1997	7,013	1031	14.7%	55	5.3%
1998	7,098	1054	14.8%	55	5.2%
1999	7,050	1109	15.7%	35	3.2%

Note: Data obtained from BPS Oct 1 Reports

*Chart 19-1*

SPED costs increased \$2.9 million or 82.9 percent, from FY93 to FY98 while the increase in total school spending as reported to DOE for the same period was \$20.0 million or 77.8 percent. During FY98, SPED expenditures were \$6.4 million or 14.0 percent of the total school expenditures reported to DOE as compared to FY93, when SPED expenditures were \$3.0 million or 11.7 percent of the total school expenditures. Payments to other districts were \$0.6 million in FY89 and increased to \$0.8 in FY98.

*Chart 19-2*

**Barnstable Public Schools  
Total Expenditures as Reported to DOE  
(in millions of dollars)**

	FY89	FY93	FY98	FY93-FY98	
				\$ Incr. / Decr.	% Incr. / Decr.
School Committee	\$2.1	\$2.6	\$5.0	\$2.4	92.3%
Payments to other Districts	\$0.6	\$0.6	\$0.8	\$0.2	33.3%
Transportation	\$0.3	\$0.3	\$0.6	\$0.3	100.0%
<b>Total</b>	<b>\$3.0</b>	<b>\$3.5</b>	<b>\$6.4</b>	<b>\$2.9</b>	<b>82.9%</b>

Note: Data obtained from BPS EOY reports

**20. Drop-out and Truancy**

BHS drop out rate for school year 1996/1997 is 5.3 percent which is higher than both the state average of 3.4 percent and the 4.0 percent average of the fourteen communities of similar population to Barnstable. This is partially due to the District's high homeless population. The dropout rate for BHS has increased 1.5 percent over its FY96 rate of 3.8 percent, which was the district's lowest yearly rate of the five years shown in Chart 20-1. Even though the district does not have a formal written program to reduce dropout rates, three programs are available to those at risk students. The three programs are; a P.M. School whose hours are 2-7 for those students 16 years or older (currently there is a waiting list for admission), an Alternative Day Program for those 15 years old or younger, and the Sheriff's Youth Ranch for high level discipline problem students. The district relies on the individual teacher and guidance counselor to identify the at risk student, provide counseling and offer them the opportunity to enroll in one of the above mention programs. The dropout rate compiled by BHS for FY98 is 3.7 percent and for FY99 it is 2.7 percent. All students absent without parental approval are considered truant, and notification to the parent is made by phone. This responsibility belongs to the truant officer at BHS. Serious truancy problems, those students with seven or more days of truancy, are addressed by personnel visits with the parent.

#### *Chart 20-1*

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

Community	FY93	FY94	FY95	FY96	FY97	1996 Population
Attleboro	6.5	6.8	7.9	5.9	5.0	39,070
Leominster	5.4	4.5	4.8	5.0	4.0	39,263
Fitchburg	3.4	3.2	2.0	2.9	1.6	39,843
Methuen	5.3	4.0	1.1	3.0	4.1	41,029
Holyoke	8.3	9.5	8.3	5.5	9.8	41,461
Revere	3.9	4.5	3.7	3.6	2.5	41,761
Arlington	0.8	2.1	1.6	1.2	1.7	43,656
<b>Barnstable</b>	<b>3.8</b>	<b>5.5</b>	<b>5.1</b>	<b>6.4</b>	<b>5.3</b>	<b>43,699</b>
Pittsfield	6.4	6.5	5.2	7.0	6.0	46,315
Plymouth		1.7	1.7	2.8	5.3	48,329
Peabody	3.0	4.4	3.8	3.8	5.7	48,365
Taunton	6.7	3.6	2.2	3.2	2.3	51,937
Malden	2.1	6.5	7.3	6.1	3.2	52,749
Haverhill	3.5	2.8	3.9	3.8	4.1	53,952
Brookline	0.5	0.5	0.4	0.1	0.1	54,137
Average These Communities	4.3%	4.4%	3.9%	4.0%	4.0%	45,704
Median These Communities	3.9%	4.4%	3.8%	3.8%	4.1%	43,699
State Average	3.5%	3.7%	3.6%	3.4%	3.4%	17,357

Note: Data provided by DOE

## 21. Maintenance and Capital Improvement

The audit team made visits to the majority of schools in the District. These buildings appeared to be clean and well maintained.

The Town of Barnstable has developed a five-year capital improvement plan covering the period FY2000 – FY2004. Included in this plan are the needs of the School Department. The Town sells bonds to finance capital improvements, which require large cash outlays. General Obligation Bonds have been sold to fund general capital improvements for various operations such as schools, public works, recreation and conservation. The Town has approximately \$105.3 million of outstanding debt, which includes a \$53 million issue dated March 24, 1999. The remodeling of the high school is the major portion of the debt issue and is reimbursable by the state at the rate of 64% for all debt service including temporary interest.

As part of the capital planning process the town has instituted a Capital Improvement Program Task Force. This task force was created as a Management Review Team to review all capital improvements projects and make recommendations for funding to the town manager. The task force is made up of department managers and representatives including the school department. Each member of the task force scores a proposed project using quantifiable matrix criteria. The goal of the task force is to come up those projects that are critical, and yet to try to get the most accomplished possible for the dollars available.

Aside from interest on debt related to the high school the other capital improvement costs for FY00 was \$250,000. Included in this sum was \$100,000 for flooring, \$50,000 for roofing at the schools and \$100,000 for Big Toys (plastic playground equipment) upgrades and repairs. However, these sums were used for operations.

## 22. School Improvement Planning

In the Barnstable School District, each individual school has developed an elective process to create and sustain school councils. Each School Council meets the requirements of Chapter 71, Section 59C relative to parity and council composition. Councils meet monthly with the building principals and are actively involved in the review of and planning for meeting the educational needs of the school's students. The District has established policy which defines the guidelines for and the role of School Councils (adopted Oct. 4, 1994).

