Impressed with the vital importance of an effective public education system to the future of the Commonwealth, a group of involved business activists formed the Massachusetts Business Alliance for Education (MBAE) in 1988. The purpose of the MBAE was to help bring about systematic improvement of Massachusetts' elementary and secondary education system. A reform plan was proposed that has three interdependent elements: (1) setting the course toward a higher plane of student achievement; (2) improving the operational characteristics of the system itself; and (3) changing the educational finance system. Each of these elements contains specific recommendations that the MBAE concluded would result in long-term improvement in the system. Also included in the proposal are sections that provide information on the need and challenge, the MBAE process, observations from other initiatives and studies, leading recommendations, and other considerations and recommendations. Appended is a listing of MBAE board of directors and supporting organizations, the national and state goals for education, and proposed reform of Massachusetts school finance. (135 references) (RR)
EVERY CHILD A WINNER!

A PROPOSAL FOR A LEGISLATIVE ACTION
PLAN FOR SYSTEMIC REFORM OF
MASSACHUSETTS’ PUBLIC PRIMARY AND
SECONDARY EDUCATION SYSTEM

by the

MASSACHUSETTS BUSINESS ALLIANCE
FOR EDUCATION
(MBAE)

July 1991

"Human history becomes more and more a race between education and catastrophe."

H. G. Wells
ACKNOWLEDGEMENTS

Many entrepreneurs state that had they known the likely complexities and pitfalls to be encountered, and the skill and knowledge required to succeed in their ventures, they quite likely never would have launched them. The MBAE Board has had that feeling many times during its more than two years of deliberations. But, like entrepreneurs, we persevered because we believed very much in the mission, and because we were helped at critical junctures by many individuals and organizations who also sensed that the mission was critical, the need for action was immediate, and that difficult times are often opportune periods to initiate long term improvements in America's society.

We are very grateful to all those who assisted, educated, and encouraged us in this effort. Although we did not seek endorsement of the Plan from these individuals and organizations, we hope that they feel the Plan justifies the time and effort they invested in us. In a way, the work is just beginning, so we call on them again to join us in turning this Plan into public policy for future generations of citizens in the Commonwealth.

Although we risk overlooking someone, we have listed those who supported MBAE and provided assistance to the effort in Appendix A.
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EXECUTIVE SUMMARY

Introduction

Massachusetts and the nation are faced with a serious crisis that is not well understood by the general public nor by many leaders in the public and private sectors. Simply stated, this crisis can be summarized as follows: The public education system is failing to provide its students with the knowledge and skills necessary for them to be productive, informed citizens in coming decades.

The prospect of an under-educated citizenry, unable to understand or cope with issues arising in the management of the country and Commonwealth, should alarm everyone.

In addition, the inability of many public school students/graduates to qualify even for entry-level jobs or to compete successfully with their counterparts from other industrialized countries is a clear signal that the education system needs to undergo dramatic improvement soon.

Further, the future trends in the work force will exacerbate the severity of the problem if corrections are not undertaken immediately. These trends were summarized in a 1988 report by the U.S. Department of Labor concerning the work force of the 1990’s:

- The number of workers will fall
- The average age of workers will rise
- More women will be on the job
- One third of new workers will be minorities
- There will be more immigrants than at any time since WWI
- Most new jobs will be in services and information
- The new jobs will require higher skills
The implications of this crisis are so serious that Massachusetts must change its priorities, putting public education reform at or near the top of its agenda. Because passage and implementation of meaningful reform will take time, the process must begin immediately; most of the year 2000 work force is already in our schools.

But there is reason to be optimistic about our capacity to improve the system successfully in the Commonwealth. There is a widespread belief in the need for a quality public system of education; there is a growing understanding that the schools need to improve; and there are many dedicated people still working in the system. Yet education needs help from outside to bring about needed change and improvement...concerned groups and individuals who can act as "change agents" or catalysts to get momentum underway, and who can accept the responsibilities of leadership in this very important undertaking.

MBAE

Impressed with the vital importance of an effective public education system to the future of the Commonwealth, a group of involved business activists formed the Massachusetts Business Alliance for Education (MBAE) in 1988. The purpose of the MBAE was to help bring about systemic improvement of Massachusetts' elementary and secondary education system. This system currently is responsible for about 850,000 students in 1,800 schools, administered by almost 400 local school committees and supervised by the Board of Education and the Department of Education.

After two and a half years of intense research and thoughtful debate, the MBAE has formulated a plan for comprehensive improvement of the Commonwealth's primary and secondary education system. This reform plan was developed independently but benefited from extensive consultation with many knowledgeable experts and practitioners from within and outside of Massachusetts. The package of reforms addresses what the MBAE concluded were the most critical areas needing improvement. The political and fiscal complexities which will surround the transformation of the proposal from a private sector initiative into public policy, legislation and regulation were also taken into account.

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Throughout the process, the MBAE business executives found much professionalism, intellect and dedication in the state education system. This reinforced MBAE's feeling that if a reform package could be implemented to produce a better system, there were plenty of good and capable people in the system to make it work. Therefore, MBAE's agenda for action focuses on ways to improve the system, rather than in areas such as curriculum improvement, pedagogical experimentation or specific elements of school-based management which are best left to the education professionals.

Reform Action Plan

The proposed reform package has three interdependent elements, each contributing both to the comprehensiveness of the reform and to the likelihood of widespread acceptance. If resistance to change is a common human trait, so is enlightened self-interest. Both tendencies will be evoked by this package. But, in MBAE's view, all stakeholders in the Commonwealth will benefit from this improvement package, and these benefits will outweigh the discomfort of coping with changes inherent in reform.

Indeed, as MBAE has presented this plan to various constituency groups throughout the Commonwealth, it has been encouraging to observe the degree of open-mindedness and receptivity they have shown. The most common perceptions seem to be: that the crisis is real; that time-trends are not favorable; that thoughtful change will be needed to overcome the difficulties; and that, despite near-term fiscal difficulties, this may be a propitious time to initiate meaningful long term reform.

The MBAE agenda consists of three principal elements:

- Setting the course toward a higher plane of student achievement by creating a vision of a system tied to international norms, and by setting expectations at world class levels. State goals and standards would be revamped with greater emphasis on outcomes and accountability.

- Improving the operational characteristics of the system itself through a series of reforms improving the quality of the teacher work force and school system management, and by increasing
focus on student preparation, knowledge, and measurable achievement.

- Changing the educational finance system to guarantee overall funding, sufficient to provide for a quality education for all students, equity across all school districts, and improved year-to-year stability...and to give special attention to economically disadvantaged youth.

Each of these elements contains specific recommendations which MBAE concluded would result in long-term improvement in the system. These are synopsized here and explained more fully in Section V of the Report.

Setting the Course

- **Focus, update and more broadly communicate "Goals of Education in Massachusetts."** These new goals should be specific and measurable and call for world class levels of achievement for students emerging from the system. Part of this will be state-wide high school graduation standards tied to levels of knowledge and skills, that is, "What do they know?" and "What can they do?"

- **Set specific local system and individual school goals.** These should respond to the state-wide goals and be approved by the state officials after formulation by local authorities.

- **Develop sets of performance indicators at both state and local levels.** This array of indicators will allow meaningful measurement of performance against both long-term goals and interim milestones without resorting to single, misleading parameters.

- **Set up a system of incentives to promote the achievement of the goals and standards.** This system will be symmetrical, with tangible awards for schools, systems and individuals which excel, and penalties for persistent under-performance. The latter can include the declaration of an unsatisfactory school as "educationally bankrupt" which would trigger reconstitution of the school and invocation of limited "choice" or privatization. Incentives should include rewards for interdistrict collaboration.
Improving the System

- **Pre-school and Early education.** Prioritized towards disadvantaged children, and phased in over four years, pre-school education for all three and four year olds will ensure that all children of the Commonwealth will have the opportunity to come to elementary school with a firm foundation for learning.

  A parent outreach/education program will bolster this pre-school effort by providing additional educational services to parents of children from one year to three years of age. Provisions are made to serve one and one half times the number of children from low income families in each district than are assisted by current programs.

- **Extended school time.** This can be done by extending daily schedules, annual calendars, or both. In all cases the added time will be used for teacher growth and renewal activities, increased learning time for students, and better integration of social services. We expect that over a four year period school time will be increased on the order of 20% with the largest increases in districts with large economically disadvantaged populations.

- **Youth at Risk.** The new pre-school education, parent outreach/education and extended school time programs are intended, in part, to help at-risk students. In addition, provisions in the model budget have been made for increased staffing in schools with significant at-risk populations.

- **School Based Management.** We recommend decentralization of educational management with principals as the pivotal operating managers in a new system which also emphasizes teacher and parent involvement. Site-based management is to be adopted throughout the Commonwealth within three years, operating under guidelines designed by the state Department of Education with input from administrators, teachers, parents and business people.

- **The Teacher Work Force.** Recommendations include: substantially increasing professional enhancement activities, funds and addi-
tional time set aside during the work day for growth and renewal; refunding most Chapter 188/727 programs; peer evaluation and individual teacher reviews and professional development plans; greater use of alternative certification; stepped-up efforts toward minority teacher recruitment and retention; delegation of teacher hiring and firing authority to the school principals; significant limitations concerning relatives of the Superintendent or School Committee members working in the same school district; simplification of teacher dismissal reviews; and prohibition of principals to be members of teacher unions.

- **Commission on Regulatory Relief in Education.** The express purpose of this "Blue Ribbon" panel would be to reduce, simplify and ease administration of educational regulations. While basic safeguards and federal mandates would be maintained, regulations would be drawn to be more outcome oriented rather than process oriented. The Commission should be empaneled quickly and accomplish its work with a high sense of urgency.

- **Restructure the State Department of Education.** The work of the Department would be clarified by the creation of two major Divisions, one responsible for Assessment/Compliance, the other for Technical Support/Assistance. A new unit called the Educational Innovation Center would be created and funded to stimulate innovative concepts and experiments within the system and report on results; the Center would also have a long range planning function to systematically track changes in the economy, demographics, technology and education trends, and translate these into needed future changes within the system.

**Change the Educational Finance System**

- **Functional School System Model.** Using national norms, MBAE, working with education professionals, developed a detailed functional and financial model of a school system. This model covers all aspects of the education system and is designed to provide quality education to all students. This model was tested several times for validity.
Foundation Funding. Based on the characteristics of the functional school system model, MBAE developed a foundation budget, which answers the basic question: "What should be spent on education?" This foundation budget is adjusted to take into account such factors as the proportions of low income families, student age mixes, special and bilingual education requirements, vocational-technical school needs and varying wage scales across the state. In this way, a specific "foundation level" budget was developed for each district in Massachusetts.

We recommend that each school district provide at least this foundation level of school funding. This addresses the heart of the equity issue. The required level floats with enrollment and inflation, guaranteeing stability and adequate funding in all communities.

MBAE has no interest in penalizing or degrading school quality in systems that currently spend above the foundation level. We recommend they be allowed to increase current budgets to keep pace with inflation and enrollment changes.

Funding the Plan. The funds needed to meet the foundation level budgeting would come from a combination of state and local funding. The local funding would come from a school property tax levy in the district but would be capped at $10 per $1000 equalized valuation (1991 dollars). Thus, if a poorer community cannot raise the foundation funding with a $10 school property tax levy, state funds would make up the shortfall. Communities which can raise the required funding for less than $10 school tax will continue to receive state aide, but at gradually reduced levels. There are provisions for communities which are close to the model budget to accommodate their circumstances.

An important feature of this system is that all school monies, both the local school tax levy and the state funding, are targeted for public education and may not be used for other purposes.

The system is envisaged to be implemented over a five year period, during which the reforms proposed elsewhere in the plan would take effect.

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Costs. The initial foundation level calculated for the MBAE model averaged about $5000 per pupil per year for the Commonwealth’s school districts, which, coincidentally, was quite close to the current average expenditure in the state. For cities with large concentrations of low income families, the foundation level budget can exceed $6000. When fully implemented, including the major reforms proposed elsewhere, the average expenditure will be on the order of $5700 per pupil per year. (There will be more pupils, or "pupil equivalents" in the system at that time due to the inclusion of the pre-kindergarten age groups.)

The total cost of the reform package will be about $890 million per year when fully implemented. $388 million will come from increases in local property taxes. $334 million will be state funds supplied to local districts to ensure that all districts reach the foundation level. The other $168 million is budgeted for activities managed by the Department of Education: $50 million for incentives and awards for excellent performance. $50 million for building assistance to help provide facilities for the 3 and 4 year olds; $50 million for the Educational Innovation Center; and $18 million for other elements of the reform plan.

If the reforms in MBAE’s plan are enacted and implemented, and if the additional revenues are earmarked for public education, MBAE is prepared to support any necessary increase in the sales tax or some other state tax(es) to raise the state share of program costs.

Section VI of the Report contains other considerations and recommendations advanced by MBAE that augment and reinforce the lead reforms. These pertain to the four major areas which were the foci of MBAE’s research, and other important topics:

- Future Teacher Work Force
- Early Childhood Education/Youth at Risk
- Restructuring and School Effectiveness
- Educational Financing System

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Privatized Sector Involvement
Choice
Vocational/Technical Education

The complete report and description of the new financing system developed within MBAE is contained in Appendix D.

Conclusion

The challenges inherent in gaining passage and acceptance of an educational reform plan such as this are daunting. But MBAE is convinced that Massachusetts can wait no longer to meet that challenge. Each year that goes by without proper attention to the public schools, especially the early grades, results in more children and young adults who are unable to understand the world around them and incapable of supporting themselves or their loved ones. The bill for those "lost" children comes due every day...a staggering cost in lost talent, lost ambition, lost creativity and, too often, lost lives.

So, failing to act now is not without a price. Just drop-outs alone cost the United States over $80 billion per year in various social, economic rehabilitation and disciplinary programs. If Massachusetts absorbs one fiftieth of that, which is likely, the costs are enormous indeed. But the economic loss pales beside the human tragedy involved.

A dynamic, vital public school system can be the keystone to overcoming this challenge. After considerable thought, MBAE feels this plan is an excellent start. Its adoption will send a message, loud and clear, across the nation and the world: Massachusetts is assuming its leadership position once again; Massachusetts knows the value of education; and Massachusetts is committed to making...

Every Child a Winner!

EXECUTIVE SUMMARY
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I INTRODUCTION

A. Background

Massachusetts has a long, distinguished history of pioneering and excellence in public education. From the establishment of Boston Latin School in 1635, through the period of the leadership of Horace Mann in the nineteenth century, to modern initiatives such as vocational and special education, the Commonwealth has led the way in making America a leader among nations in emphasizing the importance of public schools and opportunity for all children and young adults.

However, in recent decades, pressures on the school systems brought about by societal and demographic changes, fiscal constraints, public policy shifts and changing needs of the workplace, have increased. This has caused the public education system to fall below levels of quality, relevance and effectiveness needed in the 1990's and beyond.

The Massachusetts Business Alliance for Education (MBAE) was founded by representatives of leading companies from across the Commonwealth who came together in late 1988 to address this crisis. These activists were convinced that if educational trends were not reversed, the foundations of the future economic strength of the Commonwealth would be undermined, and the very fabric of the democratic society of informed citizens would be seriously weakened.

The business sector, public officials, educators and other "stakeholders" in the Commonwealth have initiated a number of meaningful attempts to support and improve elementary and secondary public education in Massachusetts. These have taken the form of school-business partnerships, local or targeted reforms and some state-wide initiatives. Massachusetts, for example, is a national leader in the number and quality of partnerships, over 3000 of which continue to contribute significantly to education in the state.

But most of these efforts have been piecemeal in nature, most often addressing narrow aspects of public education at the local level. Other, broader efforts such as the Massachusetts Public School Improvement Act of 1985 (Chapter 188), and its successor legislation, Chapter 727, have been undermined by inconsistent support and significantly reduced funding. Frequently,
excellent results have been realized at the community or program level, but seldom has this translated to broad improvement in the system as a whole. It was this realization which stimulated the formation of MBAE and its focus on systemic reform.

In the MBAE founders’ view, the Massachusetts system needed a "total system review," leading to an agenda for action to bring about systemic improvement...a new "game plan" to reestablish its preeminance. Accordingly, to lead and catalyze this process, MBAE was formed as an independent state-wide, privately-funded business coalition.

After more than two years of thoughtful consideration, research and discussion, MBAE has developed an action plan for system-wide reform of the preschool through Grade 12 public education system in Massachusetts. This agenda, presented in this report, was formulated independently but with extensive consultation with many of the state’s public and private stakeholder groups.

Improvement of the public education system is a complex, long term process, which, in MBAE’s view, must be given immediate and sustained high priority and support by all sectors in the Commonwealth. Although it will take time to implement totally this action agenda, its adoption as a blueprint for reform will place Massachusetts, once again, in the vanguard of those in the nation working to improve the schools and the futures of children.

Implementation will be a challenge of leadership: a long term view to overcome short term difficulties and parochial interests; reliance on thoughtful initiatives over obsolete, anecdotal arguments for the status quo; and support for multi-faceted approaches over simple panaceas. MBAE is confident the citizens and institutions of Massachusetts are up to the challenge.

B. MBAE Mission

The purpose of the Massachusetts Business Alliance for Education is to participate in shaping the future of education in the Commonwealth and restoring its preeminent position of educational leadership, by bringing about statewide, systemic improvement in public elementary and secondary education.
INTRODUCTION

C. Purpose

The objective of this report is to place before the public and other interested parties the agenda for systemic reform distilled by MBAE from over two years of investigation and assessment. Publication of this plan also signals a shift from the research phase of MBAE's work to the advocacy or action stage. Thus, the success of the effort will not be gauged by the development of the agenda itself, but rather by how much of it actually is translated into public policy, and eventually implemented. So, while this document is informative in one sense, it is also a "call to action" for activists to help the advocacy effort.

MBAE continues to expand its constituency, not only within the business community, but among other public and private stakeholder groups who have interests in this area. By broadening the coalition, the power of the advocacy effort will increase and the plan's implementation will benefit from the diversity of views/insights.