School Improvement Plans are developed and/or revised annually. These plans include goals, which address the areas set forth in state regulations. In one school, the Marstons Mills East Elementary, the development of the school improvement plan reflects a building-wide effort, with the focus on the school council as the central planning group. This School Council searches for specific input from its' stakeholders and focuses on improvement of educational opportunities within the school. Reflecting on district goals, the School Council examines its student performance data and gathers information on many fronts. The school improvement plan reflects this effort with goals, which focus on the elements articulated in the regulations.

In most cases, the school principal takes the lead in the work of School Councils and in the development of school improvement plans. Within the district, the role of School Councils is distinctly different from that of other parent-teacher organizations. School councils are clearly focused on educational issues, and do not become part of the school's "social or fund-raising plans".

School improvement plans across the district need further development and should include greater planning detail. Goals are appropriately identified and included in the school improvement plans, but indications of specific actions, persons responsible, projected timelines, resources needed, and measures of success are not fully developed.

Review of documents and interviews with the Superintendent indicate that in the early years of Ed. Reform, school improvement plans were regularly reviewed and approved by the School Committee. Since 1996, that focus has shifted and school plans are addressed in a more peripheral way at the School Committee level. The district should re-institute a process for the annual review and approval of school improvement plans by the School Committee and consider including a model for monitoring the progress of implementation of school improvement goals at each school. Well-defined lines of communication are needed to ensure that school improvement plan goals and actions are conveyed to the Superintendent and the School Committee.

## 23. Student Learning Time

Time on Learning Regulations are met or exceeded at all levels and in all schools in the Barnstable School district. Interviews with staff note that no changes needed to be made in student or school schedules in order to meet the mandates of Ed. Reform. The middle schools adhere to the high school level requirement of 990 hours, rather than the elementary level total of 900 hours.

Time on Learning accounting in the district appears to be based on Chapter 69, Section 1G Regulations and reflects appropriately structured learning time.

## 24. Personnel Evaluations

### Evaluation of Teachers

The Barnstable School District indicates an awareness of its need to revisit the teacher evaluation instrument (minutes of School Committee meeting, May 28, 1996). Presently, the performance standards consistent with 603 CMR 35.00: Principles of Effective Teaching are not clearly defined or included in the district's protocol. The Superintendent recognizes that the current instrument has not been revised since 1989 and does not meet current regulations. System-wide, teacher evaluations are completed within the specified timeframe, i.e. professional level teachers every other year; non-professional level teachers annually for the first 3 years.

There is, however, an inconsistent application of the existing evaluation protocol. The on-site team's review of sample teacher evaluations notes that some did not include the prescribed number of formal observations and/or summative reports as described by the district's guidelines. Evaluators of teacher performance include principals, senior administrators and department heads at the high school. These evaluators are currently in a second year of training based on the Research for Better Teaching model.

The existing agreement between the Town of Barnstable School Committee and The Barnstable Teachers Association includes a section, which has been a part of every contract since approximately 1975. This section provides for a Professional Growth increment, which may be awarded to an individual teacher, based on superior teaching. This amounts to \$375 per year. Efforts by the school committee to remove this language over the last negotiation session failed. Approximately ten teachers use the provision and there is an uncertainty within the district as to the value of this article.

## ADMINISTRATORS

All Barnstable principals hold current annual contracts and are required to work 214 days (with the exception of the high school principal at 219 days), and are expected to begin the school year five days before students arrive. Compensation ranges from \$70,000 to \$78,444. The statutory requirement relative to the "Principles of Effective Leadership" is partially addressed in the evaluation protocol, only when the designated evaluator specifically references them. The process includes a review of goals, which are set by the individual principal and discussed with the evaluator (the Superintendent or one of the Assistant Superintendents). A written narrative review is based on the principal's demonstrated attainment of those goals.

Interviews with administrators indicate that a system is in place for salary increases based on performance evaluation, but document reviews could not confirm that. The Superintendent notes that, since 1997, the district has begun to negotiate salary adjustments for principals based on the results of performance evaluation. The district does not have a written policy regarding this matter.

The Superintendent is responsible for conducting an annual performance review of Assistant Superintendents, the Director of Pupil Services, and the Business Manager. Each of these individuals currently holds contracts, which expire in 2002. Their evaluations are based on the individual's annual goals and result in a narrative report reflecting his or her level of performance.

Annually, the Superintendent and the School Committee jointly establish goals and objectives for district improvement. During the course of the school year, the Superintendent furnishes the School Committee with periodic reports (3) detailing the progress made toward achieving each of the goals. A final report on goal attainment is presented to the School Committee after the school year is completed (July). The School Committee then completes an evaluation of the Superintendent's performance. It is unclear to the onsite team whether the results of this evaluation are released publicly at a School Committee meeting, as required by the Open Meeting law.

## 25. Professional Development

The Barnstable School District has developed a Professional Development Plan, which is aligned with the D.O.E. state plan. In 1997, the district adopted the structure of a Professional Development Board and a policy of procedures. This is reflected in the collective bargaining agreement between the Town of Barnstable School Committee and the Barnstable Teachers' Association (Sept. 1, 1996 through Aug.31, 2000). The Barnstable Professional Development Plan is based on guidelines, which are adapted from the National Staff Development Council. It includes a list of opportunities for staff members to pursue professional growth, with a wide range of options, which address District, school and individual needs.

A district-wide survey of staff completed in January, 1998 has provided information to the Professional Development Board as it considers the specific training needs of school employees. Professional Development offerings are generated through analysis of student assessment results, School Improvement Plans, district-wide initiatives and, to a lesser degree, trends evidenced in teacher / administrator evaluations.

The current plan sets out a list of priorities for the 1997-2000 school years and includes 14 specific goals. There is evidence that the district attempts to respond to these goals by developing workshops, courses and graduate-level study opportunities, which are presented in a series of brochures.

The District is also involved in a number of collaborative partnerships with universities, state colleges and other surrounding school districts, i.e. Fitchburg State College, Framingham State College and The Cooperative Learning Center at the University of Minnesota.

The Professional Development Board organizes district-wide training initiatives and requires the appropriate evaluation of each offering. This information is integrated annually as the Board reviews the staff development needs of the Barnstable staff. The Board has a special interest in building a force of "local experts" and encourages its teachers to contribute their professional expertise as trainers and facilitators.