D. Scope

During its consideration of the issues, MBAE drew on voluminous background information on public education, work done in Massachusetts and in other states and countries on education reform, and many studies performed in this discipline over the past 20-30 years. This background was enlarged with statistical data concerning demographics, school populations and federal analyses of trends (societal and socio-economic). In addition, various studies, legislative actions and other related works directly concerning the Commonwealth and its schools were referred to and added to the backdrop of discussions. MBAE benefitted from experts and consultants in this field who shared their expertise in the development of the agenda. Added texture was obtained by conversations and recommendations from activists within the state, many of whom have had decades of experience in the Commonwealth's school system or public sector. Some of these references are compiled in Appendix B.

It would be impossible and counterproductive to synopsize this background in detail in this report. Rather, the net effect of this orientation is disclosed in the summaries of MBAE's observations (Section IV) and in the recommendations themselves (Sections V and VI). So, in short, most of this report
describes the results of the process rather than the process and rationale by which the recommended actions were formulated.

It should also be clear that the work undertaken by the Alliance was limited even within the general rubric of "public education." MBAE restricted its consideration to primary and secondary public education (pre-school through Grade 12). No attempt was made to address other important educational issue areas such as public post secondary ("higher") education, adult literacy or the retraining of displaced workers, to name just a few.
II THE NEED AND CHALLENGE

A. A Changing World/The Need to Respond

Over the past two decades evidence has been accumulating that the United States' leadership in many economic areas has deteriorated. This long term trend has developed because of many factors, some related to actions by other countries which have emerged as aggressive competitors in global arenas, others related to repriorization of public policies and societal/demographic changes within our country.

It is clear that an important, perhaps the most important factor contributing to America's difficulties has been the gradual slide of its public schools' performance, relevance and effectiveness. This degradation has come about because of an inability or failure of the educational system to cope with and react to change, and because the net effect of many federal, state and local policies has been massive neglect coupled with over-regulation of the system which develops the raw material, the human capital, which is the central element of the nation's future... its children.

It is equally clear that these trends cannot be allowed to continue. The cultural and economic future, indeed the very national security of the country, will depend on the nation's resolve and willingness to overcome the inertia and indifference of decades and to mount a massive and immediate effort to regain world leadership in education.

Why should education be such a central focus in America's resurgence? Because the overarching needs are to increase productivity, relieve pressures on various other social support systems and institutions and to help elements of the economy which are struggling to cope with change and international competition. To do so requires contributions by the "engine of society," the public education system. Good education relieves pressure on other social support systems; a weak education system stresses all other systems and services, including industry. In short, public education is central to America's quality of life and economic future.

Recognition of this crisis at the federal level has resulted in the establishment of a set of national goals (Appendix C) which are designed to reestablish America's public education system as second-to-none in the 21st century.
Meeting these goals is a daunting undertaking because unlike most other countries, the United States welcomes cultural diversity, independence of thought and sectional differences. These facets of American society forge the strength and fabric of the nation, but make achievement of broad education goals difficult to bring about by nationwide policies. So, while the establishment of national goals is very important in expressing a leadership focus, implementation of meaningful changes in public education falls to smaller jurisdictions, the individual states and local school districts.

It is at the state level that serious systemic reform must be initiated. This has been recognized throughout the nation’s history and has been the underlying reason that the direction and administration of public education has been left largely a responsibility of the individual states. It is at the state level that leadership for system improvement must emerge. Too often, however, state leaders have avoided taking this responsibility seriously, leaving local school districts to their own devices in reckoning with mounting difficulties without direction or support.

B. The Challenge in Massachusetts

Many insightful individuals in education, industry and government have been aware of the deterioration of public education for two decades and have attempted to raise public awareness and initiate remedial actions. These and other efforts accelerated in the early 1980's when a series of reports, including "A Nation at Risk," and other events raised the visibility of the crisis still further. This resulted in increased attempts to improve schools across the nation and in Massachusetts.

Despite the efforts undertaken Massachusetts' educational system has not exhibited system-wide response and is generally judged to be failing to provide a quality education for all students. The trends and pressures underlying the decline not only continue, they even accelerate to some degree:

(1) Early Childhood/Preschool. There are insufficient public resources being provided to ensure affordable, quality programs for young children, designed and taught by qualified, adequately-compensated staff. Funding levels, even for proven programs, have been drastically reduced in recent years due to federal and state cutbacks and strained local revenues. The average salary for a senior teacher in a child care
center is often 20% or more below the average wage of beginning teachers in the school systems.

The continued lack of equal access to early childhood programs creates a significant opportunity gap even prior to entry into public schools. As a result, a two-tier system exists in Massachusetts for access to these programs and for adequate pre-school preparation.

Indeed, with increasing numbers of two wage-earner households, it is becoming more important to provide facilities for the children from these families as well, even when the ability to pay is not the principal issue.

Lack of adequate attention to early childhood education has an important accompanying effect: failure to stimulate increased parental involvement and education, vital elements of educational performance and effectiveness.

(2) Public Education - Grades K-12. The strength of the Commonwealth will be a direct function of the capability of public schools to provide an adequate education to all children, regardless of race, ethnic background, social or economic status or location. The needs are especially acute in urban and rural areas, but even suburban schools have significant difficulties, though somewhat different in nature from the others.

Recent data on the academic performance of many Massachusetts students is very troubling. The climate, culture and organization of the schools must be changed, both in terms of student academic performance, and with added regard to the societal situations within which the schools exist and have to function. The statistics regarding single parent homes, poverty, homelessness, pregnancy, safety and substance abuse reflect a dramatically changed environment from that of a generation ago. These factors place demands on schools which are severe and debilitating to staffs, who often feel abandoned and estranged from other elements of the community.

The challenge is to improve the Commonwealth's system of public education so that each child will have the opportunity to achieve his/her maximum
potential to go on to a productive life as a participant and contributor to society and the American economy. This challenge embraces all children in the system, whether they are college-bound or are likely to enter the workforce directly from the secondary school system.

C. The Political Backdrop to Reform

The passage of Proposition 2 1/2 a decade ago drove a deep and lasting wedge between the business community and educators in Massachusetts. The tax limitation law was supported by many in industry (although that sentiment was not unanimous). When one of the major effects of Proposition 2 1/2's implementation was severe funding reductions for school systems, many educators perceived business as uncaring about education. Recent fiscal crises have served to reawaken and reinforce these views, especially since some elements of industry have been vociferous anti-tax advocates.

A more detailed look at the current situation reveals a changed scenario. Many business leaders who were Proposition 2 1/2 advocates early in the 1980's did at that time feel that a tightening of the education system was needed, as one element of fiscal reform. But as the decade progressed, increasing numbers of business practitioners developed a greater understanding of the growing crisis in education and have become involved in attempts to support and improve the schools. These efforts have led to better communications between the sectors, perhaps the best long-term result of partnerships and other collaborations. Thoughtful business leaders now feel the pendulum has swung too far.

The current fiscal crisis has created acute financial pressure on schools, and it has become very apparent that while business may oppose taxation for other reasons, it has not lost faith in educators or the importance of public schools. Rather, business leaders do not link higher taxes with assistance to schools because they have little confidence that any additional revenue raised will actually reach the schools or that it will be used in productive ways. With regard to school funding, industry lacks confidence primarily in the existing system of revenue distribution and allocation, not in the educators and schools themselves.

There is also widespread understanding in industry, and now generally acknowledged by most stakeholders, that the problems in public education reach far beyond school finance in scope, complexity and their solution or
resolution. Major changes must be brought about to make the education system more effective and more responsive to modern needs. The Commonwealth's school systems of the future must be adequately financed, but they must also operate differently to achieve necessary performance levels.

MBAE has concluded that public education in the Commonwealth is not perceived as a constituency, i.e. a political force to be reckoned with when legislative or policy debates take place. In other words, public officials do not feel that their actions regarding public education will garner or lose votes to any significant degree. This allows these officials to decry the decline in education and deliver rhetorical support on public occasions, but not back up these pronouncements with corrective action in policy and resource allocation.

Massachusetts' businesses now stand ready to ally themselves with the education sector, thereby becoming part of a joint constituency which will use its political power to demand a reckoning on how public education is treated by those involved with public policy in the Commonwealth. At the same time, however, the quid pro quo for this support is the expectation, indeed, the requirement, that those involved in Massachusetts' system of public education accept thoughtful changes which must occur in how the system is operated, guided and managed. MBAE's Plan, when implemented, should create the climate within which school improvement can take place. The specific steps to achieve improved schools should be formulated and carried out by professionals within the system.

D. Rationale for Business Involvement

The shortcomings in the Massachusetts education system are reflected in its graduate population and, of course, those 25% or so who do not graduate, 40-50% in Boston. Not surprisingly, these workers are increasingly unequal to the needs of industry, even for entry level jobs.

The price for this inadequacy is high. Because education is key to productivity, billions of dollars are spent nationally by industry each year to provide basic remedial training for underqualified entry workers. Much more is spent on further on-the-job training. It costs the national economy almost $80 billion per year in costs directly attributable to dropouts, only half of whom are employed and three quarters of whom come from poor families.
Massachusetts incurs its share of those costs. This is a good example of the stresses generated by an inadequate educational system.

Adding to the crisis, the labor market will shift dramatically over the next 15 years. By the turn of the century, the nation's minority population will exceed one-third of the total, and at least ten states, including Massachusetts, will have "minority majority" school systems. In short, 85% of the new entrants to the industrial labor pool during the next decade will be women, immigrants and minorities. These statistics are challenging to current systems, but present a great opportunity if the systems can be adjusted to cope with the coming changes.

Many business leaders are developing a better understanding of the direct relationship between quality education and the needs of the future workforce. A primary goal of education has always been, and should continue to be, to equip students with the basic skills they need to reach their potential and become contributing members of society. In coming years, the link between education and industry will be even more critical as a better educated and specialized workforce will be needed to fill available jobs. Meeting this challenge is not the burden of the education system alone. Other stakeholders, including industry, must understand that they have roles in ensuring that education meets the needs of society.

Industry can and must help, but it must start from a position of mutual trust and confidence in the professionalism of educators. There are some areas of expertise which business can supply to improve aspects of the system. But, in the end, business' role should be of "helper" and "catalyst" for change, allowing those with responsibilities in the system to evolve new plans, programs and structures within a positive climate.

The motivations for business' involvement include parochial factors such as:

1. To ensure the availability of a workforce possessing the basic skills necessary for entry-level jobs
2. To promote work force preparedness for the advanced training required in higher technological and managerial positions
3. To generate better-educated and better-paid consumers who will provide future markets
(4) To provide the leadership for tomorrow's business sector and community at large

... but the most important reason for business' concern and involvement with education is basic:

To ensure that Massachusetts and the nation have an informed, educated electorate to sustain a free society in which the nation's values will endure and businesses flourish.

The members of MBAE have no illusions of extensive expertise in education, but through a thoughtful, consultative process, they have examined the problems of public education. Using their collective experience, insights and expertise, they have evolved an agenda for action which will bring about important improvements in the system as it now exists in the Commonwealth.

E. The Imperative for Action, Leadership and Understanding

The many needs of the public school system and the options to remedy them have been extensively researched. During MBAE's deliberations, the amount of background material came close to being overwhelming. Although reformers must be careful in selecting solutions, there is ample information upon which to form opinions.

But the need for beginning systemic reforms is immediate, as each month the system continues to struggle with its burdens and fails to meet the needs of many students...students who will be young only once, and whose time in school ebbs away without the benefit of an improved system.

So, the time has come for action. Action, even if not all the problems can be addressed immediately; action, even though the various stakeholders may differ on some elements of the reform package; action, even though, due to resource limitations, some reforms must be phased-in over time. The importance of the commitment, publicly stated and acted upon, cannot be overemphasized. Once that commitment is evident and accompanied by concrete action to move the agenda forward, the reform movement will grow in scope, acceptance and effectiveness. Initiation of this action will require leadership, as the true dimensions and urgency of the crisis in education are not well-understood by the broad electorate.
It must be further understood that the proposed reforms, of necessity, will affect many stakeholders' prerogatives and traditional ways of "doing business." This may cause a very natural tendency to try to resist certain aspects of the Plan. But it is essential to the success of systemic reform that the elements of the Plan be linked together and considered interdependent...a "package" which provides balance and benefits to all stakeholders, benefits which more than offset the painful acceptance of change.

The leadership must come from all sectors. Political leaders must cooperate to move the agenda into legislation and regulation, risking some difficulties because they may be "ahead of the electorate" to some degree. Business leaders must broadly support the reform and ensure that their capabilities are brought to bear to assist enactment of needed legislation, and that their resources are used to augment public sector initiatives and commitments over the long term. Leaders in the education community must understand that the time of opportunity for long range improvement is now, and they should lend their insights, guidance and enthusiasm to the process so that reform will take the optimal path to success. If this leadership emerges, the citizens of the Commonwealth will respond; the "common good" and long range improvement will become the foci of their thinking, instead of the near-term difficulties in the state's economy and fiscal situation.
III THE MBAE PROCESS

A. Formation and Identification of Issues

A nucleus group of industry activists, members of the Massachusetts Committee on School-Business Partnerships, first had the notion of a systemic improvement effort in late 1988. After several meetings which included consultants from as far away as California, the group decided that the statewide effort should be established. They pledged the support of their companies and undertook the formation of the organization and its governing Board. MBAE, Inc. was formed as a Massachusetts non-profit corporation and requested designation as a 501(c)4 educational and community advocacy group. The initial Board of Directors was comprised of representatives from participating companies; other firms were solicited for financial and intellectual support. (Appendix A)

Using initial funding, MBAE contacted virtually every major stakeholder in the Commonwealth to advise them of the intended MBAE effort, welcoming their opinions. Essentially unanimous support for the MBAE undertaking was expressed by those briefed in the public, private and educational sectors.

An initial compilation of key issue areas based on interviews and background of the MBAE participants was completed. This list of major topics included: the teacher workforce, management of cultural diversity, organizational restructuring, use of technology, educational financing, use of physical plant, parent and community involvement, choice, youth at risk, accountability, legislative mandates, curriculum and early childhood education. Each of these had numerous subtopics/areas of concern.

B. Consultative Process/Refinement

MBAE retained a professional interviewer to meet with and query educators, educational leaders, legislators, professional associations and other stakeholders as to their reactions to the list of issues.

The MBAE Board received a report from the interviewer and added its own assessments to this perspective. MBAE also gave consideration to those areas in which business could most usefully apply expertise.
After careful consideration, the MBAE board selected four major issue areas as the focus of its agenda for reform in the state:

(1) The future of the teacher workforce
(2) The education financing system
(3) Youth at risk/early childhood education
(4) School organization/restructuring

Even though these topics focused the discussions, the analyses necessarily crossed over into other areas as total-system considerations or ramifications were assessed.

C. Research on Priority Issues

MBAE then embarked on a focused research effort in which consultants were tasked to examine in detail each of the priority issue areas. The researchers were specifically selected for their insight, experience and expertise in areas or disciplines relating to the areas of interest. They were encouraged to examine and assess not only Massachusetts' programs and experiences, but also exemplary initiatives of other states.

After months of research, reports and briefings were provided to the MBAE Board which analyzed the results and drew their own interim conclusions while defining areas for needed further examination.

D. Development of a Framework

After a year of detailed analysis and involvement, certain fundamental conclusions emerged as a consensus in the group. These basic conclusions formed the backdrop to the more detailed, substantive deliberations leading to the agenda for action. This framework was summarized in MBAE's Interim Report published in March, 1990:

(1) Improving the Public Education System is a compelling priority for the Business Community

Business cannot meet its goals if the public education system fails to meet its goals. The two are fundamentally interdependent. Banks, in-
Insurance companies, and others already decry the lack of high school graduates with the computational and verbal skills necessary to handle many currently unfilled entry level positions; high technology firms acknowledge their struggle to remain competitive in global markets against the superior graduates of the math/science educational curricula in other countries. By the year 2000, as many as 400,000 engineering/science positions alone are expected to be unfilled in the U.S. What's more, many in the business community do not believe that the practice of "training their own" is a viable alternative to an effective public education system. Apart from workforce-related concerns, the business community recognizes the socio/cultural implications of a poor education system . . . an unacceptably uninformed and underachieving citizenry.

(2) Many valuable initiatives within Massachusetts and in other States to reform the public K-12 system are already underway and can serve as models for further system improvements.

National initiatives such as "Headstart" and Massachusetts programs such as the nine Carnegie School pilot activities represent promising interventions into the process of public education reform. Partnerships between the business community and the educational system are adding value to the efforts of hundreds of local school systems. Local experiments with changed scheduling, curriculum and other aspects of education are both widespread and well documented. The process of educational reform need not begin at "Square 1!" Rather, it is most important to draw from the best, applicable programs and systematize them.

(3) Any effort to reform the system must acknowledge and accommodate the enormous range of individual differences in the needs of both schools and students.

The social and economic contexts within which public education operates vary widely among the urban, suburban and rural environments. Any approach to state-wide school improvement must recognize these differences and not attempt to impose "cookie cutter" solutions on quite varied situations. The urban system, for example,
must concern itself with issues of student safety, with pervasive "drop out" and attendance problems, and the like, before learning can take place.

Suburban systems must operate in the context of enormous parental pressure to compete and succeed and widespread disagreement over what that should mean in terms of schedules and curricula. Further, the individual abilities and interests of the students are widely disparate.

Rural areas must cope with severe shortages of qualified teachers and lack of modern facilities and equipment, among other factors peculiar to this sector of schools.

The point is that the system must provide programs that reflect the circumstances comprising the educational environment in diverse districts and which respond to the needs of every student, from the least to the most capable, in every district.

(4) Systemic reform, involving major new approaches to the public education process will be required to produce fundamental and lasting improvement.

The business community, as an interested and empathetic "outsider," and as a principal "consumer" of the products of the education system, must serve as both a catalyst and a resource to facilitate this systemic reform. It is not likely, nor indeed reasonable, to expect educators to remain sufficiently dispassionate to overhaul the system from within. Issues of structure and authority levels must be addressed; the interplay of strategic and operational priorities must be reconciled; standards of performance and measures of accountability must be re-examined and a symmetry brought to the system to provide incentives for good performance and penalties for underperformance.

(5) An effective, long-term plan for improvement must include built-in incentives to ensure that the needed changes will be implemented and self-regenerating over time.

Enough research studies have been conducted to paint a reasonable landscape of what elements of change must occur to transform the
public school system at its essence. But the predictable resistance to change inherent in any complex social system provides natural barriers to achieving substantial change in the way the system operates. Superintendents, teachers, school boards, parents' groups and other stakeholders have their respective agendas, beliefs and sacred cows. To persuade these myriad constituencies to abandon the old in favor of the new and build in enduring incentives to prompt more effective behavior is the ultimate challenge facing those who would advocate system reform.

(6) **Substantial improvement in public education cannot and will not occur in Massachusetts without revisions in the Law to provide adequate revenues targeted directly and specifically to public education.**

Notwithstanding earlier (and continuing) efforts on behalf of the business community to resist tax increases in general, we believe increasing or redeploying funds in support of public education to be an essential prerequisite to reform. The limits imposed by Proposition 2 1/2, as evidenced by the current budget crisis in education, are simply too stringent to provide for quality education in Massachusetts. School improvement cannot be done "with mirrors." The financial burden of some mandates, coupled with existing funding constraints are insurmountable barriers to system reform. While financial resources are by no means the only issue at stake, MBAE concluded that funding must be increased and/or reformulated. Specific recommended changes must be proposed to achieve these changes in the system of financing. In short, we must spend more and spend "smarter."

(7) **The entire "Community," not the individual school, should be the Learning Center of the public school system.**

MBAE has endorsed the concept of the community as the learning center, rather than the traditional concept of the schools, somewhat isolated and separate from other community stakeholders, responsible solely for education.

Communities, by themselves, are rich in learning resources. Local businesses, committed parent organizations, "resident experts," etc.
are potential collaborators in an improved public education system. Linked together, communities across the state become a larger "community" network with a broader range of assets that could be shared. Developing these community resources, instilling a sense of shared ownership in the quality of the public education process, and shared governance in the shaping of that process, is pivotal to the concept of "systemic reform."

E. Development of an Agenda for Action

As the MBAE project continued, it benefited from an expanded participation of a broader array of Massachusetts companies and more detailed research. The express purpose of this work was to refine the specific issues into actionable items upon which recommendations for systemic improvement could be based. There was a sense of urgency in this effort, but MBAE wanted to develop its agenda thoughtfully and thoroughly, even if more time and funding were needed.

After considerable thought and consultation with stakeholders in the Commonwealth, MBAE has developed its Agenda for Action, its important initiatives to improve Massachusetts public schools across the board. It is not an attempt to "reinvent the wheel," but draws on the best previous efforts/programs and seeks to systematize them. New proposals are advanced as well.

F. Advocacy

MBAE does not intend merely to publish yet another report and fade from the scene. The issues are too important; the crisis too deep. Instead, it will become an active advocate for public education improvement as part of the industry-education constituency mentioned earlier in the Report. Through the force of persuasion and the political power of its collective companies and allies, MBAE will actively seek and insist on action to improve the educational system. At the same time, it will use its influence and expertise, where applicable, to help educators respond to the new challenges posed by modern society and the 1990's global economy.
IV OBSERVATIONS

A. Introduction

As MBAE evolved its agenda for reform, the executives were affected by many influences. Numerous studies and scholarly treatises were persuasive and informative, though often inconsistent in their conclusions. Conversations with educators and state officials impressed MBAE with the reservoir of talent, intelligence, dedication and perseverance existing in the Commonwealth. Yet these individuals are caught in a maelstrom of countervailing pressures, possess the wariness of change so common to all humans, and lack the power to bring about improvements by themselves.

Similar education reform efforts in other states were examined, those initiated voluntarily and those forced upon some states by court order. Where possible, successful initiatives which seemed applicable to Massachusetts were studied in detail; "lessons learned" in the processes used to bring about reform were also noted.

Many of the feelings and conclusions of MBAE were developed in this process of assimilation and education. These are reflected elsewhere in this Report. This Section summarizes other factors or observations which affected MBAE's approach to reform.

B. National Business Reforms Recommendations

The national awakening to the need for systemic reform of public education has spawned outstanding, insightful efforts in the national leadership of the business community. The National Business Roundtable, the National Alliance of Business, National Small Business United and the U.S. Chamber of Commerce's Center for Workforce Preparation and Quality Education have been exemplary in their attention to the challenge. Interestingly, their conclusions as to the characteristics of satisfactory education systems match well with MBAE's agenda and outlook.

Since these independent views are so widespread and support MBAE's thinking and agenda, they are worth summarizing:
(1) *Revised educational systems should have four operating assumptions:

a. All students are able to learn and to achieve higher levels of performance;

b. We know how to successfully teach all students;

c. Every child should have an advocate from within or outside his/her school system; and

d. Curriculum content should reflect high expectations for all students; instructional time and methods may vary to enhance effectiveness.

(2) The new systems should be much more oriented to performance or outcomes.

(3) Standards for schools should be raised to include higher expectations for all. Assessment of these schools should adequately measure the skills and abilities of students at key junctures.

(4) Successful schools and systems should be rewarded; unsuccessful schools should be given incentives to improve.

(5) School Administrators and staff should have major roles in decision-making and should be held accountable for the outcomes.

(6) Important emphases should be placed on staff development and alternative certification opportunities.

(7) A high-quality, pre-school program should be available to all children, especially to those who are disadvantaged.

*These subparagraphs are paraphrases from several documents published by the organizations mentioned previously.
OBSERVATIONS

(8) Better integration of schools and other social support programs should be achieved. Significant barriers to learning can be reduced through improved student health and social services.

(9) Technology should be incorporated into school curricula and pedagogy, and recognized as being essential to enhancing student learning and individualized instruction.

(10) New systems should encourage competition among schools or school districts and promote accountability through the implementation of "choice" plans.

C. The Posture of the Commonwealth - Education in the 1990's.

To bring about reform, or even to arrive at a meaningful agenda, it was necessary to take into consideration important aspects of the state's political and economic situation...the environment within which reforms will be discussed and implemented. Some of these are alluded to in earlier sections of this Report; others are summarized below:

(1) Massachusetts, from an education point of view, has a two-level political structure: state level, and local level, with a very strong history and tradition of "home rule," such as town meetings. Although there are attractive aspects of creating a regional or other intermediary structure for education, it seemed unlikely to MBAE to be successful in the requisite time frame. Thus, MBAE's reforms were formulated within the existing structure. This structure includes the regional high schools and vocational technical schools already part of the system which, because they involve multiple districts, are unusual in the state structure.

(2) According to a 1990 Roper Poll and other available sources, the population as a whole has a vague understanding or suspicion that American schools need improvement, but generally feel that their own schools are satisfactory, while "other" schools are sub par. This translates to a misplaced complacency which makes it more difficult to politically enact reforms.
Frequently, citizens in Massachusetts compare their schools with what they perceive to be the "best in the state," usually in a rich community. They then conclude that while their schools aren't up to that standard, they're "doing alright, considering what we can afford."

The two fallacies in this perception are: that the costs of not improving the schools is often not considered in the equation; and that the "best in the state" is the wrong benchmark upon which to check the schools. The "nation's best" or "world's best" should be the reference, and many of Massachusetts' schools would flunk that test.

(3) Typical of most states, many Massachusetts school districts include populations of voters, of whom only 20% have children currently in the public school system. In difficult economic times, especially, this manifests itself in insensitivity, or even open resistance to attempts to improve the education system, especially when additional funding is required. Given the possible lack of local support, it is important to ensure that funding intended for schools actually reaches the schools.

(4) In Massachusetts, as elsewhere in the country, there is widespread confusion and skepticism about the relationship between school system expenditures and performance. Some feel too much is spent; some feel, too little; some feel it doesn't matter.

MBAE concluded that it does matter, but felt it must address the question: "How much is enough?" as a first step in its quest for a new financing system. As far as MBAE knows, this would be the first time this question has been answered in recent memory, based on a specific rationale and current data.

(5) Massachusetts continues, understandably, to be dominated by Boston, especially in the media, and it is undeniable that the performance of Boston's schools is important to the overall state picture. But educational reform must be undertaken with a broad, Commonwealth-wide perspective, because the problems of other districts in the state are also compelling and, at their roots, emanate from the same societal, demographic and economic factors affecting the Boston schools.
(6) Massachusetts' fiscal situation began deteriorating almost at the same time MBAE was formed. Throughout the two-year effort, this downturn progressed with a noticeable deleterious effect on the schools, and demanded the attention of everyone in the state. MBAE continued with its work because it realized that: Education reform is a long-term proposition and should not be stopped because of temporary difficulties in the state fiscal condition; and, that if the Commonwealth's educational system isn't substantially improved, the state will never achieve true and lasting economic or social health...a prospect far more ominous than the current crisis.

D. Measuring Education's Success

Educators have been historically very process-oriented, approaching the notion of outcome measurement or accountability warily. This is based on the general belief that "results" of school systems are difficult to quantify in a meaningful and fair way because so many "outside" factors affect school operations, factors largely beyond educators' control. While this orientation is understandable, it will not be sufficient in the future. In a time of strained resources and increased demands, the citizens of the Commonwealth will not agree to maintain or increase educational funding without some measures of outcome at both the state and local levels.

Such indicators, in MBAE's view, are best formulated by the educators themselves, but they must be developed, and they must be meaningful and measurable. Some excellent work in this area is ongoing under the auspices of the State Department of Education and the Massachusetts Association of School Superintendents. This work must be expanded, with assurance that the indicators include measures related to both college-bound and non-college-bound students.

Inherent in any system where outcomes take on more significance, is a sense of symmetry, the balance needed to achieve results. This will manifest itself in different ways, such as:

(1) Incentives should be provided for institutions and individuals to perform above expectations; penalties should exist and be applied to underperformers and those simply not willing or able to participate in the new "game plan" for education.
(2) Decentralized decision-making must be accompanied by a concomitant restructuring and sharing/delegation of authority over resources.

E. State Government Roles
The State Government should adopt a three-part role in the next decade, which will be instrumental in bringing Massachusetts' schools to a new, higher plane of achievement:

(1) Goals and Standards: The state should be the top-level setter of goals and standards which tie the Commonwealth to national objectives and international norms. Also, the state must ensure that each and every child entrusted to the system will have a realistic chance, based on his/her abilities, to have a productive life as a citizen and worker.

(2) Stimulation and Support: The state should be an "enabler," a "stimulator" and a "helper" to local school districts as they develop new initiatives and adjust to reform. For example, special effort should be made to encourage and support individuals and institutions to improve operations, modernize/update curricula, extend outreach to the community and more vigorously develop staff. Also, interdistrict collaboration should be encouraged, and meritorious programs rewarded.

(3) Educational Finance: The state should adopt and operate a system of educational finance which ensures state-wide school funding at adequate levels, that is equitable across district lines, and also relatively stable from year-to-year.

F. Local District Roles
Looking ahead, the focus of actions to improve the schools will be at the individual school system and school levels, making the school committees and their policies more important than ever. With the state providing overall performance expectations, guidance, encouragement and support, each system
led by its school committee will be expected to improve its operations. While each school will be unique, special attention must be given to:

(1) Developing school-based management mechanisms and procedures while restructuring school system management.

(2) Experimenting with new ideas and methods of teaching, both with regard to subject matter and pedagogy.

(3) Extending the outreach of the schools to other segments of the community. Important aims of those efforts would be to make effective use of all community resources for curriculum enrichment and teaching effectiveness, to develop liaisons which would engender support for the schools in fiscal decision-making/budgeting, and to better integrate other local social support services and facilities.

(4) Exploring with other districts ways of improving operational efficiency, subject matter instruction/learning and/or pedagogical techniques/methods. This could involve either the better utilization of existing interdistrict collaboratives, such as the Education Collaborative for Greater Boston (EDCO), or formation of new collaborative initiatives.
V LEAD RECOMMENDATIONS

A. Introduction

As indicated in Section IV, MBAE formed its action agenda based on key observations regarding the current education system itself, the political structure and climate in the Commonwealth and the forces at work which are stimulating the need for reform. In essence, MBAE's lead recommendations are built on the principle that education reform must be looked upon as a "total package," that the educational financing reform must be accompanied by concomitant changes in the system's operations. To summarize:

(1) While finance reform is necessary, it is not sufficient by itself to achieve genuine educational improvement. There must also be dramatic changes in the operations of public schools to accompany finance reform. The combination will provide a firm basis for comprehensive improvement.

(2) The education finance system in Massachusetts is in need of major reform. Such reform will assure, for all children in the Commonwealth, an adequate and equitable distribution of resources, with year-to-year stability. This new system must provide special attention to, and include provisions for the extraordinary needs of economically disadvantaged children.

MBAE's lead recommendations, outlined in the following paragraphs, provide such a package.

B. State Goals with Indicators

The state should focus, update and more broadly communicate clear "Goals for Education in Massachusetts." (The current goals are listed in Appendix C.) These new goals should be outcome oriented rather than process oriented and should be consistent with, but not limited to, the National Goals for Education. The goals should be specific and set high expectations with reasonable target dates for achievement of the goals and interim milestones.

At the local level, school systems, individual schools, principals and teachers should be involved in setting their own goals for improving educational performance. Local goals should include both short and long range objectives.
and should be consistent with the statewide goals. Local school committees and state education authorities should review goals to assure that they are not set too low and that all schools are making steady progress toward realizing performance standards deemed desirable for all students. In its goal setting or evaluation processes, the state should not accept for the long term, fallacies such as "urban students can't be expected to be competitive with suburban students."

Progress in achieving both state and local goals must be regularly measured. The state needs to further develop its system of performance measurement and indicators of success, while individual schools should have some latitude in selecting means for measuring performance against its goals. A broad array of performance indicators should be developed, not simply results of standardized tests. In this regard, we commend the work of the Massachusetts Schools Superintendents Association as a good start in developing a new framework of educational indicators.

There must be rewards and penalties attached to school performance. School faculties should be given flexibility in designing educational strategies to meet their goals, and they should be rewarded for their successes and held accountable for their failures. There should be monetary rewards to individual teachers and to schools for exceptionally high performance, while underperforming schools should be required to receive increased technical assistance from the state. If after receiving such assistance, a school continues to underperform, then state education authorities should declare it "educationally bankrupt." Students should be allowed to transfer to other schools, as it is unreasonable, in MBAE's view, to require children to continue to attend unsatisfactory schools. The principal should be replaced and the new principal is free to choose a faculty from within and outside the building that will best meet the needs of the students. To compensate teachers for agreeing to work in schools that need rejuvenation after being declared educationally bankrupt, there should be an added increment of pay during the turnaround period. The proposed financing model also includes similar incentives for all teachers working in especially difficult circumstances.

Once a school has been declared educationally bankrupt, various "choice" mechanisms may be employed to assist students in reaching satisfactory schools. Also, during the turnaround process, some degree of privatization may be used to overcome persistent shortcomings; for example, foreign lan-
guage instruction could be contracted-out, if suitable faculty were not available to the public school in distress.

MBAE feels that the state standards and the specifics of local goal setting, evaluation, rewards and penalty mechanisms should be set by a duly constituted panel of educational professionals assisted by knowledgeable business people. This lead recommendation sets only the basic principles.

MBAE believes that such a commission, as part of its effort, must establish, in consultation with a wide variety of groups including employers, a comprehensive array of performance-based graduation standards that should be applied to all students in the state. These standards would describe in detail what the state expects a graduate of a Massachusetts high school to know and be able to do. Such a clear set of standards would have great value not only to students and teachers, but to the general public as well, and perhaps serve as one basis for rewards and punishments.

C. Pre-School and Early Education

MBAE is persuaded by the strong evidence showing the vital importance and economic payback of pre-school education. We believe it is imperative to begin making opportunities available to younger children as soon as possible. Two specific recommendations are offered in this regard:

(1) Pre-school education for all three and four year olds - MBAE recommends that all three and four year old children in the Commonwealth be provided with the option of attending a pre-school program. Such a program could be phased in over four years with near-term priority given to every economically disadvantaged four year old, followed by disadvantaged three year olds, followed by non-disadvantaged children of both age groups. Financing for the last group would likely include a sliding tuition scale for those who can afford to pay for such services. Finally, MBAE's model budget sets aside some additional funding for school building assistance to assist local districts in providing the additional space needed for pre-school programs.

(2) Parent outreach/education - Though pre-school education is necessary, it is not sufficient to meet the educational needs of very young children, particularly those from low-income circumstances.
LEAD RECOMMENDATIONS

MBAE believes that if every child is to begin school with a firm foundation for learning, as the national educational goals indicate, then we must initiate in Massachusetts a comprehensive parent outreach/education program.

This program will provide education and training to parents so that they might be as effective as possible in guiding the early learning of their children. The outreach/education program would feature parent paraprofessionals who would visit families in their homes. The paraprofessionals would work under the supervision of a teacher, and assist parents in providing quality learning opportunities in the home. At the same time, the paraprofessionals would assist parents in completing their own education.

MBAE envisages a program in Massachusetts which incorporates elements of the proven "Parent as Teachers" (PAT) program and the "Home Integration Program for Preschool Youngsters" (HIPPY) described in more detail in Section VI C of this report.

This program would be phased in over a four year period. Provisions have been made in MBAE’s financing plan to provide these services to 150% of the number of low income students currently enrolled in each school district in the Commonwealth. Families with children between the ages of one and three would be eligible to participate.

D. Extended School Time

In addition to improving the quality of the educational system, the amount of time spent in education should be increased. To allow sufficient time for professional development (growth and renewal) activities of teachers, for additional academic work and pedagogical experimentation, and for improved integration of social support services, school time should be increased significantly, in some cases as much as twenty percent (20%) or more. This should be accomplished by modification of the daily schedule, yearly calendar, or both.

Since this commitment will require increased funding and would be fiscally difficult under current budgetary constraints, it is recommended that the commitment be made now, but that the proposal be implemented over a four year period, phased in with priority for districts with high concentrations of
low income families. MBAE believes that early childhood education is necessary for all students. The proposed new budgets provide for all low income students and some funds for others.

This increased schedule would have the effect of making Massachusetts school schedules more closely approximate those of school systems in those countries which are our principal, economic competitors.

E. School-Based Management

To enhance productivity and increase accountability, educational management should be decentralized. Principals should be the instructional leaders and chief operating officers in their buildings. They should have central authority in the hiring, firing and transfer of teachers while teachers should have a meaningful role in school budget and policy matters. Principals, as part of the senior management of the school system, should not be represented by unions, nor granted tenure as managers. To recognize this new status, MBAE has raised principal compensation in its financial model. In conjunction with educators, the state should establish a set of organizational guidelines for school-based management, and schools should be required to adopt these guidelines in three years, or sooner if two-thirds of the faculty votes to adopt school-based management.