The school calendar reflects some specific time for staff development purposes. Teachers work two full days before students begin the school year and one full day after schools close at the end of the year. These days, however, are not primarily devoted to professional training. At the elementary level, there are four early release days scheduled throughout the year, which allow for building-based staff development activities.

Additionally, 4 other early release days are used to schedule parent conferences. The middle and high school levels do not schedule early release time, therefore allowing even less time for professional development work during the regular school year.

## 26. Curriculum Alignment

Barnstable's efforts to work with the state standards began in 1995 with the awarding of an Ed. Reform grant to create Curriculum Frameworks Study Groups. The District focused on 3 areas: ELA, Math and Science & Technology forming committees of teachers representing

all levels, administrators, SPED personnel and parents. The district's 2 Assistant Superintendents supervised their work. Their tasks included: linking the Frameworks to existing district curricula, recommending changes in curricula and instructional strategies, and creating model integrated thematic units for elementary, middle and high school levels. As work progressed, each of the Elementary Principals was appointed to lead on-going curriculum committees in the District. These committees presently continue their work and specifically focus on the State Frameworks Documents in these areas: ELA, math, science & technology, the arts, health, history & social science, and World Languages.

The District expects its individual administrators to support this curricular focus at the school level and to reflect this commitment in each of the school improvement plans. There is a strong effort in the Barnstable district to help parents and community members understand the state standards for student performance expectations and the MCAS results. Annually, the Assistant Superintendents organize evening forums where administrators and teachers present information, which makes connections between the Common Core document, the Frameworks standards, the Barnstable Curriculum goals, and student MCAS results. Because all grade 4 students in the district attend the Grade 5 School, individual student MCAS results are picked up by parents at a time when the results can be reviewed with them by individual teachers. As a result, parents across the District are developing a clear sense of what is taught in the public schools, what is expected of their students, and how that is measured by evaluations, including MCAS.

A review of MCAS results is completed each summer, when teachers are compensated for time spent analyzing test results by grade level and by school in each content area. The Assistant Superintendents and recommendations for improvement then review these findings and subsequent needs are brought forward to the School Committee and the Professional Development Board.

Within the last school year, the School Committee has organized a Strategic Planning Advisory Board. This group plans to complete a full-scale self- assessment of the district and has selected a series of surveys developed by the National Study of School Evaluation to gather input from parents, students, staff, and community members. As a result, the Advisory Board will develop a draft outline of the district's strengths and challenges. Presently, the Advisory Board members are drawn from the district's senior management and the School Committee. According to the Assistant Superintendent, this Board will soon name four separate District Action Teams, whose efforts will be directed by the district's four overarching goals:

- Assure short and long term fiscal stability for the district
- Maximize the potential of each student
- Achieve a positive and orderly learning climate in all the schools
- Create an interactive collaboration among schools, homes, and community

These teams will be responsible for the development of goals and action plans. They are scheduled to report regularly to the School Committee as the year progresses.



## **IV. Employee Survey**

The audit team conducted a confidential survey of all employees of BPS to provide a forum for teachers and staff to express their opinions on education in BPS. Approximately 1045 questionnaires were delivered to school staff and 243 responses were received and tabulated, a response rate of 23.3 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
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 a priority in Barnstable. Eighty-one 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 districtwide plans. Eighty-five percent believe that the school district is taking positive steps to improve education and 56 percent state that their job has changed because of education reform.

Eighty-two percent of teachers are clear about the School District's goals and objectives as and 79 percent are clear about how the School District's goals and objectives relate to their own jobs. Forty-three percent feel that they have a role in developing these goals and objectives and 53 percent confirm that there are indicators used to measure their progress toward their goals and objectives.

The survey also indicates that 34 percent of the teachers do think that an increase in school funding is tied directly to improvements in education. Forty-five percent of teachers think that improvements in education at the school would have occurred without education reform.

Fifty-eight percent believe that the Curriculum is coherent and sequential. Fifty-three percent believe that the Curriculum now in use in their school will improve student test scores. Seventy-five percent of the teachers felt that there is a coherent, ongoing effort within the district to keep Curriculum current and 63 percent feel that teachers play an important role in reviewing and revising curriculum. Sixty-four 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
3. plans over the next three to five years

The Superintendent's statement is included in *Appendix E*.