F. Improve the Teacher Workforce

Because of the central importance of the quality of the future teacher workforce, MBAE recommends the following:

(1) Professional Enhancement: If the teaching profession is to be attractive to bright, talented individuals, then the profession must be enhanced. The achievement of financial stability in education could restore some measure of security for educators. Professional development funds, often the first to be cut in this era of tight budgets, should be mandated in each district at the rate of 2.5% of the overall salary budget. Time must be made available for professional development activities during regular school hours. Chapter 188/727 reforms such as Horace Mann grants, Lucretia Crocker Fellowships, Professional Development Schools and Carnegie Schools should be evaluated to
determine the most effective use of resources, and then funded. The model budget includes substantial funding for these programs.

While MBAE's professional development recommendations center on teachers, principals and other administrators would also be included in the expanded program of professional growth opportunities.

The practice of peer evaluation and review of educators should be instituted where it has not been practiced, and increased elsewhere. Each educator should have a professional development plan and receive technical assistance in meeting the goals of the plan.

(2) Alternative Certification: Regulations governing the two alternative means of entering the education professions should be liberalized and publicized more broadly so that Massachusetts school children can benefit from the enormous reservoir of adult talent in the state. The thrust of this recommendation is not to create additional routes, but making it easier for individuals to exercise the existing options.

(3) Minority Recruiting: Changing student demographics make it imperative that goals for minority staffing be established, publicized and achieved, employing affirmative action plans, as necessary. Section VI B (2) further discusses this concern.

(4) Hiring and Firing: To restore school committees' focus on policy and to streamline the dismissal process, MBAE recommends the installation of a strong CEO form of management at the school system level. In order for school committees to concentrate on formulating policy, their personnel responsibilities should be limited to the hiring and firing of their chief executive, the superintendent. The superintendent would then have final authority on all appointments and firings within the school system, although a good deal of that authority will be delegated to school principals under a system of school-based management. The superintendent would act as the chief executive charged with assembling the team needed to execute the policies promulgated by the school committee, but the principal will have the primary role in the hiring and firing of teachers.
School committees, under this system, continue to have the lead responsibility for setting policy, monitoring the performance of the school system, developing (with system management) school system goals, and evaluating the job performance of the superintendent.

(5) **Conflicts of Interest**: Neither school committee members nor the superintendent should be permitted to have close relatives working in their school district without the specific approval of the Commissioner of Education.¹

(6) **Tenure Reform**: Incompetence is no more prevalent in public schools than in other organizations, but the current system for dismissing persistently incompetent educators has proven cumbersome and unworkable. As a result, incompetents create an ongoing liability for school systems and children while reducing faculty morale. MBAE proposes changing the tenure laws to make it more practical and less punishing for school systems to remove incompetents.

All dismissal decisions made by a principal should be reviewed only by a three person review committee appointed by the Commissioner. This committee should consist of a teacher appointed by the state office of the union representing the teachers of the district, an administrator appointed by the Massachusetts Association of School Superintendents and a lay person preferably someone with arbitration experience. None of these parties should be a resident or employee of the school district involved. This process would replace the school committee review, arbitration and court review processes currently embodied in tenure law. The review panel decision/findings would be subject to court review in accordance with the provisions of the Administrative Services Act.

G. **Commission on Regulatory Relief in Education**

A Commission on Regulatory Relief should be created with its purpose to reconsider all education-related regulations. The express purpose of this Commission would be to make recommendations to reduce the scope, ease administration, simplify compliance or eliminate entirely regulations bearing

¹"Close relatives" is intended to include a person's immediate family, his/her spouse and the spouse's immediate family.
on the Commonwealth's public education system, particularly from a cost-benefit point of view.

Included within the scope of the Commission's purview would be regulations in areas such as special education and bilingual education and the provision of equitable educational opportunities.

The Commission should seek to redirect regulatory oversight toward educational outcomes. The emphasis should center more on "what is accomplished" rather than "how it is accomplished." Determination of the methods to be used to achieve the desired outcomes should be delegated to professional educators by enabling or empowering local, school-based management to as high a degree as practicable, while ensuring that safeguards are in place to prevent undermining of regulatory intent.

The Commission should start with a clear charge and purpose, and have a realistic time frame established for its work. An interim report should be available in six months, and a final report should be promulgated no later than twelve months after the Commission is convened. A shorter time frame would be highly desirable.

The Commission should have broadly-based representation to ensure that different perspectives are considered in developing the recommended changes.

Although it cannot pre-judge the specific outcomes of the Commission's work, MBAE is convinced that the system of education in the Commonwealth is over-regulated, and that substantial savings could be realized if a diligent effort to examine this area were accomplished. The results of the Commission's work would, of course, have to be transformed into regulatory reform legislation to realize the gains and change the system.

H. Restructure the State Department of Education

The Department of Education should clarify and expand its roles by creating two distinct major divisions and establishing a new innovation center to guide and inform the work of the two divisions.

One of the major divisions would be responsible for certifying compliance with regulations and the updated educational goals and standards, measuring progress of schools and school systems toward those goals, and administering the consequences of achievement/success and failure/underperformance.
A second major division of the Department would be dedicated to providing technical assistance to schools and systems as they strive to meet educational goals. It is important that the availability of the resources and capabilities of this division be made known to the school districts so that wide use will be made of these services. Within the Department, the latest developments in the knowledge base must be integrated as quickly as possible into the technical assistance and service delivery functions. Thus, this Division would also be responsible for data collection as an ongoing activity.

In addition, an independently structured Educational Innovations Center should be established and substantially funded under the Department. The purposes of this Center would be to:

(1) Stimulate, assist, and in some cases fund innovative concepts, demonstrations and experiments by local schools/school systems in such areas as school-based management, use of technology, school choice and ways to meet the needs of disadvantaged students, as only a few examples;

(2) Follow and report on the results of innovative concepts, programs and initiatives, and develop and disseminate information regarding successful projects so that they may be emulated/replicated in other districts. "Lessons learned" in less successful undertakings should also be reported; and

(3) Monitor changes in societal, demographic, pedagogical trends and other influences that could affect long-term educational requirements and recommend changes in structure or procedures in the Commonwealth's primary and secondary education system to anticipate change in a timely manner.

Discretionary grants, using funds from other public and private sources could be administered either by the Technical Assistance Division or the Educational Innovations Center at the direction of the Commissioner and the Board of Education.
I. Change the Educational Finance System

To address this challenge, MBAE began with the elementary question: "How much should be spent to assure an adequate, quality education?" Then: "How should these expenditures be financed?" The answers to these questions provided the basis of the education finance reform recommendation:

(1) Foundation Funding: MBAE developed a "foundation budget" based on a functional model of a school system compiled with the help of knowledgeable school superintendents. This foundation budget sets standards for student teacher ratios, maintenance expenditures, support personnel, teacher training, and budgets for computer purchases and educational supplies and so on. This foundation budget will rise and fall with changes in enrollment and inflation; it varies from one community to the next to reflect differences in community labor markets and wage levels. School lunches and transportation costs are excluded from this model because they are funded separately.

MBAE places particular emphasis on the special problems of youngsters from disadvantaged backgrounds. To meet their needs, funding is provided for preschool programs for low-income 3 and 4 year olds, for parent outreach/education, for extended day and summer programs for such youngsters, and for extra staffing to supplement regular teachers and to help deal with the problems of single parent homes, violence and drugs.

In the 1990-1991 school year, the foundation budget provides about $5,000 per student for the average school district; for cities with large concentrations of low income youngsters, the foundation budget can exceed $6,000. Details of the Plan are contained in Appendix D.

(2) Maximum Local Tax: No community in Massachusetts would be required to levy a local school tax rate greater than 1% ($10 per thousand dollars of equalized property valuation). State aid funds would make up the difference between the required spending and what could be raised with a $10 tax rate.
The new state funding required to fill this gap comes to about $334 million; the remaining $386 million will come from increases in local property taxes.

The state will spend $50 million each on: school innovation grants; on a bonus pool for schools which turn in outstanding performance; and on school building assistance funds to provide the space necessary to offer preschool programs. There will be $15 million dedicated to the "circuit breaker" program, and $3 million for extraordinary enrollment increases.

(3) Suburban Communities: The MBAE plan also promotes good schools in suburban communities as well as in inner cities and rural areas. Districts which currently spend in excess of the foundation budget will be allowed to maintain current per-pupil expenditure levels - adjusted for inflation - without going through the 2 1/2 override process.

To provide stability in budgets and tax rates, such communities will be guaranteed per-pupil aid amount: equal to at least 95% of previous year levels. This is explained more fully in Appendix D.

(4) Transition: Changes in taxes and school budgets should occur in tandem with structural reform, so taxpayers can see results as taxes change. Schools will move from current expenditure levels to those set by the foundation budget over a five year transition period. Similarly, additional revenues will be phased in over five years. It is characteristic of the overall reform package that reforms in goals, operations and management will be evident in advance of most funding increases.

(5) Proposition 2 1/2: State aid payments to cities and towns will be clearly broken down into school and non-school components. This will allow calculation of school and non-school tax rates. Although foundation school budgets will be allowed to increase with inflation and enrollment without need for 2 1/2 overrides, any additional increases in school budgets will require approval of town meeting or city council and will be subject to the normal override process. The 2 1/2
ceiling on non-school expenses will be recalibrated to bear the same relationship to the non-school levy as the current ceiling bears to the current total property tax levy.

(6) Examples: A typical inner city in Massachusetts is currently spending $4,500 per pupil and falls 25% short of its $6,000 foundation budget. With property per student of $300,000 and state aid of $2,100 per pupil, it is spending $2,400 per pupil of its own money and imposes a school tax rate of $8 per thousand. With current aid levels, it would need to raise $3,900 of its own money to reach the foundation budget; this would require a tax rate of $13. Under the MBAE proposal, this city would receive aid of $3,000 per pupil and would need a tax rate of $10 to raise the remaining $3,000. Under this plan, 60% of the new funds needed to meet the foundation budget would come from state aid.

An extraordinarily poor community with similar expenditures but property of only $200,000 per student would now have a school related tax rate of $12. Under the plan its aid would rise from $2,100 per pupil to $4,000 per pupil; its property tax related to its schools would fall to $10.

A typical suburban community, on the other hand, is spending $7,000 per pupil, well above its foundation budget. With only $500 per pupil in state aid, it is raising $6,500 of its own money. With $1,000,000 in property per pupil, it would have a school tax rate of only $6.50. Under the new plan, it would receive 95% of its previous year's aid in the first year, or $475. By the fifth year, its per-pupil aid would be $387; this implies a tax rate of $6.61.

Finally, a community with $1,000,000 in property per pupil which is currently spending only $4,000 per pupil and receiving $400 in aid now has a school tax rate of $3.60. It would be required to increase expenditure to its $5,000 foundation budget; at the same time, its ability to raise the foundation budget with a property tax less than the $10 target would expose it to 5% annual cuts in per-pupil aid. Over five years, its aid would fall to $310 and its property tax rise to $4.69.

As these examples help illustrate, all communities with current school expenditures below the foundation budget would move up to the
required level over a five year transition. Consistent with the $10 target, some communities would enjoy tax reductions; most would see modest tax increases. A few wealthy, low spending communities would face significant property tax increases but in no case would they be forced to raise more than the $10 target.

Appendix D contains more data showing how the application of these financial rules would apply to a variety of Massachusetts communities.
VI OTHER CONSIDERATIONS AND RECOMMENDATIONS

A. Introduction

Section V contains a top-level synopsis of MBAE's primary recommendations. This list was intentionally kept short to focus attention on the most important aspects of reform. However, during its process MBAE formed views about other facets of its major areas of investigation: Future Teacher Workforce; Youth at Risk/Early Childhood Education; Organization Restructuring; and Educational Financing.

This Section contains further comments and recommendations in these areas and three other topics of importance: private sector involvement, "choice" and vocational-technical education. They are offered to add context and texture to the lead recommendations and to further define the reform MBAE feels is required.

B. Future Teacher Workforce

No school can be effective without competent, committed teachers. If our citizens are to be well educated and productive, we need to attract intelligent, knowledgeable, creative and energetic individuals to the profession. It is in the urgent interest of our public education system to attract and retain a teaching force of the highest possible quality. However, there is already ample evidence that many promising candidates for teaching careers never enter the profession, while many of the most able teachers leave after a short tenure. Furthermore, younger people, in general, and minority youth, in particular, show little interest in entering the teaching profession. MBAE, therefore, recommends immediate attention to five key areas: making the teaching profession more attractive, recruitment, certification, personnel practices and integration of social services.

(1) Making the Teaching Profession Attractive - To draw and retain talented people with many employment options, the teaching profession must become more attractive. MBAE feels that the reform recommendations presented in this report, will enhance the attractiveness of the teaching profession.
a. **Organizational restructuring** - MBAE's school-based management proposal is designed to make schools more productive and satisfying workplaces. The emphasis on local control at the school site aims to provide the faculty with more of a sense of control over its own professional destiny, to foster teamwork and collegiality and to create a sense of ownership and pride in school performance.

b. **Financial reform** - MBAE's finance proposal has a number of objectives, but several of them speak directly to the attractiveness of the teaching profession. First of all, the restoration of stability to the education finance system will eliminate the highly destructive insecurity that has been generated in the profession as a result of the instability of the last several years. Uncertainty regarding the future of the profession, the massive issuance of layoff notices and substantial staff cutbacks have all conspired to make teaching appear to be an undesirable career field to enter. Many excellent teachers with other options have left the profession, unwilling to suffer constant insecurity in a relatively low paying profession. Second, the new financial system will provide adequate resources for a quality education, thus assuring that teachers will have the tools with which to do their jobs.

Various features of the reform package assure a significant degree of professional development which will both attract and retain those who seek the ongoing challenge and stimulation of professional growth. These opportunities for growth and renewal are coupled with incentives for outstanding performance based on achievement, a combination that will be attractive to talented, high performers.

Although an adjustment period can be expected, the new structure characterized by site-based hiring/firing, decentralized decision-making and a mechanism to cleanse the system of underperformers, will all enhance the teaching profession and the teachers' view of themselves. Indeed, just the enactment of significant reform will raise teachers' morale by signaling that other segments of the community recognize their professionalism and value their work.
(2) Recruitment - In addition to the general attraction of top talent to the teaching profession, MBAE has other specific concerns about recruitment to the teaching profession.

Most experts anticipate an undersupply of teachers later in this decade, so we must assure a steady supply of well-qualified candidates with diverse skills. MBAE is particularly interested in attracting top notch teachers in the areas of math, science and technology, fields that will be critical to the future of our economy and in which there is significant competition from industry for skilled personnel. Highly visible recruitment efforts like the "Teach for America" program should be encouraged. In addition, consideration should be given to early recruitment devices such as establishing "future teachers corps" programs in secondary schools throughout the Commonwealth.

Though there is a surplus of teachers at the moment due to a combination of demographic and fiscal factors, this situation will change during the decade, and we must be prepared.

Student populations, particularly in urban areas, are becoming increasingly African-American, Latino and Asian, yet the teaching force is overwhelming white. It is not necessary for a teacher and student to share ethnic identity for a productive and positive learning relationship to occur. However, there is considerable value to ethnic role models and diversity in our teaching force. MBAE is concerned that nationally only 6.8% of U.S. teachers are African-American and only 1.9% of current public school teachers are Hispanic. There has also been a steady decline of minority student enrollments in college, including teaching colleges.

MBAE's proposals which will increase the attractiveness of the teaching profession generally should have the same effect on potential minority teachers. However, more is needed, and so MBAE also supports federal legislation to create a National Teacher Corps to attract teachers interested in working in urban schools.

In addition, MBAE supports stronger efforts to attract minority educational para-professionals into obtaining the additional education needed to enter the profession. Since this group is already committed to education, it has great potential as a base for recruitment of
teachers. Furthermore, MBAE would support state initiatives, including financial incentives, to attract graduates of two year colleges (where there are high concentrations of minority students) to enter four-year colleges with an eye to pursuing a teaching career upon graduation. Since these students have already demonstrated success in higher education, they would also be promising candidates for the teaching profession. This should be a priority activity of the State Department of Education.

Although job openings are scarce now for teachers of any background in the Commonwealth, MBAE encourages the State to make extraordinary efforts to place minority teaching candidates. For example, the Department of Education might create a hiring network for minority teachers that would match candidates and job openings.

In general, MBAE applauds the wide variety of programs ranging from "Talent Search" and "Upward Bound" to the "Educational Opportunity Centers" that seek to make college education available and accessible to minority youth.

There are relatively few minority teachers in the system and those who are in place have, for the most part, relatively low seniority. They are, therefore, very vulnerable to layoffs during force reductions because the system is heavily weighted toward seniority as the preeminent factor in layoff decisions. The reformed system, with added emphasis on performance, achievement and professionalism, will provide some dilution in the power of seniority in dismissal decisions. However, to bolster this with additional underlying resolve, school committees should introduce policies which, through collective bargaining, will help preserve minority teachers who are top performers but relatively new to the system.

(3) Certification - MBAE supports the two stage certification process now being implemented in Massachusetts. However, we recognize that for this new system to be effective, there will have to be plans and support for the mentor teacher concept. MBAE is concerned that special attention be given in the development of regulations so that the additional requirement of a Master's degree does not become an im-
pediment for low income candidates seeking to enter the profession. For example, use of state scholarship incentives should be increased.

(4) Personnel Practices

a. Performance Expectations, Review and Consequences - Modern personnel practices demand that every professional have a clear understanding of performance expectations, have regular coaching and participate in an at-least-annual review of accomplishments, strengths, weaknesses and improvement needs. Peer evaluation should be an important component.

As a feature of the restructured system, every school will have in place a comprehensive personnel evaluation system. Those charged with administering such a system, especially principals, should receive extensive training in evaluation techniques. In schools, there must be consequences for effective and for ineffective performance. Much more must be done to recognize and show appreciation for effective teaching.

The evaluation system should include principals who would be evaluated and counseled by the Superintendent. It will be inappropriate for Principals to have tenure.

b. Professional Renewal and Growth - An important outcome of performance review should be a jointly-developed, individualized plan for personal professional growth for each teacher, which builds on strengths and helps to overcome weaknesses. Teaching is not a static profession, and every professional needs time for reflection, renewal and updating. When it is part of a professional development plan to which they are committed, most teachers welcome opportunities for in-service programs, out-of-conferences, supportive coaching and counseling and time to experiment and develop new approaches.

But teachers are often "isolated" in classrooms, and effective professional development takes time that teachers don't have and resources that are frequently not available. To address this issue, MBAE is urging a longer school day and year, with on-the-job time allocations, related salary adjustments, and adequate budgets for professional
development. To be consistent with the practices in modern, progressive industries, it should be expected that professionals will spend at least 2.5% of their time on growth/renewal activities. Therefore, allocations of funding for meetings, conferences, resource materials and staff support should be at least 2.5% of the salary budget.

To further provide for professional growth, the foundation budget includes funds for one month of extra pay for one third of the teachers each year, set aside for such activities.

The MBAE proposal provides for professional growth opportunities to be made broadly available not only to teachers, but to principals and other administrators as well.

MBAE recognizes the significance and effectiveness of certain programs that were part of earlier school reform legislation, Chapters 188 and 727. In particular, it applauds initiatives with strong professional growth dimensions such as the Lucretia Crocker fellowships, the Horace Mann grants, the Professional Development Schools and the Carnegie Schools. Unfortunately, these programs have not been adequately funded so that teachers have been unable to reap their full benefits. MBAE restores substantial funding for these important initiatives in the foundation budget. After these programs are evaluated to ensure most effective use of the funds, these programs should be rejuvenated and made part of the Commonwealth's education system, funded to the extent necessary by the Education Innovations Center.

c. **Differentiated Staffing; Career Ladders** - One of the characteristics of schools is that all teachers generally have the same responsibilities regardless of their experience or expertise. MBAE supports the practice called differentiated staffing which allows for variety in teachers' work supplementing classroom teaching with related responsibilities in research, mentoring, curriculum development, or administration. Teachers receive more pay and status in assuming these new roles, while at the same time, they benefit from increased opportunities for professional growth. Through differentiated staffing, teachers' time can be used more efficiently as expert staff to guide and advise peers.

MBAE also supports the practice of career ladders, i.e. providing teachers with opportunities for professional advancement within the
teaching profession. Instead of making promotion synonymous with a move to administration, teachers should have opportunities to assume more responsibilities while advancing up a professional ladder much as college faculty do.

d. Consequences for Ineffective Performance - In effective organizations, there is an atmosphere and expectation of competence and high performance. After appropriate counseling and assistance, people who are not meeting reasonable expectations move to a more appropriate assignment in or out of the organization. Even the best leadership and organizational structure will produce limited results if there are no consequences for non-performance.

In addition to recommending the implementation of effective personnel evaluation systems in all schools, MBAE recommends streamlining the process for removing persistently incompetent personnel. This process was described in Section V.

e. Integration of Social Services - The personal problems of students and their families are increasingly serious. Teachers, especially those in urban schools, frequently must cope with consequences of grave social problems like delinquency, poverty, homelessness, drugs, pregnancy and mental and physical illness. Teachers frequently report that dealing with the personal problems of their students is one of the most troubling and discouraging parts of their work, leading many to consider leaving teaching.

Schools and school leaders recognize that their strength is in instructional and academic matters, but that it is impossible to ignore these personal problems which usually become impediments to learning. As a result, schools find themselves assuming more and more responsibility for personal dimensions of students' lives.

This situation makes it imperative that social service agencies which are funded and staffed to address the problems of young people be integrated into schools. There must be broad coordination of services to youth in our society and schools are the logical place for such coordination to occur. However, school people cannot do the job alone. MBAE recommends that every effort be made to foster the integra-
tion and coordination of social services to students in schools. The foundation budget includes funding for three new staff positions for every 100 low income students, and some to deal directly with this need.

(5) Inter-district Employment Mobility - A characteristic of the current education system in the Commonwealth is that once a teacher is employed in a school district, he/she is essentially "locked-in" to that district's school system for the rest of his/her career in teaching. There are a number of reasons for this lack of "mobility," but important ones relate to differences in collective bargaining agreements and school committee policies which fail to address or discourage accommodation of teachers with seniority from entering their jurisdictions.

In some states with larger county or regional school districts, this situation is not so confining, as considerable movement is possible even within each district. In Massachusetts, the typical school district is significantly smaller and can be professionally limiting.

MBAE feels that inter-district employment options would significantly improve the image and attractiveness of the teaching profession. Eventually, these opportunities would also raise the professionalism and quality of the teacher workforce as well.

Therefore, MBAE urges the Department of Education, to work with the Massachusetts Association of School Committees and the major teacher unions to develop guidelines and incentives to promote inter-district hiring opportunities within the Commonwealth.

C. Early Childhood Education/Youth at Risk

There are many definitions of "youth at risk." The emphasis and descriptions vary according to one's interests: those concerned with youth employment and school-to-work transitions tend to perceive those at risk as those who are unlikely, for a variety of reasons, to enter the workforce with the skills and experience necessary for entry level work. People involved in health care think first of babies born prematurely and with low birth weight, children who are malnourished and teen mothers with no prenatal care. Family service
providers, teachers and educational administrators are generally most concerned about those who are deemed unlikely to finish high school.

These definitions leave out two important characteristics of the lives of children at risk. The first is that the single most reliable predictor of these risk factors, and many others, is poverty. In the 1980's children replaced the elderly as the poorest segment of our nation's population. If one is a low income parent, one is more likely to have trouble with transportation, health care, mental health, nutrition and parenting, even before worrying about finding affordable and safe child care so that one can seek employment. Poor children are likely to confront a number of barriers to academic success, and in the absence of familial or institutional resources to cope with them, are extremely vulnerable to repeating the experiences of their parents.

A second condition common to virtually all those young people at risk is that their vulnerability to risk factors and the need for an appropriate response are identifiable at a very early age, long before they come in contact with most school-based programs.

After MBAE reviewed a number of impressive model projects for adolescents - covering dropout prevention, school-to-work transition, teen parenting support, vocational education reform, and comprehensive school-based social services - it became clear that the most ambitious, cost effective and sweeping approach to these problems would be to concentrate on the beginning of life and the first experiences with schooling.

Research on the effects of comprehensive early intervention programs on future performance of children has compellingly demonstrated that the four-, five- and six-year old graduates of these programs, as they become teenagers, are far less likely than their peers to drop out, get arrested, fail to find employment, or have children while still children themselves. These results have been repeatedly confirmed and documented in a wide array of programs and evaluations, including Headstart, the Perry Preschool Program, the Brookline Early Education Project, the New York State Prekindergarten Program and the Consortium for Longitudinal Studies. In 1985, the Committee for Economic Development found that "Every dollar spent on early prevention and intervention can save $4.74 in costs of remedial education, welfare, and crime down the road." Other estimates are higher. In the words of Harold Hodgkinson of the Institute for Educational Leadership, "...the earlier the programs, the better the return on the investment."
In consideration of these factors, MBAE has recommended Pre-school education for all three and four year olds and additional early education programs. (Section V)

In the event that pre-school education as described above cannot be achieved in the short term, MBAE recommends expanded state and federal cooperation to make the Headstart program accessible to greater numbers of low-income youth. MBAE applauds the federal government's decision to increase its support of Headstart over the next several years, however it also recognizes that factors such as low faculty salaries for Headstart staff continue to constitute a problem for the program, detracting from its potential. If the Headstart Program receives greatly increased funding, the monies in the foundation budget should be used to further expand the pre-school funding for broader categories of three and four year olds.

In this regard, MBAE applauds existing state efforts in the area of pre-school education and day care including the Governor's Day Care Partnership Initiative, various employment and training day care and linkages and the intent of Chapter 188 school reform legislation to provide pre-school funding. Chapter 188 also promised to provide funding for dropout prevention programs, some of which proved effective in its early application. Recent cutbacks have forced reduction and/or elimination of these funds, a situation to be remedied by previously discussed recommendations.

MBAE also believes that the following programs, could provide substantial positive assistance to youth at risk. Some are incorporated under MBAE's lead recommendation on Early Education; the others should be considered for funding by the new Education Innovation Center:

(1) Reading Recovery - This is a program offering one-to-one reading instruction to those first graders with a demonstrated difficulty learning to read - the lowest scoring 15-20%. Its purpose is "to reduce reading failure through early intervention and to help children become independent readers." Its actual effect is to transform the way children learn to read, so that they achieve at a consistently higher level, at or above average, after only 15 weeks of intensive intervention. This program has an impressive track record and has already been tested at several locations in Massachusetts.
(2) Parents as Teachers - In 1981 a partnership between the Missouri Department of Elementary and Secondary Education and the Danforth Foundation of St. Louis launched what has become one of the nation's model programs for preparing children for success in school: the Parents as Teachers (PAT) Program. In four competitively selected school districts including urban, rural and suburban communities, 350 families expecting their first child were offered an impressive array of services.

In the statewide program, school districts select the parent educators who will provide the services to the families. State funds provide each district with a base payment for each family that participates in the program, and special funding is available for "hard-to-reach" families and those with more than one child under the age of three. All parents with children under four—whether they are single teenage mothers or two-income, educated professionals—are eligible for participation, which is entirely voluntary.

In 1985, a strongly favorable independent evaluation of the pilot program fueled the state's enthusiasm for the program. Among the positive findings were that at age three, the project participants were significantly further advanced than the comparison group in language, intellectual, and social development.

MBAE recommends that the Parents as Teachers Program be considered for tests in a small sample of districts, including urban, rural and suburban environments, with students who are economically, ethnically and culturally diverse. The purpose of the tests would be the successful adaptation, not replication, of the existing model to the Massachusetts environment. If these experiments prove to be successful, PAT should be included in subsequent foundation budgets.

(3) HIPPY - HIPPY stands for Home Instruction Program for Preschool Youngsters. The program was originally developed in Israel, but is now offered in many communities across the U.S. It is a home-based program for the educational enrichment of disadvantaged preschool children and for the promotion of increased awareness by their mothers of their own strengths and potential as home educators. Participation in the program helps the children become more responsible,
responsi...successful school pupils, while changes in mothers relate to their self-image and attitudes to education.

The program reports numerous successes in the U.S. and is deserving of an experiment in Massachusetts.

(4) An Advocate for Every Child - MBAE wholeheartedly endorses the following statement by the National Business Roundtable, "Every child must have an advocate." No one succeeds or maintains success without help. Children need to be read to and talked to, nurtured and cared for; others must guide them to a healthy lifestyle. All children need to be secure. School objectives require support beyond the schoolhouse. Each child must know that education is valued by one or more persons whose opinion the child values.

The parent is the best source of such help. Renewed and urgent attention to strengthening the family is important, because a strong family will increase the ease of school success significantly. Where parent support does not exist, an advocate for the child must be found in the extended family, a youth-serving organization, a mentor, or someone from the school.

(5) Residential Education for At-Risk-Youth - In some neighborhoods so beleaguered by family breakdown, poverty, drugs and crime, the only answer for at-risk youth may be the establishment of an old idea for a new population, i.e. boarding schools for at-risk youth. In some instances, a residential environment may be the only way to protect and educate youth who are at extreme risk. MBAE believes this idea deserves consideration and experimentation.

(6) Added Staff for At-Risk-Youth - Because it is recognized that added staff are needed to properly guide and teach at-risk students, MBAE included in the foundation budget three additional staff for every 100 youths in a school or district.
D. Restructuring and School Effectiveness

Several of MBAE's lead recommendations for reform emerged from considerations of the public education system's governance, management, structure and effectiveness. This section builds on those primary recommendations for change by summarizing MBAE's observations and advancing additional recommendations concerning specific sub-topics under the general scope of restructuring.

(1) Introduce More School Choice - As indicated earlier in this Report, MBAE does not believe that school choice is a panacea for public education, but rather a strategic tool to be judiciously applied to increase students' educational options and to provide incentive to school systems for improvement. The choice tool should be used in conjunction with other strategies to restructure public education. Choice programs must provide equal opportunities for all students to participate, with close attention to potential barriers like admissions policy, public information and support for student transportation costs. We believe that choice can provide important new options and benefits and that broader experimentation with various choice models is warranted. This topic is discussed in more detail later in paragraph G of this Section.

(2) Technology Council - MBAE has been struck by the relatively limited use of technology in public education. Technology is generally not prominent as either a subject or an instrument of education, yet the world of work is steadily becoming more technological. The growing technological gap between school and the workplace threatens to render public education obsolete, unless action is taken in the near future. MBAE recommends that the state education authorities create a Technology Council, composed of school and business leaders who are charged with making comprehensive specific recommendations on cost effective strategies for increasing the attention to the study and utilization of technology in our schools. This council should consider creating incentives for school system participation in technological initiatives.
(3) **Policy Development and Strategic Planning** - Local school committees represent one of the most important elements of the educational system. They have the capacity to be leaders of educational reform. To assert effective leadership, they must focus their attention on policy and goal development, and be proficient at policy development and strategic planning. If necessary, assistance in these efforts should be provided by the state Department of Education.

(4) **Consultive, Participative Governance** - As school committees, superintendents and principals execute their responsibilities in policy development, strategic planning and goal-setting, it will be important that an aggressive effort is made to reach out to, consult and involve key stakeholders in the educational system. These stakeholders include employees of the school system (teachers, administrators, services and support personnel), students, parents, public officials, citizens, community agencies and businesses. Parents especially need to be genuinely involved in the school systems that their children attend.

(5) **School-Based Management** - In its lead recommendations, MBAE calls for a system of education that relies on school-based management. It is suggested that a group of educators, under the direction and guidance of the Massachusetts Department of Education, construct a working definition of school-based management. Attention should be paid to the following considerations in the formulation of school-based management concept:

a. The principal should be an instructional leader, general manager, and chief operating officer.

b. The principal, in consultation with key stakeholders, especially teachers and parents, should have the freedom to operate the school pursuant to the school and district goals and long-range plans; the principal should be the leading authority on personnel decisions affecting his/her school.

c. Teachers should have a major role in educational policy and curriculum decisions affecting the school’s educational program.
d. School advisory councils should be broadly employed.

e. Central office staff should play a supporting role to school-based professionals.

f. Goals and indicators of progress must be regularly reported to all school stakeholders.

(6) Business Community Restructuring Assistance - The business community in Massachusetts has a wealth of experience (good and bad) in restructuring to meet new challenges. School systems should take advantage of the knowledge and skills that reside in these businesses and develop sophisticated school-business partnerships that address the organization and management of school systems.

The National Alliance of Business in its publication, "A Blueprint for Business on Restructuring Education," has enumerated a variety of ways in which businesses can assist in school restructuring efforts:

a. **Management Analysis and Improvement** - Initiating restructuring; developing goals and objectives; conducting analysis and planning.

b. **Advocacy** - Building coalitions and partnerships; leveraging support with other community groups.

c. **Staff Development** - Improving teacher and administrator capabilities; developing performance review systems.

d. **Research and Development** - Fostering creativity and new approaches.

e. **Application of New Technology** - For administration, pedagogical improvement, subject matter instruction, and intra- and inter-district programs or projects.

(7) Voluntary Interdistrict Collaboratives - Unlike many states, Massachusetts has provided few statutory incentives to induce school districts to cooperate more extensively. Absent specific state incentives, many school districts have chosen to rely on their own often-limited resources, operating in relative isolation from neighboring communities. In contrast, some other districts have worked together
imaginationally and productively for several years to improve curriculum and better inform teachers, administrators and school committees. They have also stretched scarce tax dollars through cooperative bidding and volume purchase of such items as computers, school furniture, and instructional videos. In the process, they save both money and time as vendors respond to the larger quantity contracts and school districts avoid time-consuming and duplicative bidding on a district-by-district basis.

A multi-purpose collaborative can provide a wide range of services, including curriculum and staff development, educational technology, research and development, special education, alternative education for at-risk youth (teen parents, school dropouts and youthful offenders), migrant education, cooperative bidding and purchasing, and school management services. These services would be provided on behalf of the collaborative's member school districts and other program sponsors, including state agencies such as the Department of Education, the Department of Youth Services, and the Department of Mental Retardation.

Some collaboratives are single-purpose entities, serving special needs students from several communities and taking advantage of the economies of scale inherent in inter-district cooperation. Their programs often serve as a less expansive, locally based alternative to costly private residential placements.

Whether designed as "single purpose" or "multi-purpose" entities, education collaboratives should be responsive, adaptable and innovative public entities. If they fail to respond to member districts' needs, they are annually subject to dissolution by the school districts which create and govern them.

The Commonwealth should encourage the formation and utilization of such collaboratives. Cost effective regional collaboration could be encouraged by proposed funding formulas through direct state support of regional collaboratives, common in many other states, including New York and Connecticut, with their well-developed networks of regional education service agencies. Financial incentives could also be provided to local school districts that provide services on a collaborative basis, as is done in New York State through differential
reimbursement formulas that reward school districts for providing certain services in a cost effective manner through regional entities known as Bureaus of Cooperative Educational Services, or BOCES.

E. Educational Financing System

Section V contains the outlines of MBAE's proposed new Educational Financing System for Massachusetts. Because the considerations are numerous and their treatment somewhat complex, the complete report of MBAE's Educational Financing Committee is included in Appendix D.

F. Private Sector Involvement

One thrust of the MBAE effort has been toward reforms of the public financing system. During the process there were a number of discussions which involved the possible participation of the private sector in the pre-school through Grade 12 system financing. MBAE has concluded that while the principal financing of the system must be from public sources, there are many functions which could employ private sources very usefully. A few examples are:

1. **Mini-grants** - Mini-grants and other forms of resources supplied to schools as part of school-business partnerships.
2. **Philanthropy** - Philanthropic sources which could provide grants (matching or otherwise) to state programs administered by the Department of Education. The types of activities anticipated in the Education Innovation Center would seem to be good candidates for private sector augmentation.
3. **Communications** - Cooperative communications activities to promote greater parental awareness and involvement. Private sector sources can fund, in a variety of ways, newsletters and other communications instruments which assist the link between the schools and students' homes. "Education Today," a unique newsletter published in Boston is an example of such a vehicle and is aimed at parent education and improving their involvement with the schools.
4. **Other Projects** - Demonstration projects and risky experiments that schools could not undertake without outside support and incen-
Particularly promising could be projects in applied learning in mathematics and the sciences, mounted with the help of private companies, local education funds or other partnership organizations.