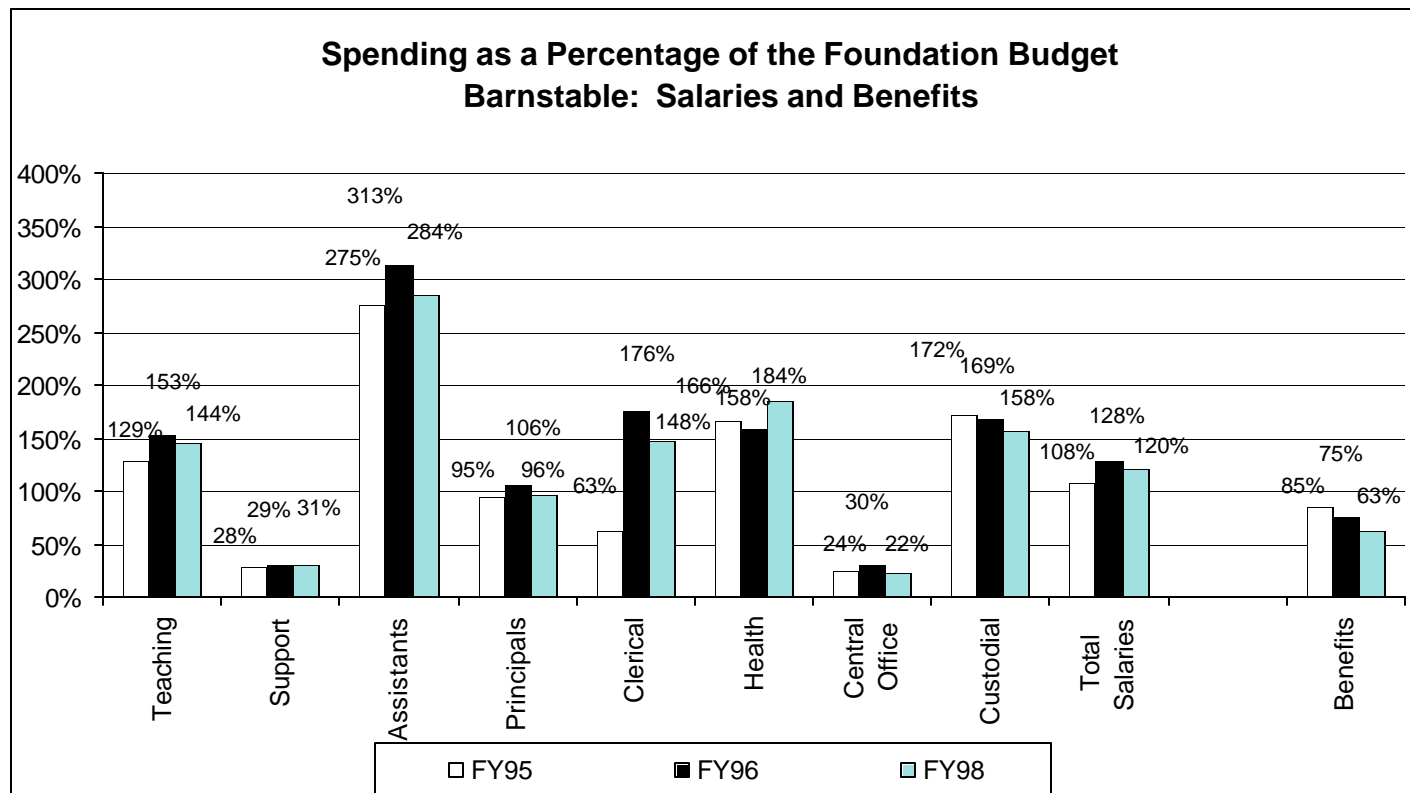
## **VI. Appendix**

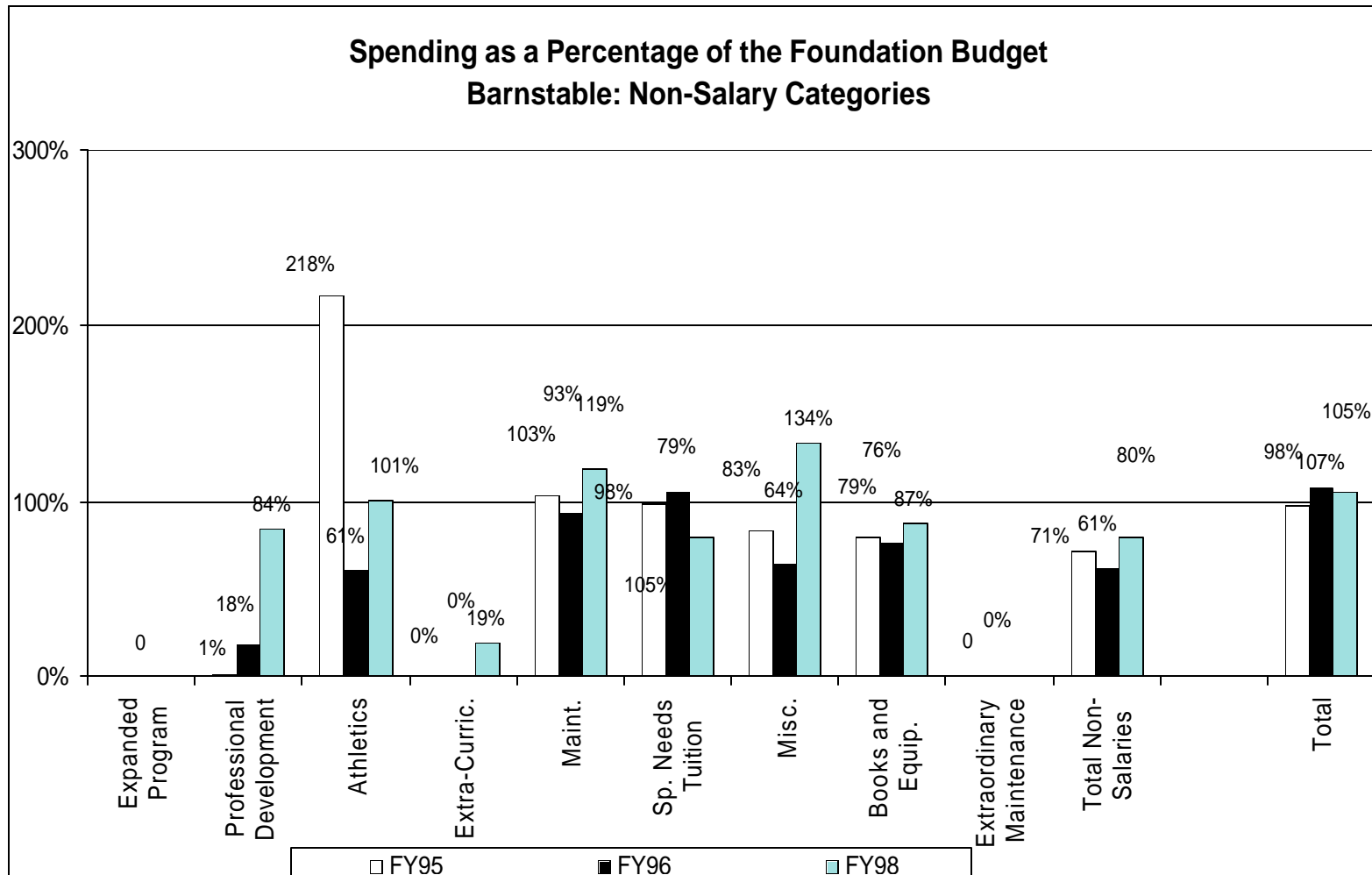
Appendix A1	Foundation Budget Line Items Targets and Expenditures FY95-FY98 - Table
Appendix A2 - A3	Foundation Budget Line Items Targets and Expenditures FY95-FY98 - Graph
Appendix B	Mass. Educational Assessment Program (MEAP)
Appendix C	Comparison of MCAS Average Scaled Scores
Appendix D	Employee Survey Results
Appendix E	Superintendent's Statement on Education Reform Accomplishments, Barriers and Goals
Appendix F	Auditee's Response