In addition to financing, the private sector should continue its involvement on advisory councils to the State Department of Education, such as the School-Business Partnership Committee and the new Technology Council recommended previously. Also, business leaders must increase their advocacy efforts on behalf of public education at state and local levels to ensure that support is steady over the long term; in this way, much needed reforms will not be undermined or watered-down by the press of short-term crises. Improved business involvement would be greatly enhanced if more business executives sought positions on local school committees.

Finally, there are other ways that businesses can support the aims of education and improve the system's effectiveness. Some that have been tried with good results include: screening job applicants for satisfactory school grades before hiring (recently instituted in Vermont); making provisions in part-time work schedules for homework; and providing on-the-job assistance for workers who are struggling with school work.

G. Choice

In the context of a more comprehensive reform package Choice can be a powerful stimulus for educational improvement if it is accompanied by safeguards that: preserve equity and prevent re-segregation; guarantee equality of access by providing parents with information and transportation; and preserve the funding base necessary to improve weak schools. In such a context, which MBAE would call "regulated Choice," intra-district choice can encourage schools to innovate, provide parents with more options, and promote a healthy competition that provides administrators with information about which schools need attention.

However, without other efforts at educational system improvement, and total reliance on "market forces," which MBAE would call "unregulated Choice," there will be little real improvement. In the absence of any major qualitative difference among schools, parents will use non-educational criteria, e.g., distance and travel convenience, racial homogeneity, in making their choices.
Unregulated Choice may exacerbate inequalities of educational opportunity among families. There are time, travel and "information costs" requirements associated with the act of choosing which can be best managed by the more educated and affluent families. Unregulated Choice may also exacerbate resource inequalities between rich/high spending school districts and poor/low-spending school districts, leading to a "Balkanized" school system.

Choice advocates cite increased "market forces" and competition as stimulants to school reform. But, in MBAE's view, the competition engendered by choice does not create strong enough continuous incentives for school improvement. Schools/districts which are already at 100 per cent enrollment capacity have no incentive to improve their product in order to attract more parents. Also, if there are no provisions in these circumstances to cleanse the system of the weakest performers, eventually the system will take on characteristics similar to current systems.

On the other hand, with unregulated Choice, the undersubscribed schools who are losers in the competition for parents will have the incentive to improve but not the resources to do so. Moreover, parents will need help in developing the capacity to choose and to understand educational quality; without attention and support for developing this capacity, competition will not lead to improvement and choice becomes a hollow concept.

Unregulated Choice may weaken the grassroots constituency for school improvement and leave schools less, not more, accountable to the parents of the children they serve. The most vocal, informed, and active parents may take the exit option rather than exercising their "voice" to improve their local school. Schools that are over-enrolled will have the option of telling their parents: "If you don't like it, go somewhere else." Furthermore, unregulated, inter-district Choice may allow receiving districts to turn away pupils they do not want thus further ghetto-izing minority and special needs students.

In summary, unregulated or purely "market-driven" Choice, is likely to widen the gulf between strong and weak schools and increase the disparity between wealthy and poor school districts thus eliminating the resources necessary to improve weak schools. However, used as a tool to stimulate change within a systematic reform and improvement program, regulated Choice has been and can be very useful.
H. Vocational-Technical Education

Throughout MBAE's work and the formulation of its recommendations there has been a consistent theme of increased emphasis on "outcomes." This term is used intentionally to signal a broad interpretation of "results" in measuring the effectiveness of the education system. Any systemic reform of the public education system must address adequate and relevant education for all the students, including those intending to go to college immediately after high school and those who will be entering the workforce. State goals and standards must consider both groups, as should the sets of state and local indicators which will be used to measure improvement and effectiveness. Failure to do so, as was cogently argued in "America's Choice: High Skills or Low Wages," the recent report of the Commission on the Skills of the American Workforce, will result in enormous productivity costs and competitive penalties.

Considerable background material was reviewed by MBAE which addressed the public school students' transition from the school to work; most of it documented that this vital transition is seriously neglected in the United States when compared to other industrialized nations. Generally, the systems in our country are geared toward preparing students for college, while the non-college bound youngsters are left to fend for themselves as they enter the world of work. As a result, the latter group often drifts in the marketplace for years before acquiring sufficient skills via on-the-job-training or other programs such as community colleges, to carve out decent careers. Their ranks are swelled along the way by the large number of their contemporaries who fail to complete college and find themselves similarly ill-equipped to enter the workforce. Many, of course, never do achieve a stable, satisfying career, and if they do not return to a training facility of some sort, they are likely to spend their lives changing from one low-wage, subsistence job to another.

In Massachusetts we cannot afford to squander the innate talents of a large number of our young people in this way. Since our population is not expected to grow dramatically in the future, and is expected to be increasingly host to immigrant and minority workers, we must make the most of every child entering and leaving our school system. Fortunately, earlier generations of leaders sensed this need and established the system of vocational
technological schools, the exception to the policies of neglect of the non-college bound student.

Massachusetts was the first state to establish vocational high schools in 1913, and today has an exceptional system, ranking highest in the nation in student retention and job placement. The vocational technical schools offer effective preparation in basic academic education as well as vocational training. Yet this system is underutilized, educating only a small percentage of the total school population when easily 50% of the state’s high school students could benefit from at least some exposure to this education and training. Indeed, at times the vocational-technical school system appears to be an "orphan" in the education system of the state. The reasons for this are complex: Some educator "purists" discount vocational school attendance as "training," not "education" and feel it should be eliminated; some private sector interests seek single, limited measures of school performance such as basic skills testing, S.A.T. scores or percentages of graduating classes admitted to college; some parents are obsessed with college as the only acceptable outcome of the primary/secondary system; and even some vocational educators, prefer to stay separate from the complexities and pressures of the mainstream public school system.

These attributes combine to reinforce the quasi-isolation of the vocational technical schools and ignore the realities with which we are faced. The workforce requirements clearly indicate that a broader approach to education will be necessary for Massachusetts to successfully compete in the coming decades. This means that all students, bound for college or not, must achieve higher standards of competence by the time they emerge from the secondary school system.

MBAE fully understands and supports the need for all students to obtain a solid academic foundation, regardless of their plans after high school. But it must be recognized that at approximately age eighteen, many students must be prepared and must have marketable skills to compete for and perform in full time jobs at competitive wages. The Commonwealth’s system of vocational/technical high schools must be used more effectively to meet that challenge. State officials responsible for economic development and for education must both organize to make that happen, expanding the utilization of existing vocational/technical schools, and move toward closer integration of the "comprehensive" and vocational systems. Indeed, some of
Massachusetts' vocational/technical schools could be considered models of the truly comprehensive school, where students learn academic skills in an environment of applied education. This is a formula that could be optimal for more than half of all students in the Commonwealth, including some college-bound students.

MBAE's mission and focus has been to suggest changes to the education system, not curriculum and other such aspects of education best left to professional educators. The following system-related recommendations will, if implemented, bring about better understanding, appreciation and utilization of Massachusetts' vocational technical school system:

(1) The new state-wide goals for education, performance indicators and graduation standards (Section V B), should reflect the need for technical job skills/qualifications at graduation as well as for related academic achievement;

(2) The regulatory review (Section V G) should include identification and elimination of practices at the state and local level which obstruct admissions to vocational/technical schools, particularly to those vocational technical centers that are integrating academics and articulating with colleges;

(3) The educational finance system should take into account the special characteristics and requirements of the vocational/technical schools for budget purposes, in regard to capital equipment and insurance as examples; and incentives should be provided which will encourage closer integration of the comprehensive and vocational/technical school systems. MBAE's proposed financing system (Appendix D) has been adjusted to make these accommodations;

(4) Massachusetts should institute a comprehensive system of Technical and Professional certificates for all service and manufacturing occupations along the lines proposed in Recommendation 3 of the National Center on Education and the Economy's report, *America's Choice: high skills or low wages*;

(5) The new Education Innovation Center under the state Department of Education (Section V H) should encourage experiments and
demonstration projects aimed at closer collaboration between comprehensive and vocational-technical high schools;

(6) Full funding for the implementation of the Massachusetts Vocational Education Reform Act of 1987 (Chapter 731) should be provided so that the Act's objectives can be achieved. This funding (about $15 million) has not specifically been included in MBAE's foundation budget.

It should also be mentioned that Massachusetts' extensive system of Community Colleges provides a natural adjunct to the vocational/technical high school system if properly coordinated. Together they could provide a continuum of job-related training and academic education (the so-called "2 + 2" potential cited in the "America's Choice" Report and recently adopted in Oregon), not only for young students, but also for adults who require retraining or remedial assistance. The highest state education authorities should support and seek out ways to make these assets more available, accessible and better known to the people of the state. Ongoing projects, planning and promoting closer coordination and greater utilization of these two systems should be continued and expanded. These programs already involve 48 secondary schools and 17 colleges, with 175 articulation (credit) agreements in 19 occupational areas. This direction is encouraged under new federal funding provisions of the Perkins Act, regarding technical preparation programs.
VII CONCLUSION

A. Continuing Business Role in Education

It is apparent from MBAE's review of education in Massachusetts that for the foreseeable future, business will continue to have a major stake in the quality of public education. There will be an ongoing need for business involvement through partnerships at the local level and through advocacy at the state policy level. However, business participation, while necessary, is not sufficient alone to meet the significant educational challenges facing this state in coming years.

What will also be needed is a commitment from a host of other stakeholders. For example, educators will have to be receptive to working with a broad array of constituencies and willing to consider new ideas for modifying current practices. Social service agencies will need to be both flexible and resourceful in reaching out to serve the growing needs of a diverse array of students. Parents must have real commitment to placing education at the top of their lists of priorities; they will need to be actively engaged with their children's teachers and schools. Elected officials at all levels will need to have the courage to transform educational rhetoric into the reality of an adequately funded, finely tuned system of public schools that will assure the health and prosperity of this state through the competitive decades to come.

Specifically, the Massachusetts Business Alliance is committed to continue its work:

(1) Developing an Action Agenda for the Improvement of Public Education in Massachusetts - MBAE has achieved this goal through research and analysis coupled with dialog involving those interested in the state's education future. The action agenda includes specific proposals and indicates short and long range priorities.

(2) Advocacy for the Agenda - MBAE will work intensely toward the adoption of the action agenda. Massachusetts is at a crossroads as a society; the schools will play a key role in determining whether it moves into the next century as a strong leading state or as an "also ran." MBAE will work to assure that business takes a leading role in
collaborating with educators to forge a prosperous education future in this state.

(3) Broadening MBAE’s Participation - In parallel with its agenda advocacy, MBAE will continue to expand its participant base of companies, large and small, from throughout the state. This will provide new intellectual capital (as well as the other kind) to the effort, and greatly strengthen MBAE’s powers of persuasion. Support liaisons will be established with business groups to further broaden the constituency.

(4) Close Collaboration - MBAE recognizes that a public process must ensue to bring its agenda into public policy and legislation. We are determined to work closely with the Legislature and Administration in this process.

B. Expectations

It is well understood that systemic reform is a massive undertaking. But after over two years of involvement, MBAE is more convinced than ever that thoughtful proposals will be well received and that, in the end, improvements will be made. After all, the final argument is that the current system does not work for all children in the Commonwealth, indeed maybe not for most of them.

C. Conclusions/Aspirations

MBAE, as a volunteer activity, draws heavily on the time of busy leaders. But it feels that the stakes are so high, the penalties for inaction so great, that it can be involved in no better venture and make no more lasting contribution to Massachusetts and its citizens. While there are many stakeholders and others concerned with these issues, the focus must always be on the children. The aim is to make...

EVERY CHILD A WINNER!
APPENDIX A

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Massachusetts Association of School Committees
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Massachusetts Business Roundtable
Massachusetts Elementary Schools Principals Association
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Massachusetts Secondary School Administrators Association
Massachusetts State Council on Vocational Education
Massachusetts Taxpayers Association
Massachusetts Teachers Association
National Alliance for Business
New England School Reforms Initiatives Conference
Public Education Fund Network

A-8
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APPENDIX B

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APPENDIX C

NATIONAL GOALS FOR EDUCATION

Goal 1. By the year 2000, all children in America will start school ready to learn.

Goal 2. By the year 2000, the high school graduation rate will increase to at least 90%.

Goal 3. By the year 2000, American students will leave grades 4, 8, and 12 having demonstrated competency in challenging subject matter, including English, mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so that they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy.

Goal 4. By the year 2000, U.S. students will be first in the world in mathematics and science achievement.

Goal 5. By the year 2000, every adult American will be literate and will possess the skills necessary to compete in a global economy and to exercise the rights and responsibilities of citizenship.

Goal 6. By the year 2000, every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.
CURRENT

MASSACHUSETTS GOALS FOR EDUCATION

(Amended, 1988)

1. Physical and Emotional Well-Being
   Education should contribute to the learner's physical and emotional well-being and development, in a positive environment that fosters self-esteem.

2. Communication Skills
   Education should develop in each learner the reading, writing, listening, speaking and computational skills necessary for effective communication, as well as the ability to think clearly and critically.

3. Citizenship in a Democratic Society
   Education should provide each learner with knowledge and understanding of how our society functions, and foster individual commitment to exercise the rights and responsibilities of citizenship.

4. Values and Mutual Respect
   Education should expand and advance the humane dimensions of all learners, by helping them to cultivate basic shared values and fostering mutual respect.

5. Arts Appreciation and Creativity
   Education should provide each learner with a broad range of opportunities to understand and appreciate the arts, to discover and develop talents and interests, and to be creative through various media.

6. Understanding History and the Humanities
   Education should provide each learner with knowledge and understanding of history, the humanities, and our multicultural heritage.
7. Understanding Mathematics and the Sciences

Education should provide each learner with knowledge and understanding of mathematics and the sciences, encouraging exploration and discovery as well as the acquisition of facts.

8. Occupational Competence

Education should provide each learner with the academic and vocational skills necessary for employment and continuing education, opportunities for career exploration and occupational guidance, and productive work habits that will enhance the capacity to adapt to changing conditions.

9. Capacity and Desire for Lifelong Learning

Education should foster and stimulate the natural desire for lifelong learning, and should help learners develop the skills necessary to reach personal goals.
APPENDIX D

PROPOSED REFORM OF MASSACHUSETTS SCHOOL FINANCE
Report of the MBAE Committee on School Finance

Summary: The Massachusetts Business Alliance for Education seeks an historic change in Massachusetts education. On the one hand, teachers and principals will be given the tools they need to provide each child an adequate education. On the other hand, they will be held accountable for their results. The two elements of the MBAE program go hand in hand. If we don't give educators the funding they need or clear away some of the regulatory obstacles they face, we can't fairly call them to account if they fail to produce results. But if we don't find ways to hold them accountable for results and to reconstitute schools which fail, there is little point to investing additional funds in our schools.

As its part in assembling the total MBAE proposal, the finance committee set out to design a school finance system which met four basic objectives:

1. That there should be a broadly accepted standard for how much each district needed to spend to provide an adequate education to each of its students, and that each district should be guaranteed such funding.

2. That a system of state aid should be created which assured that the local tax budget required to provide such funding be as nearly equitable as practicable, and that the tax rate in low wealth communities be capped at some reasonable level.

3. That the minimum funding standards include extra resources to deal with the special needs of at-risk youngsters whose ability to learn is hampered by drugs, violence, poverty, and family instability.

4. That all schools be guaranteed stable sources of funding which adjust to changes in enrollment and inflation and which allow teachers and administrators to make and carry out long-term improvement plans.
The committee concluded that these goals could not be achieved within the current system, in which school and other municipal spending are funded from the same local revenues. With the Proposition 2 1/2 limits assuring that local property tax levies will fail to rise with inflation, and with state aid payments falling, this local revenue stream cannot continue to support the current program, let alone provide the added resources necessary to help at-risk youngsters.

While there is little evidence that local officials have been unfair to school systems in allocating existing revenues, the adequate revenues-in-return-for-accountability bargain cannot be struck with educators if falling local revenues continue to force major cuts in school budgets.

The committee recommends that school funding be separated from the remainder of municipal finance. State aid payments should be separated into school and municipal components, and property tax rates for the two be clearly identified.

The committee’s first major task was to determine just how much funding is necessary to provide adequate education. This was done in the form of a foundation budget based on the numbers of children in each community at different grade levels, the number of teachers they will need, how much these teachers should be paid, and how much else should reasonably be spent for educational supplies, building maintenance, insurance, and other costs.

The basic foundation budget spells out the resources needed to meet current educational goals; the full budget includes the extra resources needed to provide new programs to meet the special needs of at-risk youngsters. Each of these budgets is described in detail in the next section of this report.

Although the state currently provides more aid per pupil to low income communities than to wealthy ones, total aid payments are inadequate. As a result, low income communities currently pay higher property tax rates for their schools, while spending less per pupil. The Committee recommends moving toward the ideal of having all communities in the state be able to provide foundation budget funding for their students with the same school tax rate.

As first steps in this direction, the proposed finance system would require that each system fund its schools at least at the foundation level. The foundation budget - and hence local school spending - would rise with inflation and
enrollment. School districts currently spending above the minimum would be allowed to continue current per-pupil, inflation-adjusted expenditure levels without resort to Proposition 2 1/2 overrides.

The state would set a maximum school property tax rate. State aid payments would make up the difference between foundation expenditure levels and the revenues raised with property taxes set at the target rate.

To meet the foundation spending levels will require approximately $720 million in additional spending above fiscal year 1991 levels. The local aid cuts scheduled for FY 1992 are all but certain to force significant reductions in school spending below the estimates for 1991 on which our calculations are based. Since the foundation budget is indexed to costs and not to available revenues, these cuts will increase the gap between foundation and actual spending levels. Therefore, the new funding at both state and local levels actually required to implement the program in 1992 will be somewhat greater than the estimates included here.

The committee recommendations are designed so that roughly half of the new money will come from increased property taxes and half from increased state aid payments. In general, wealthy communities which currently spend relatively little on their schools will see the largest increase in property taxes, while low income communities with high school spending will enjoy the largest increases in state aid.

The committee understands that school systems cannot usefully make large increases in a single year. The committee also feels strongly that the public should not be paying higher sales taxes before it can see educational changes. School improvement plans should therefore be prepared in the program's first year, with increased aid and increased sales taxes phased in over the subsequent five years.

This school finance system will be described in more detail in the final section of this report.

Let us turn now to a detailed description of the foundation budget and how it compares with current spending levels:
THE FOUNDATION BUDGET

While the MBAE understands that funding alone cannot guarantee quality education, and that a few outstanding educators might be able to provide good schooling despite low budgets, common sense suggests that there is some funding level below which most educators would be hard pressed to do right by their students. The MBAE's foundation budget approach is based on the notion that the business community should not be asked to support additional funding for the schools until MBAE had determined how much was enough - and done so by a process similar to that used by businesses themselves. The committee therefore undertook a dialogue with several school superintendents; the foundation budget is based on a respectful yet independent review of their recommendations.

The foundation budget is quite specific - so many teachers, guidance counselors, and principals, and so much expended on maintenance, books, and teacher salaries. The particular staffing required and the particular salary and spending guidelines are used to arrive at a total spending level. We understand, of course, that in practice individual principals and faculties may choose to take the same total budget and allocate it in other ways. In general, we are more concerned with the overall budget figure and the results educators achieve; we encourage program flexibility and innovation in meeting educational goals.

The foundation budget is best understood by examining the resources it provides for students at each level. The most important and the most expensive of these resources is the teaching staff. We'll begin our review of the foundation with a detailed description of suggested staffing levels:

Foundation Budget Staffing - Elementary Schools: The superintendents MBAE consulted felt strongly that small classes were important for elementary school youngsters, particularly in grades 1 through 3. The foundation budget's average class size for elementary schools was therefore set at 22. The foundation also calls for a variety of specialized teachers. To see how this works, consider a typical elementary school of 333 students:

Our school would be assigned 15 regular classroom teachers. In addition, there would be a principal and five other support teachers. These positions might be used to provide a reading teacher, a physical education teacher, half a librarian (a librarian shared with one other school), half a computer...
teacher, half a guidance counselor, and two thirds each of an art and a music instructor. The school would also have four aide positions, which might be used to provide a lunch aide, a computer aide, a kindergarten aide, and a library aide.

The foundation budget is built on the assumption that the number of children assigned to special education programs (on a full-time equivalent, or FTE, basis) would equal 3.5% of the student body. In our school, this would mean 12 FTE special education students. This could mean 12 students in substantially separate programs, but in practice, it might mean 36 students in all, each of whom spent a third of his or her time in special education programs. For these students, the budget would allow 2.5 teacher or therapist positions, and 1.5 aides.

In addition to the special education students attending the local school, the budget also allows for tuition funds for an additional one percent of the student body (3 children in our example). These children would be served in collaboratives or private schools.

These staffing figures - fifteen regular classroom teachers and five regular support teachers, along with the two and a half SPED faculty - comprise the basic foundation. They constitute the resources assigned to a school with no bilingual or low-income students, and exclude the extra positions assigned for new programs for low income youngsters.

For bilingual students, the foundation budget uses an average class size of 15; were our school to consist entirely of bilingual students, it would be assigned an additional seven teachers, or 22 in all.

Were our school to contain significant numbers of low-income students, it would be assigned substantial additional resources. The program for such youngsters is described later; to facilitate comparison with current spending levels, we postpone such discussion for now.

Foundation Budget Staffing - Middle School and Junior Highs: The staffing allotments for middle schools and junior high schools is based on the cluster notion: that 4 teachers would handle the math, science, English, and social studies for a cluster of 100 students. For a school of 500 youngsters, this would mean 20 teachers assigned to the clusters.
In this foundation, art, music, language, and physical education are provided by additional teachers (the time students spend with such teachers gives the cluster teachers a chance to meet together to develop curriculum and review needs of individual students).

The foundation budget would assign our model school an additional 14 professional positions. These might be used for three guidance counselors, two physical education instructors, two language teachers, three teachers in industrial arts and home economics, and a librarian, a computer teacher, an art teacher, and a music teacher. Funding would also be provided for a principal, a computer aide, and an assistant principal working 3/4 time.

The special education guidelines are the same as at the elementary level. For our 500 student middle school, we would expect 17.5 special education youngsters on an FTE basis; they would be assigned 4.5 professionals and 2 aides.

Were our school to consist entirely of bilingual students, it would be assigned an extra 13 teachers so that each cluster could have 60 students instead of 100.

**Foundation Budget Staffing - High Schools:** For high school students, the foundation budget is based on an average class size of 18. While some classes could undoubtedly be larger than this, many industrial arts, remedial, and advanced classes will necessarily be much smaller. As our example, let's take a high school of 1200 students. Such a school would have 67 teachers. The foundation also assigns our school 4 counselors, a librarian, a principal, three assistant principals, and a computer aide.

The expected number of special education students (FTE basis) is 17.2; this means that an additional 8.5 full-time professional positions will be assigned along with five SPED aides. There would also be funding for 12 tuitioned out Sped students.

Were the high school to consist entirely of bilingual youngsters, an additional 13 teachers would be assigned.

**Staffing Levels - Interstate Comparison:** North Carolina, Virginia, and Vermont have class size or overall student-faculty ratios written either into state law or into state education regulations. The foundation budget standards adopted by MBAE are similar to (but slightly more generous than) the stand-
ards used in these states. At the middle school level, for example, the MBAE class size of 25 compares to 25 used by Virginia and 26 by North Carolina. In the elementary grades, the MBAE class size of 22 is slightly smaller than Virginia's 25. The overall student-faculty ratio (counting guidance counselors, librarians, art teachers, etc.) in the MBAE budget is just under 17 to 1 in grades 1 through 6; North Carolina's standards work out to 18.6 to 1 and Vermont's are 18 to 1.

Foundation Budget - Salaries: To go from the basic teaching staffs outlined above to total spending targets, we need to add custodial and clerical positions, lay out salary guidelines, and add in spending for athletics, school supplies, teacher training, utilities, maintenance, insurance, and special education tuition. We'll start with the foundation budget approach to salaries:

The foundation budget uses $37,000 as its standard teacher salary for school year 1990-1991. It would make little sense to apply the same salary standard in Berkshire County as in Greater Boston. Such a statewide salary figure might make it hard to recruit good teachers in high wage metropolitan areas while spending unnecessarily high sums in low wage communities. The foundation budget therefore incorporates a wage adjustment factor based on the one currently used in the state of Ohio.

The Division of Employment Security publishes average wages and salaries paid across all industries and occupations in each city and town in the state, and also groups communities into broader labor market areas. Using this data, a wage adjustment factor (a number slightly higher than 100% in high wage areas and somewhat lower in low wage communities) is calculated for each school district. This factor reflects both community and labor market wage levels, with greater weight given to the labor market area. The general notion is that schools located in a community and a labor market area with generally higher wages will have to pay more for teachers than their counterparts in low wage regions.

To determine model teacher salaries for a particular district, the statewide standard is multiplied by the wage adjustment factor. For example, if New Bedford's wage adjustment factor is 95%, its model budget will reflect an average teacher salary of 35,150.
The wage adjustment factor used in the foundation budget is based on only one third of the actual wage differentials reported by DES (we'd expect less variation in teacher salaries than in average wages across all occupations). In Boston, for example, actual wages are some 3% above the state average; the adjustment factor used in the model budget is 1%. The highest wage adjustment factor (about 4%) occurs in the high tech belt running from Marlboro through Maynard and Concord to Lexington. The larger Berkshire communities have a wage adjustment factor of -10% (their adjusted wage rates are only 90% of the state average); a few isolated communities have an adjustment as low as -15%.

The use of labor market specific wage adjustment factors means that the foundation budget wage rate for teachers in a particular labor market area will rise at about the same rate as wages generally in those communities. In good times, this should mean that teachers and other workers will enjoy wage gains somewhat higher than inflation. In bad times, it assures that taxpayers will not be asked to increase their taxes to support teacher wage adjustments greater than the raises they themselves are receiving.

Foundation Budget - Expenditures: Adjusted to 1991 price levels, the basic foundation budget comes to $4,950 per pupil (see the pie chart Basic Foundation Budget - Fiscal Year 1991). Of this amount, half goes to teacher salaries ($2,161). Other major items include other salaries (principals, central administration, aides, and custodians - $792 per student); utilities, supplies, and maintenance ($536); and insurance (including health insurance for employees - $420).

A few items merit special attention. The equipment and supplies budget was set generously to allow adequate funds for computer purchases as well as for books and educational supplies. A special fund equal to 2.5% of teacher salaries was created to provide for the cost of teacher training programs. Borrowing from an idea in the new Colorado finance law, a special extraordinary maintenance fund was created - with $3,400 per year per classroom - to deal with leaky roofs, worn-out boilers, drafty windows, and other major problems.

A few special education students cannot be accommodated within regular schools. We've assumed that this number will equal one per cent of the student body. Three fifths of these are assumed to be in multi-district collabora-
Basic Foundation Budget - Fiscal Year 1991

Per Student Expenditure by Budget Category

Basic Foundation Budget - Excluding New Programs - $4,950 per Student
tives at a cost of $16,250; the other two fifths in private schools at an average
tuition of $21,700.

The foundation budget is completely defined by the assumptions laid out in
the three page appendix Foundation Budget - Assumptions.1

The foundation budget includes all current operating expenditures except
those associated with lunch programs and with school transportation.
Lunches and transportation were excluded both because adequate (if under-
funded) programs to reimburse these costs are already in place, and because
costs might differ from one town to the next for reasons which have nothing
to do with educational policy. A community might have higher costs than its
neighbor because it chose to subsidize lunch costs, or because it had a sparse-
ly settled population and consequent high busing costs.

The Foundation Budget - Comparison with Current Expenditure Patterns:
The basic foundation budget - before the new programs are added in - was
originally calculated for the 1988-89 school year and can be compared with ac-
tual expenditure in that year, as reported to the state on the end of year
reports. On a statewide basis, the foundation and actual expenditures were al-
most identical.

Of course, the similarity between actual and foundation expenditures
statewide masks major differences between communities, some of which
spend more than the foundation and some less. The bar chart Actual Spend-
ing Relative to Foundation illustrates the spread in the ratio of actual to foun-
dation spending across districts in 1989. The first bars show that 5% of the
districts spent less than 70% of their foundation budget; 1.0% of the students
attend school in these districts. Forty percent of all students were in districts
with spending between 80 and 95% of the foundation. Half the students were
in districts spending less than 95% of the foundation. On the high spending
side, a third of the state’s students attended school in districts with spending
in excess of 105% of the foundation.

Preliminary expenditure data for the current school year (1990-1991) indicate
that total spending statewide has risen with the foundation budget, although
inner cities were less likely to keep pace than wealthier suburbs.

1. The foundation budget was originally defined for budget year 88-89, using rounded numbers. To advance the cost assumptions to 90-91, inflation indices
were used. This - not a sense of false precision - explains the curiously precise figures in the FY 91 table of assumptions.
Actual Spending Relative to Foundation

Distribution of Students by Actual/Foundation Ratio - FY 89

Expenditure as % of Model Budget

Uses Basic Foundation Budget without Low-Income Programs
Actual Teaching Staff Relative to Foundation - FY 89

Distribution of Districts, Students by Actual/Foundation Ratio

<table>
<thead>
<tr>
<th>Actual Teaching Staff % of Foundation</th>
<th>Districts</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>60%-80%</td>
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<tr>
<td>80%-95%</td>
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<tr>
<td>95%-105%</td>
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<tr>
<td>105%-120%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>120%-140%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;140%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

% of Pupils or Districts

- 0%
- 5%
- 10%
- 15%
- 20%
- 25%
- 30%
- 35%
- 40%
- 45%
Actual Teaching Staff Relative to Foundation

Statewide Totals for School Year 1988-89

Percent of Foundation

150%
140%
130%
120%
110%
100%
90%

Type of Students Served

Regular
Sped
Biling
Voc
Most districts employed more teachers than the foundation budget called for (Bar Diagram Actual Teaching Staff Relative to Foundation, Distribution of Students). Some 70% of all students were in districts with more than enough teachers, and only 10% of students were in districts with fewer than 95% of the teachers needed. (Remember that we are using the basic foundation budget for this comparison. Many districts will be short of teachers when the new programs for low income youngsters are added to the foundation budget).

The gap between foundation and actual teaching staffs is greatest for special education programs (Bar Diagram Actual Teaching Staff Relative to Foundation, Statewide Totals). Statewide, there were 40% more special education teachers than called for in the foundation budget, but only 10% more regular teachers. There was a small deficit for bilingual and vocational teachers.

The gap in special education teachers is indicative not of an excessive number of teachers in relation to the special education population, but rather reflects the fact that districts in fact assign more students to special education (and keep them in separate programs for a higher percentage of the school day) than is allowed for in the foundation budget targets. When the foundation budget staffing ratios for special education are applied to actual special education enrollment, they match closely the existing teaching staff.

If the typical district is overspending its faculty budget relative to the foundation, it is giving other areas short shrift. The bar diagram Actual Expenditure-Relative to Foundation, Statewide Totals compares actual to foundation expenditures in maintenance, equipment, and administration. On average, schools fall short on desired maintenance and equipment purchases by some 20%. Spending on athletics is 10% below the foundation level, while administrative costs are 15% above. While there's no data on actual teacher training expenditures, we suspect that it falls far short of the $60 per student we recommend.

The MBAE is concerned over the spending pattern suggested by this data. While we can understand the tendency to protect staff positions, we are concerned that too little is spent on books, computers, teacher training, and basic maintenance. No business which fails to retrain its employees can compete in today's economy; we worry about schools which allow teaching staffs to get stale and textbooks to get outdated. Similarly, visits to schools throughout
Actual Spending Relative to Foundation
Statewide Totals; School Year 88-89

Percent of Foundation

- Maintenance
- Administration
- Equipment
- Athletics

- 115%
- 110%
- 105%
- 90%
- 85%
- 80%
- 75%
the state suggest that most are in need of serious repair; postponing basic maintenance only raises costs in the long run.

Despite our general preference to give school administrators flexibility in allocating the foundation budget sums, we recommend that the allotments for teacher training, educational equipment, and the major maintenance reserve be earmarked specifically for these purposes. Schools which demonstrate success in meeting their learning improvement objectives might be allowed to override this requirement.

New Programs for Disadvantaged Youngsters: The MBAE has placed particular emphasis on the needs of low income youngsters. Violence, drugs, poverty, and the family tensions they bring put children from inner city or other low income neighborhoods at a serious disadvantage. To enable schools to meet the needs of these youngsters, we recommend the following:

1. For every 100 low income youngsters, schools will be assigned three additional faculty members. Some of these positions can be used to reduce class sizes or to provide special reading and other resource teachers; others can be used to hire counselors and social workers to help children and their families deal with problems at home including lack of medical care, inadequate diets, violence, or study patterns. As the Massachusetts fiscal crisis cuts into other community resources to deal with such problems, educators in central cities tell us that school staff to deal with such issues is particularly important.

The elementary school in our earlier example had 333 students, fifteen classroom teachers, and five support positions, including a half-time counselor. If half the students at this school were low income children³ - not an atypical enrollment in central city schools - our school would receive an additional 5 positions. This 25% increase in school faculty should be enough to make a major difference both in remedial assistance and in the school’s ability to help children work through family problems.

³ As measured by eligibility for free and reduced cost lunches under federal subsidies.
2. Educational research has consistently shown that the single most important step we can take to help at-risk youngsters is to provide preschool training. Despite these findings, Head Start funding falls far short of the need. We recommend that Massachusetts take the bull by the horns and provide half-day preschool programs and full day kindergarten for all low income youngsters.

We’ve also included funding for a parent/outreach program, in which the school system reaches out to parents of one and two year old youngsters, providing toys and other educational materials, helping parents understand how these toys help their children learn, and addressing educational needs of the parents as well. This program not only helps children when they arrive in school, but can also serve to increase the bond between parents and their local schools. Our budget provides funds to cover two years of the program for youngsters and parents at or slightly above the poverty level.

3. Despite their problems, the superintendent of Holyoke’s schools told us that his schools offered many of his students the best few hours of their days. Given the problems these youngsters face at home, he placed high priority on extended day programs for disadvantaged youngsters. Similarly, any progress the schools were able to make during the academic year could be lost during the summer.

Accordingly, we’ve recommended funds for an extra four hours a day of school time for all elementary and middle school low income youngsters and an extra 12 weeks a year of half-time programming all low income students, including those in academic high schools and vocational technical schools.

4. The greatest educational challenge lies in inner city classrooms filled with disadvantaged youngsters; too often the highest pay levels are in suburban systems. Accordingly, our recommendations include extra pay for teachers in low income schools. Specifically, in a school where naturally all youngsters are low income, the foundation pay level would be increased 10%; if 40% of the youngsters are low income, the adjustment would be 4%.

The committee is convinced that incorporating these new programs for at-risk youngsters within the regular education program is the appropriate way
to address many of the problems now served in special education programs. The fact that our special education enrollment target is well below current program levels must be seen in the context of our support for these new programs. We prefer to make this additional help available within regular programs and thereby to minimize use of the bureaucratic and adversarial special education framework.

These additional programs represent a major investment. The new faculty members assigned to low income students and the new preschool programs will require close to 6,000 additional teachers statewide (the extended day and summer programs would be staffed by teachers who wished to work extra hours along with use of part-time employees). These positions all but erase the 7,000 teacher gap between actual and base model staffing levels.

The programs for low income youngsters would cost $475 million in the current school year¹. We’ve also included $73 million to provide an extra month’s salary for one third of all teachers each year. This will support the MBE’s strong desire to give teachers the opportunity to renew their skills. All told, these program enhancements bring average per-pupil expenditure statewide to $5,600.

We’ve recommended additional funds for districts based on the number of low income children. As a practical matter, parents of other youngsters might also want to take advantage of extended day and preschool programs. We suggest that such parents be billed on a sliding fee scale basis for such services. In our funding formula, we have not taken account of existing Head start and Title One programs. These extra funds might allow partial subsidies to children with incomes just above the cutoff line.

The scatter diagram titled School Spending vs % of Low Income Students - FY91 shows both the foundation level and an estimate of actual spending for the 90-91 school year as a function of the percentage of low-income students in each district. Each cross represents an individual district; in the lower right corner of the diagram, the cross at 70% and $3,000 represents the Lawrence schools, which spend just under $3,000 per student and where 70% of the student body comes from low income homes.