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

	Reported Expenditures				Foundation Budget				Variance Expend. over(under) Foundation			
	FY95	FY96	FY97	FY98	FY95	FY96	FY97	FY98	FY95	FY96	FY97	FY98
Teaching Salaries	\$16,548	\$20,681	\$19,929	\$20,958	\$12,835	\$13,542	\$14,092	\$14,511	\$3,713	\$7,139	\$5,837	\$6,447
Support Salaries	\$1,059	\$1,187	\$1,061	\$1,349	\$3,815	\$4,049	\$4,282	\$4,345	(\$2,756)	(\$2,862)	(\$3,221)	(\$2,996)
Assistants' Salaries	\$1,628	\$1,950	\$1,784	\$1,884	\$592	\$623	\$658	\$663	\$1,036	\$1,327	\$1,126	\$1,221
Principals' Salaries	\$1,119	\$1,324	\$1,349	\$1,291	\$1,176	\$1,244	\$1,322	\$1,348	(\$57)	\$80	\$27	(\$57)
Clerical Salaries	\$436	\$1,287	\$1,446	\$1,169	\$692	\$731	\$777	\$791	(\$256)	\$555	\$669	\$379
Health Salaries	\$427	\$429	\$407	\$538	\$257	\$272	\$288	\$293	\$170	\$157	\$119	\$246
Central Office Salaries	\$269	\$355	\$265	\$282	\$1,115	\$1,177	\$1,250	\$1,272	(\$846)	(\$822)	(\$985)	(\$991)
Custodial Salaries	\$1,888	\$1,952	\$1,901	\$1,954	\$1,095	\$1,157	\$1,209	\$1,241	\$793	\$794	\$693	\$714
Total Salaries	\$23,374	\$29,164	\$28,142	\$29,426	\$21,577	\$22,794	\$23,878	\$24,464	\$1,797	\$6,370	\$4,264	\$4,963
Benefits	\$2,586	\$2,418	\$2,116	\$2,172	\$3,038	\$3,210	\$3,365	\$3,444	(\$452)	(\$792)	(\$1,249)	(\$1,272)
Expanded Program	\$0	\$0	\$0	\$0	\$366	\$359	\$295	\$326	(\$366)	(\$359)	(\$295)	(\$326)
Professional Development	\$4	\$97	\$98	\$478	\$500	\$528	\$551	\$566	(\$496)	(\$431)	(\$453)	(\$88)
Athletics	\$842	\$250	\$491	\$472	\$387	\$411	\$444	\$466	\$455	(\$161)	\$47	\$5
Extra-Curricular	\$0	\$0	\$66	\$43	\$197	\$210	\$224	\$230	(\$197)	(\$210)	(\$158)	(\$187)
Maintenance	\$1,622	\$1,560	\$1,767	\$2,136	\$1,579	\$1,675	\$1,752	\$1,801	\$43	(\$115)	\$16	\$335
Special Needs Tuition	\$845	\$951	\$951	\$778	\$858	\$906	\$969	\$979	(\$13)	\$45	(\$17)	(\$201)
Miscellaneous	\$506	\$415	\$1,299	\$943	\$613	\$651	\$691	\$706	(\$107)	(\$236)	\$607	\$237
Books and Equipment	\$1,482	\$1,521	\$1,892	\$1,895	\$1,876	\$1,988	\$2,120	\$2,173	(\$394)	(\$467)	(\$227)	(\$278)
Extraordinary Maintenance	\$0	\$0	\$0	\$0	\$1,052	\$1,117	\$1,168	\$1,201	(\$1,052)	(\$1,117)	(\$1,168)	(\$1,201)
Total Non-Salaries	\$5,301	\$4,793	\$6,565	\$6,744	\$7,428	\$7,843	\$8,213	\$8,447	(\$2,127)	(\$3,050)	(\$1,648)	(\$1,703)
<b>Total</b>	\$31,261	\$36,375	\$36,822	\$38,342	\$32,043	\$33,847	\$35,455	\$36,354	(\$782)	\$2,528	\$1,367	\$1,987
Revenues												
<b>Net School Spending</b>	\$31,261	\$36,375	\$36,822	\$38,342	\$32,043	\$33,847	\$35,455	\$36,354	(\$782)	\$2,528	\$1,367	\$1,987

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





**Barnstable Public Schools  
Massachusetts Educational Assessment Program (MEAP) Scores**

	Grade	1988	1990	1992	1994	1996	1988-96 Change	1996 State Average	1996 BPS Over/(Under) State Avg.
Reading	4	1350	1360	1370	1370	1360	10	1350	10
	8	1330	1410	1390	1390	1430	100	1380	50
	10	N/A	N/A	N/A	1300	1300		1310	-10
Math	4	1330	1350	1370	1350	1330	0	1330	0
	8	1300	1420	1400	1390	1390	90	1330	60
	10	N/A	N/A	N/A	1320	1340		1310	30
Science	4	1340	1380	1390	1360	1370	30	1360	10
	8	1340	1360	1390	1330	1360	20	1330	30
	10	N/A	N/A	N/A	1330	1350		1310	40
Social Studies	4	1340	1360	1360	1340	1330	-10	1340	-10
	8	1330	1380	1390	1350	1350	20	1320	30
	10	N/A	N/A	N/A	1320	1290		1300	-10

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

# The Public Schools

## Comparison of 1998 and 1999 MCAS Average Scaled Scores

Students	1998	1998	Point	1999	1999	Point	1998 - 1999 Inc/Dec.	
	District	State	Diff.	District	State	Diff.	District	State
Language Arts	230	230	0	232	231	1	2	1
Mathematics	235	234	1	236	235	1	1	1
Science & Technology	239	238	1	242	240	2	3	2
Language Arts	239	237	2	239	238	1	0	1
Mathematics	231	227	4	229	228	1	-2	1
Science & Technology	228	225	3	226	224	2	-2	-1
Physical Education	N/A	N/A	N/A	221	221	0	N/A	N/A
Art								
Language Arts	233	230	3	231	229	2	-2	-1
Mathematics	222	222	0	226	222	4	4	0
Science & Technology	224	225	-1	230	225	5	6	0

provided by DOE

**EMPLOYEE SURVEY - Barnstable  
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?	80%		8%		12%
1.b.	Do you feel you have a good understanding of the purpose and the goals of the law?	77%		8%		15%
1.c.	Do you feel that there is a lot of confusion about what Education Reform is all about?	60%		18%		22%
1.d.	Do you feel the issues of Education Reform are considered when school district plans are made?	79%		2%		19%
1.e.	Do you feel the issues of Education Reform are considered when school-based plans are made?	81%		1%		18%
1.f.	In your opinion is the school district taking positive steps to improve education?	85%		2%		12%
1.g.	Do you feel your job has changed because of Education Reform?	56%		28%		16%
1.h.	Do you think there has been an improvement in student achievement in your school due to Education Reform?	36%		12%		52%
1.i.	Do you think the improvements in education at the school would have happened without Education Reform?	45%		9%		46%
1.j.	Have you perceived an increase in school funding tied directly to improvements in education in your district?	34%		21%		44%
1.k.	Is there a formalized process in place to analyze student test scores and identify areas of academic weakness?	70%		11%		19%
1.l.	Are there specific programs in place to improve student performance in areas where academic weaknesses have been identified?	74%		9%		17%

2	Educational Goals and Objectives	1 & 2		4 & 5		3
2.a.	Are the school administration's goals and objectives generally clear and understandable?	82%		10%		8%
2.b.	Are you clear about the school district's goals and objectives as they relate to your own job?	79%		10%		11%
2.c.	Are there indicators issued to measure progress toward goals and objectives generally?	47%		14%		39%
2.d.	Are there indicators used to measure your progress toward goals and objectives?	53%		14%		33%
2.e.	Do you have a role in developing these goals and objectives?	43%		35%		22%



## APPENDIX D

### EMPLOYEE SURVEY - Barnstable 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?	58%		22%		19%
3.b.	Do you believe that your curriculum is challenging and tied to preparing students for life after secondary school?	76%		9%		15%
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?	75%		8%		17%
3.d.	Do teachers play an important role in reviewing and revising curriculum in the district?	63%		16%		22%
3.e.	Will the curriculum now in use in your school improve student test scores?	53%		7%		40%
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?	64%		15%		21%
3.g.	Is the curriculum in your school aligned with the state frameworks?	92%		2%		6%

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?	75%		4%		21%
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?	32%		37%		32%
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?	36%		33%		30%
4.c.	Are you familiar with the content of your school improvement plan?	74%		12%		14%
4.d.	Does the school improvement plan address the needs of students in your school?	68%		13%		19%
4.e.	Is the plan used to effect important changes in your school?	61%		11%		28%

## Appendix D

### EMPLOYEE SURVEY - Barnstable 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

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?	37%		32%		31%
5.b.	Is there adequate communication between you and your superiors?	68%		2%		19%
5.c.	Is there a mission statement in place for your school district?	79%		13%		19%
5.d.	Is there a mission statement in place for your school?	89%		2%		8%
5.e.	Does the mission statement define how the school is run, and how students are taught?	64%		16%		21%
5.f.	Are these mission statements applied in the operation of the school and the teaching of students?	55%		16%		30%

6	Budget Process	1&2		4 & 5		3
6.a.	Do you understand your school budget process?	45%		29%		26%
6.b.	Do you understand how the budget process impacts your department?	67%		15%		18%
6.c.	Is the school budgeting process fair and equitable?	21%		38%		41%
6.d.	Are budgetary needs solicited and adequately addressed in the budget process?	23%		38%		39%
6.e.	Once the budget is approved and implemented, does the allocation and use of funds match the publicly stated purposes?	36%		14%		50%
6.f.	Given the circumstances, the school department seems to be doing the best it can with in the school budget process.	44%		20%		37%
6.g.	Are there deficiencies in this process?	53%		17%		30%

7	Professional Development	1&2		4 & 5		3
7.a.	Is there an adequate professional development program in your school?	70%		21%		8%
7.b.	Is the program designed to meet school needs and tied to the new frameworks and assessments?	71%		11%		18%
7.c.	Is the program designed to change the content of pedagogy in classrooms?	57%		15%		28%
7.d.	Are there deficiencies in the professional development program?	43%		27%		30%
7.e.	Did you participate in the professional development program in 1997/98?	83%		15%		2%
7.f.	Professional development is making a difference and will improve education in my school district.	67%		12%		21%

**EMPLOYEE SURVEY - Barnstable**

		Rating Scale			
		Yes/No Questions		Opinion	
<b>8</b>	<b>Supplies</b>	<b>1 &amp; 2</b>	<b>4 &amp; 5</b>	<b>3</b>	
<b>8.a.</b>	Have you generally received sufficient and appropriate supplies to do your job?	59%	yes 1 & 2 29%	Good to Excellent 12%	
<b>8.b.</b>	Have you generally received sufficient and appropriate basic educational supplies (e.g. chalk, paper, pens, pencils, etc.) to do your job?	87%	No 4 & 5 8%	Not good, inadequate OK - could be better, 5%	
Note: Percentages may not add to 100% due to rounding		Not sure, one way or the other		could be worse	
<b>8.c.</b>	Have you generally been supplied with a sufficient number of a current edition of textbooks?	63%		29%	9%
<b>8.d.</b>	Are students given a copy of these textbooks to keep at home during the year?	2%		93%	5%
<b>8.e.</b>	Have you generally been supplied with sufficient ancillary curriculum materials (e.g. current maps, lab supplies, videos, etc.)?	46%		40%	15%
<b>8.f.</b>	Is the process for obtaining supplies and materials effective, time sensitive and responsive to your classroom needs?	41%		37%	21%

<b>9</b>	<b>Facilities</b>	<b>1 &amp; 2</b>	<b>4 &amp; 5</b>	<b>3</b>
<b>9.a.</b>	How would you rate the overall state of school facilities (e.g. cleanliness, security, maintenance, structural integrity)?	57%	31%	31%
<b>9.b.</b>	How would you rate the overall state of classrooms, labs, and other teaching rooms/areas?	57%	26%	26%
<b>9.c.</b>	How would you rate the overall state of the common areas (e.g. hallways, stairwells, and cafeteria)?	61%	17%	22%
<b>9.d.</b>	How would you rate the overall state of the areas outside of the building (e.g. playgrounds, walk-ways and grounds)?	63%	18%	18%
<b>9.e.</b>	Would you agree with the following statement: "The school administration makes an effort to provide a clean and safe working environment."	70%	18%	12%

**EMPLOYEE SURVEY - Barnstable  
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

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?	68%	12%	19%
10.b.	Are the usage of computers and other technological tools a significant part of the instructional practices at the school?	47%	26%	27%
10.c.	In terms of student usage, are computers generally available only in a computer laboratory setting or library/media center?	44%	47%	9%
10.d.	How many computers are located in your classroom?			
10.e.	Do you have a school computer provided for and dedicated for your usage?	70%	28%	2%
10.f.	Is there a school computer provided for and shared by you and other teachers?	55%	35%	10%
10.g.	Are there computers available for and used on a regular basis by students?	69%	19%	12%
10.h.	Is the number of available computers sufficient for the number of students?	25%	67%	9%
10.i.	Are the computers in good working order?	64%	14%	22%
10.j.	Are the software packages in the computers uniform and consistent with the instructional level to be provided?	48%	22%	22%
10.k.	Is there a policy or program providing for computer training for teachers on software and computers used by students?	23%	19%	23%

V. Barnstable Public Schools - Superintendent's Statement – Education Reform

1. School District Progress and Education Reform Since 1993

Since the passage of the Education Reform Law in 1993 the landscape of learning in Barnstable and across the State has radically changed. In 1986 I left the State to work in New York State primarily because of two factors: the impact of Proposition 2 ½ and the lack of learning standards and requirements. Our schools were seriously underfunded as inflation advanced and Prop 2 ½ essentially prevented matching funding increases. Newly hired quality staff were RIF'ed by seniority, and textbooks, programs and staff development were slashed. At the same time, High School requirements encompassed only four years of English and one year of U.S. History. In contrast, New York State benefited from the pro-education funding of former Governor Rockefeller and then Governor Cuomo. For much of the century New York had maintained its high standards for a Regents' diploma and curriculum-based Regents' Exams. With the Education Reform Law in 1993, Massachusetts attempted to even the playing field in these areas.

**A. Finance**

Although formula concerns will be a recurring theme both in this statement and most likely throughout the report, there is no doubt that State Aid support has substantially increased under Education Reform and made a real difference in what we can offer our students, staff, and community.

From 1993 to 2000, our Chapter 70 State Aid has grown from \$1,305,948 to \$4,220,448. In addition, we have been able to seek and receive numerous grants for programs and services which have emanated from the Ed Reform Act.

**B. Standards**

Just as significantly, the Curriculum Frameworks, Standards and follow-up MCAS testing have served to focus K-12 learning on academics. Our core curriculum committees have examined the State Frameworks and matched local expectations. The actual advent of MCAS testing in 1998 provided the concrete assessment that everyone needed to see what those Frameworks meant for student learning. The adjustment to achieve real instructional change will take years and some real conflicts, but can be done if we all

stay the course with an eye to what students need to learn. The primary question should be, “is this learning (knowledge, skills, etc) what I would like my child to achieve?”

What kind of changes took place under Education Reform?

- Time on learning was expanded at the secondary level, with the elimination of study periods. Block scheduling was implemented at Barnstable High School to meet new Graduation requirements.
- Core academic expectations were increased at the High School with additional Math, Science and Foreign Language requirements and more specific English requirements.
- Early Childhood Programs were instituted. Pre-school initiatives and all day K opportunities have been put in place.
- Health grants (\$160,000) have led to a revamping of the entire Health Curriculum. Prevention specialists have been placed in all elementary schools.
- Reduced class size (especially at the elementary level) has been a major focus. Much progress has been made.
- Foreign language instruction has begun K-6.
- Technology upgrades have been achieved as a result of a District Technology Plan and additional funding from the State and local level. Hardware and staff development have been greatly improved.
- Alternative programs have flourished. A PM Program at the High School saw sixty students graduate. A ninth grade intervention program and Middle School class have begun.
- Additions to sports, the Arts, and the Gifted/Talented Program (one of the State’s best) have been made during the Ed Reform years.
- A Comprehensive Education Reform Grant has been a catalyst in establishing a House System at Barnstable High School.
- The District has embraced PALMS in Science and Math and become a lead contributor.
- Textbook upgrading (which had not been a priority) has been done in many areas.
- A Safe School initiative in collaboration with the Police Department has resulted in an Adopt-a-School Program in our elementary schools and a full-time Resource Officer at Barnstable High School.
- Barnstable has become the site of a Horace Mann Charter School at Grade 5. This school has become a model site for the changeover to building-based budgeting.
- Career-oriented opportunities for students have been effected through State, Federal, and other grants.
- Career Pathways have been introduced at Barnstable High School.
- CS2 entrepreneurs have provided initiatives Grades 5-12.

- Professional staff development has also been the beneficiary under Education Reform.
- The requirement for expanding a set amount per year has guaranteed that staff Development would not be slashed in budget crunches.
- Barnstable has established a District Professional Development Board. It sponsors courses targeted to our priorities.
- The evaluation process has been significantly improved. All supervisors have been trained in the Saphier method.
- The administrative evaluation tool has been completely revised and negotiated.
- The School Committee has required that all employees (professional and support) must receive regular reviews.
- Infrastructure upgrades have also been achieved since Education Reform.
- A forty-five million dollar reconstruction of Barnstable High School is near completion.
- The Performing Arts Center at BHS is a fabulous community resource.
- The reconstruction of Hyannis Middle School is ongoing.
- Renovations and repairs have been extensively made at the Grade 5 School and all of the elementary schools.

All in all, additional funding and the direction of the Education Reform Law have had a major and positive effect in Barnstable.

## 2. Barriers to Education Reform

The major barriers to Education Reform in Barnstable have, ironically, been financial. Despite significant increases in State Funding under the Education Reform Law, the Ed Reform formula has still resulted in only a small percentage (7-11%) of our school budget. As a consequence, the Town of Barnstable has been required to supply additional funding to reach the Foundation Budget. Just as the schools were limited prior to 1993 by Proposition 2 ½, so the Town of Barnstable must face the same restraints as it seeks to support the schools and other essential Town services such as the Police and DPW.

From 1993-1996 the expanding school population devoured the increases under the Reform Law. The District tried to maintain services and begin Reform initiatives. Problems erupted into crisis when a two million-dollar budget deficit emerged in 1996. The situation was resolved with help from the State and the Town, but the damage was serious. Staffing and program cuts, budget freezes and investigations took place. The resulting School Committee Finance Management Plan has stabilized accounting and budgeting.

The crisis also led to turmoil in the District Leadership. The long-time School Superintendent had retired in 1994. The new Superintendent was a casualty of the budget deficit, and two interim replacements took over during 1996. I arrived in October of 1996 and have tried to provide consistent and responsible budget management.

A Town vs. School syndrome has been a concern as the attempt to fund services adequately has been pursued. The schools have followed a needs-based budgeting approach while Town Departments have been zero-based. The School Department is moving to building-based funding similar to the Town's approach for the 2000-2001 school year.

Some specific problems related to growth/finance:

- The District had difficulty keeping textbooks updated. Resources were redirected into shortfalls.
- Building repairs and care suffered. Infrastructure concerns were seen as subsidiary to instructional ones.
- Special education costs soared and ate up State Aid increases. Barnstable's SpecialEd services are widely recognized; families move into the District to receive these services. The resulting costs are a problem under maximum feasible benefit.
- Student population growth over the last decade has led to a space crunch. The District owns 23 portables with one or more at almost every school site.

Some other barriers to Education Reform should be noted:

- The Commonwealth Charter School located in the District, the Sturgis High School, has begun to drain money from the system. As the percentage of funding increases yearly, our Chapter 70 money will diminish. The Charter School funding mechanism needs to be changed.
- Another clear barrier is the State's tenure law. If the State is sincerely interested in substantive change, State officials need to have the courage to deal with tenure.
- MCAS testing focuses on instruction and achievement efforts. However, comparisons between District, area and other schools are counter-productive. This is especially true in regard to early years' results when socio-economic factors tend to dictate success.

### 3. Plans Over the Next Three to Five Years

- A. Stability Over the last few years student population growth has moderated. Chapter 70 Aid has increased and allowed us to address several needs. After the 1996 budget crisis, the Town of Barnstable has responded to school needs albeit reluctantly as it seeks to provide equity for other Town priorities. We have improved on all our operating systems and are functioning as a professional organization.
- B. Problems In the near future we must solve several problems. A system of our



size needs a Personnel Director/Function to see to it that our employees (over 1000) are professionally hired, trained, evaluated and supported. Lack of space limits kindergarten expansion and administrative efficiency. Limited Town resources are not projected to meet demands, and the potential financial drain of the Commonwealth Charter School could be debilitating.

#### 4. Plans for the Future

Our School Committee, school community and Town are presently developing a 3-5 year Strategic Plan for the Barnstable Schools. Its #1 priority is increased student achievement K-12. The State Curriculum Frameworks and MCAS testing will play a central role in guiding continuous improvement in learning. It is evident that real learning growth will not occur quickly or easily. We need to individualize learning to see more students reach their potential and State expectations. Communication between and among staff and with students and the community must be significantly enhanced. The District needs to develop a Public Relations function to celebrate the enormous amount of successful efforts that are ongoing.

The Strategic Planning process is a major catalyst in this pursuit of academic and overall excellence. The School Committee is currently engaged in a complete Policy Review that is crucial. The continued and continuous improvement of all our systems will be pursued.

We will rely upon the support of the State of Massachusetts, Town of Barnstable officials and the entire community as we seek to make excellence and achievement for all our students watchwords.



### ***BARNSTABLE PUBLIC SCHOOLS***

*RUSSELL J. DEVER, Ed.D., Superintendent of Schools*  
*SHARON K. McPHERSON, Administrative Assistant*

ADMINISTRATION CENTER  
P.O. Box 955  
Hyannis, Massachusetts 02601

To: DOR/DOE Review Teams  
From: Barnstable Leadership Team  
Date: March 28, 2000  
Re: Responses/Recommendations

The report highlights several areas where the District can take quick steps to reach the level of excellence that the Education Reform Law envisions.

It is clear that School Improvement Councils and Plans are in place and that goals are set and pursued. We will develop a uniform spreadsheet that all councils will use. Specific actions, persons responsible, timelines, resources and evaluation measures will be identified.

We will make sure that categorical spending in future years meets expected levels.

We will work cooperatively with the Town of Barnstable to reconcile District and DOE accounting categories.

We will complete the work begun on the Teacher Evaluation instrument, agree on the instrument with the Barnstable Teachers Association, and have it approved by the Barnstable School Committee.

It is clear that since 1997 we have differentiated Principal salaries based on performance and narrative evaluations. We do not have a written policy or procedure on this process; we will develop one.

Superintendent evaluations have regularly been completed, but only occasionally been released publicly at a School Committee meeting. We will put that practice in place.

## ACTION PLAN

<u>Focus Area</u>	<u>Steps</u>	<u>Person(s) Responsible</u>	<u>Timeline</u>
Uniformity of School Council Plan Formats	Develop System Spreadsheet	Leadership Team	May 2000
Categorical Spending	Allocate Funds by Category in Previous Year	Frank Inzirillo	May 2000
Reconciliation of District, Town and DOE Accounting Categories	Crosswalk Between Munis and DOR Accounting Categories	Frank Inzirillo	September 2000
Teacher Evaluation Instrument	1. Work with Barnstable Teachers Association and Saphier Consultant 2. Update Process in Compliance with Evaluation Criteria and Teacher Standards	Andre Ravenelle	September 2000 School Committee Approval
Written Policy on Principal Compensation	1. Develop Written Guidelines for Differentiated Principal Compensation	R. Dever	May 2000
Public Release of Superintendent Evaluation	Presentation at School Committee Meeting	School Committee	June/July 2000

4/10/2000