¹. This $475 does not include the extra pay for teachers in low-income schools which is included in the base budget.
School Spending vs % of Low Income Students - FY 91

Estimates of Actual Spending (Dots), Foundation Budget (Line)

Per-Pupil Expenditure

Low Income Students as % of Total

Foundation Budget Includes New Programs for Low Income Students
The solid line in this diagram represents the foundation budget, inclusive of extra programs for low income youngsters. For districts with no low income students, the foundation is at the $5,000 per student level of the base budget. The line generally slopes upward - the foundation budget is higher for districts with large numbers of disadvantaged students, exceeding $7,000 per student for districts with low income populations greater than 50%. Because the foundation budget reflects cost differences between high school and elementary schools, the extra costs of bilingual and vocational students, and regional wage differentials, the foundation budget curve does not rise smoothly with low income population.

A close examination of this diagram shows that communities with low income populations less than 10% are as likely to exceed the foundation budget as to fall below it. But few communities with low income populations greater than 20% meet or exceed the foundation, and most fall short by some $2,000 per pupil per year. The 11 communities with low income enrollment greater than 40% - Somerville, Brockton, Worcester, Boston, Fall River, Lowell, New Bedford, Springfield, Holyoke, Lawrence, and Chelsea - represent almost 200,000 students and a quarter of statewide enrollment. Other than Boston, which spends over $6,000 per student (and is not using it for the preschool and extended day and extended year programs we recommend), none of these districts come within $2,000 per student of the funding we think they need.

Vocational Schools: In designing our foundation budget, MBAE was careful to recognize the special funding requirements of vocational schools. We set the class size at 10, as compared to 18 for other high schools. We allowed an equipment budget of $663 per student, almost twice that set for academic high schools. Since maintenance and utility budgets are based on the number of classrooms, the smaller class size yields higher maintenance funding per student. In addition, we've increased the utility budget an additional 50% to cover the cost of operating shop and ventilation equipment and we've increased the budget for accident and liability insurance by 50%.

Few vocational schools tuition out special education students, but a high percentage of special education youngsters are educated within the vocational schools. We've recognized this by assuming for budget purposes that a
higher proportion of vocational students are in special education. (4.5% (FTE basis) as opposed to 3.5% for other schools).

Having completed our discussion of what is included in the foundation budget, let's now turn our attention to how the needed funds should be raised.

**SCHOOL FINANCE REFORM**

Ideally, we'd like to see a system in which the school property tax rate was identical in all communities across the state, and each school was able to spend at the foundation budget rate. As a practical matter, however, such an ideal is out of reach. Some communities have property wealth so high that they can afford the foundation budget and more with no state assistance. To force their property tax rates up to any practical statewide average, we'd have to require them to make large payments to the state.

Many communities place a high priority on their schools and choose to tax themselves enough to have school budgets well in excess of the model. A strict definition of equality might prohibit such high spending. We are interested in good schools everywhere in the state - in rural areas, in suburbs and in central cities - and have no interest in penalizing wealthy districts or forcing them to reduce school quality. We have also reviewed the New Jersey school reform and the enormous political backlash generated by the punitive approach of that plan to the state's wealthier districts.

Our highest priority is to eliminate the situations where communities provide relatively low spending on schools, despite high taxes. On the other hand, those communities with relatively low taxes but which provide high spending on schools, do not strike us as an urgent problem. Specifically, we have set ourselves two over-riding goals. By the end of the transition period,

1. No district shall spend less than its foundation budget, which will be adjusted each year with enrollment and inflation, and
2. No district shall need to levy a school tax rate greater than 1% ($10 per thousand dollars of equalized valuation) to achieve foundation budget expenditure levels.

**Foundation Assistance:** The heart of our school finance proposal is a state foundation plan. Under a foundation plan, (the approach most state educa-
tion formulas use), the state sets a foundation expenditure level and a target school tax rate. If the revenues from local property taxes at that rate fall short of the foundation level in any district, the state makes up the difference.

Since we intend every district to spend at the foundation budget rate, we set the foundation support level equal to the foundation budget. To achieve a reasonable balance between state and local expenditure effort, we recommend a guaranteed tax ceiling of $10. (The current average school tax is $7.06).

The working of our plan is illustrated in the accompanying table Elements of New School Aid Grants - Per Pupil - 1991. To help clarify the plan, this table assumes that the plan was fully implemented in Fiscal Year 1991; in practice, we’d recommend that it be phased in over five years. Since tax rates are imposed at the municipal level, the expenses of all multi-community districts have been apportioned amongst the member communities according to their share of school enrollment.

Looking across the first line, we see that Holyoke’s floor expenditure is $7,191 per pupil. They currently spend only 60% of this amount. Their current state aid is $2,654 per pupil; absent new assistance, they’d need to spend $4,537 of their own funds to reach the target ($7,191-2,654 = 4,537). With equalized valuation of $214 per pupil, they’d need a tax rate of $21.20 to meet this goal ($4,537/214 = $21.20). This is shown in the column labelled "Old /Foun" - (the tax rate they would need to raise the foundation with old assistance levels). Under the new foundation plan, the state would provide $5,053 in aid, leaving them to raise $2138, which would require a $10 tax rate.

A glance down the table shows that low income communities such as Fall River, Brockton, Springfield, and Worcester also receive substantial amounts of foundation aid. The bottom row of the table shows that total foundation aid would cost the state $1,080 million ($1.1 billion) under our plan. Foundation aid, which is the most strongly equalizing portion of our program, constitutes some 80% of our total local aid spending.

Upper Tier Aid: We have prepared our foundation budget with great care, but we recognize that school systems with expenditure slightly above our foundation can undoubtedly make a good case that their current programs are necessary for quality education. If low wealth districts have established
## Elements of New School Aid Grants - Per Pupil - 1991

<table>
<thead>
<tr>
<th>Town</th>
<th>Foundation Aid</th>
<th>Upper Tier Pupil</th>
<th>$100/ Min Aid</th>
<th>Reg</th>
<th>Old Exp</th>
<th>Old%Ft</th>
<th>EwVal</th>
<th>% Avg Old Aid</th>
<th>New Aid</th>
<th>Old/Foun</th>
<th>New Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOLYOKE</td>
<td>5,053</td>
<td></td>
<td></td>
<td></td>
<td>7,191</td>
<td>60.4%</td>
<td>214</td>
<td>41.0%</td>
<td>2,654</td>
<td>5,053</td>
<td>$21.22</td>
</tr>
<tr>
<td>FALL RIVER</td>
<td>4,269</td>
<td></td>
<td></td>
<td>2</td>
<td>6,323</td>
<td>56.3%</td>
<td>205</td>
<td>39.3%</td>
<td>2,107</td>
<td>4,270</td>
<td>$20.52</td>
</tr>
<tr>
<td>BROCKTON</td>
<td>3,441</td>
<td></td>
<td></td>
<td>1</td>
<td>6,258</td>
<td>64.5%</td>
<td>282</td>
<td>54.0%</td>
<td>1,900</td>
<td>3,442</td>
<td>$15.47</td>
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<td>SPRINGFIELD</td>
<td>4,158</td>
<td></td>
<td></td>
<td></td>
<td>6,573</td>
<td>61.8%</td>
<td>242</td>
<td>46.3%</td>
<td>2,198</td>
<td>4,158</td>
<td>$18.11</td>
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<td>BOSTON</td>
<td></td>
<td></td>
<td>100</td>
<td>1,196</td>
<td>6,844</td>
<td>93.0%</td>
<td>704</td>
<td>134.8%</td>
<td>1,675</td>
<td>1,296</td>
<td>$7.35</td>
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<tr>
<td>WORCESTER</td>
<td>3,123</td>
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<td></td>
<td>6,420</td>
<td>73.4%</td>
<td>330</td>
<td>63.1%</td>
<td>1,792</td>
<td>3,125</td>
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<td>MALDEN</td>
<td>913</td>
<td>654</td>
<td>1</td>
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<td>86.9%</td>
<td>495</td>
<td>94.8%</td>
<td>2,025</td>
<td>1,568</td>
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<td>NORTHAMPT</td>
<td>698</td>
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<td>1</td>
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<td>98.6%</td>
<td>495</td>
<td>94.8%</td>
<td>1,542</td>
<td>1,194</td>
<td>$8.30</td>
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<td>SHARON</td>
<td>582</td>
<td>378</td>
<td>2</td>
<td></td>
<td>5,072</td>
<td>83.5%</td>
<td>449</td>
<td>86.0%</td>
<td>696</td>
<td>582</td>
<td>$9.75</td>
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<tr>
<td>RANDOLPH</td>
<td>713</td>
<td>101</td>
<td></td>
<td></td>
<td>5,164</td>
<td>105.6%</td>
<td>445</td>
<td>85.2%</td>
<td>1,542</td>
<td>1,195</td>
<td>$8.14</td>
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<td>STONEHAM</td>
<td></td>
<td>623</td>
<td>1</td>
<td></td>
<td>5,348</td>
<td>92.3%</td>
<td>565</td>
<td>108.2%</td>
<td>934</td>
<td>723</td>
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<td>SANDWICH</td>
<td>39</td>
<td>61</td>
<td>213</td>
<td>0</td>
<td>4,737</td>
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<td>631</td>
<td>120.9%</td>
<td>405</td>
<td>314</td>
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<td>ORLEANS</td>
<td>100</td>
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<td>11</td>
<td>4,870</td>
<td>108.6%</td>
<td>2,516</td>
<td>481.9%</td>
<td>181</td>
<td>151</td>
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<tr>
<td>MIDDLETOWN</td>
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<td>307</td>
<td>10</td>
<td></td>
<td>5,032</td>
<td>94.5%</td>
<td>754</td>
<td>144.4%</td>
<td>526</td>
<td>417</td>
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<tr>
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<td>242</td>
<td>6</td>
<td></td>
<td>5,146</td>
<td>114.7%</td>
<td>773</td>
<td>148.1%</td>
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<td>348</td>
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<td>WESTON</td>
<td>100</td>
<td>175</td>
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<td>1,560</td>
<td>298.8%</td>
<td>356</td>
<td>275</td>
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<tr>
<td>LINCOLN</td>
<td>100</td>
<td>716</td>
<td>5</td>
<td></td>
<td>5,363</td>
<td>187.6%</td>
<td>1,654</td>
<td>316.7%</td>
<td>821</td>
<td>821</td>
<td>$2.61</td>
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<tr>
<td><strong>AVERAGE</strong></td>
<td>1,319</td>
<td>8</td>
<td>36</td>
<td>299</td>
<td>3</td>
<td>5,621</td>
<td>88.0%</td>
<td>522</td>
<td>100.0%</td>
<td>1,258</td>
<td>$8.36</td>
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<tr>
<td><strong>TOTAL ($Mns)</strong></td>
<td>1,080</td>
<td>7</td>
<td>29</td>
<td>244</td>
<td>3</td>
<td>4,769</td>
<td>427,564</td>
<td>1,030</td>
<td>1,363</td>
<td>3,739</td>
<td>3,405</td>
</tr>
</tbody>
</table>

Cape Ann Economics

June, 1991
spending levels slightly above the foundation, we feel they should be given some assistance in supporting such spending.

This is the rationale which supports our upper tier aid, an approach used by many other states. Essentially, the idea here is that for expenditure between 100% and 120% of the foundation level, the state will provide equalizing assistance - specifically, that communities will raise funds as if their equalized valuation were 130% of the state average ($687 per pupil).

Randolph illustrates this aid. It spends 105.6% of its foundation amount, or an extra $286 per pupil. With equalized valuation of $445 per pupil, this extra spending would ordinarily cost Randolph 64 cents on its tax rate ($286/$445 = .64). If its property wealth had been $687 per pupil, however, this extra spending would have cost only 42 cents ($287/$687 = .42). Accordingly, the state pays the difference - 22 cents on the Randolph tax rate, or $98 per student ($22*445 = $98).

As it happens, most school systems which spend more than their model budgets have property wealth in excess of 130% of the statewide average and are therefore ineligible for upper tier assistance. The total cost of this portion of our program is only $8 million.

$100 per Pupil: Since taxpayers in all communities contribute to the aid pool, we feel that all districts should receive some assistance; we've set the floor at $100 per pupil. Boston and Stoneham, for example, are eligible for no foundation aid (they could raise the foundation budget with tax rates of $7.35 and $7.81 respectively - both less than the $10 target). This portion of our program costs $29 million statewide. Since two thirds of the students are in schools which receive foundation aid, this category of assistance is extended only to wealthier districts and averages only $36 per pupil statewide.

Minimum Aid: Because we are concerned with funding stability in all school systems, we do not wish to see sudden reductions in state assistance to wealthy communities. Accordingly, we've recommended that every community receive at least 95% of its previous year's aid. Over a five year period, this means that each community would retain at least 77.8% of previous assistance. Weston, for example, previously received $356 per pupil in aid. Their minimum of $275 per pupil exceeds $100, so an additional $175 is paid in this category. Statewide, minimum aid costs $244 million.
Regional Aid: Massachusetts has historically offered a bonus to communities which agreed to form regional districts. Since the larger cities tend not to regionalize while most of the wealthy suburbs do, large regional aid payments actually serve to increase funding discrepancies. We therefore recommend only a small program—$25 for every student in a regional district. Since approximately half of Orleans' students are in regional schools, for example, the town receives a regional bonus equal to $11 per student. This program costs $3 million statewide.

Assessing the Program's Fairness: The table School Reform Plan - 1991 is designed to help readers understand how our formula treats various communities and therefore to assess its fairness. Holyoke and Fall River are paired because they have similar property wealth. Reading across the top two rows, we see that 56% of Holyoke's youngsters are low income; the corresponding figure for Fall River is 40%. Accordingly, the foundation budget for Holyoke ($7,191 per pupil) is substantially higher than Fall River's, at $6,323). Holyoke is currently spending some 20% more than Fall River. Both have property valuation per pupil approximately 40% of the state average. To meet its higher expenditure figure, Holyoke would have needed a slightly higher tax rate; hence it gets slightly more new aid. After the program is in place, each community has a $10 school tax rate.

Although Holyoke has been forced to raise its school tax rate by 25%, some 70% of the new money in Holyoke schools has come from the state. While Fall River's tax rate has risen 40% (from $7 to $10), almost 70% of the new money in its schools has come from state assistance. With the new program in place, both communities spend at the foundation level, and both have a $10 tax rate.

Brockton and Springfield have similar expenditure levels but Springfield has somewhat less property tax wealth. Both have similar foundation budgets and currently receive roughly similar state aid payments. Because Springfield is the poorer community, it will take more new money for it to achieve foundation expenditures with a $10 tax rate; its aid rises $1,950 per pupil; Brockton's $1,550 per pupil.

Data for Boston and Worcester is included because they are the state's two largest cities. While Boston has a high poverty population and therefore a high foundation level, it is not a property-poor community. Its property valua-
## SCHOOL REFORM PLAN - 1991

### EFFECT OF PROPOSED REFORM - SPENDING DATA PER PUPIL

<table>
<thead>
<tr>
<th>Town</th>
<th>Lowinc%</th>
<th>Old Exp</th>
<th>Floor Exp</th>
<th>Old%F/</th>
<th>EqVal</th>
<th>% Avg</th>
<th>Old Aid</th>
<th>New Aid</th>
<th>Old Net</th>
<th>New Net</th>
<th>Old Tex</th>
<th>Old/Foun</th>
<th>New Tax</th>
<th>Old Tax</th>
<th>Old/Foun</th>
<th>New Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOLYOKE</td>
<td>56.3%</td>
<td>4,347</td>
<td>7,191</td>
<td>60.4%</td>
<td>214</td>
<td>41.0%</td>
<td>2,654</td>
<td>5,053</td>
<td>1,693</td>
<td>2,138</td>
<td>$7.92</td>
<td>$21.22</td>
<td>$10.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FALL RIVER</td>
<td>40.4%</td>
<td>3,558</td>
<td>6,323</td>
<td>56.3%</td>
<td>205</td>
<td>39.3%</td>
<td>2,107</td>
<td>4,270</td>
<td>1,451</td>
<td>2,053</td>
<td>$7.06</td>
<td>$20.52</td>
<td>$9.99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BROCKTON</td>
<td>34.6%</td>
<td>4,038</td>
<td>6,258</td>
<td>64.5%</td>
<td>282</td>
<td>54.0%</td>
<td>1,900</td>
<td>3,442</td>
<td>2,139</td>
<td>2,816</td>
<td>$7.59</td>
<td>$15.47</td>
<td>$10.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPRINGFIELD</td>
<td>50.6%</td>
<td>4,061</td>
<td>6,573</td>
<td>61.8%</td>
<td>242</td>
<td>46.3%</td>
<td>2,198</td>
<td>4,158</td>
<td>1,862</td>
<td>2,416</td>
<td>$7.71</td>
<td>$18.11</td>
<td>$10.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOSTON</td>
<td>49.3%</td>
<td>6,364</td>
<td>6,844</td>
<td>93.0%</td>
<td>704</td>
<td>134.8%</td>
<td>2,025</td>
<td>4,026</td>
<td>2,923</td>
<td>3,296</td>
<td>$8.13</td>
<td>$14.04</td>
<td>$9.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WORCESTER</td>
<td>44.3%</td>
<td>4,715</td>
<td>6,420</td>
<td>73.4%</td>
<td>330</td>
<td>63.1%</td>
<td>1,792</td>
<td>4,270</td>
<td>2,736</td>
<td>3,090</td>
<td>$8.87</td>
<td>$14.04</td>
<td>$9.00</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>SHARON</td>
<td>1.4%</td>
<td>4,236</td>
<td>5,072</td>
<td>83.5%</td>
<td>449</td>
<td>86.0%</td>
<td>696</td>
<td>3,540</td>
<td>4,490</td>
<td>$7.88</td>
<td>$9.75</td>
<td>$10.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RANDOLPH</td>
<td>5.9%</td>
<td>5,451</td>
<td>5,164</td>
<td>105.6%</td>
<td>445</td>
<td>85.2%</td>
<td>1,900</td>
<td>4,270</td>
<td>2,923</td>
<td>3,296</td>
<td>$8.78</td>
<td>$8.14</td>
<td>$9.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STONEHAM</td>
<td>5.5%</td>
<td>4,938</td>
<td>5,348</td>
<td>92.3%</td>
<td>565</td>
<td>108.2%</td>
<td>934</td>
<td>4,004</td>
<td>4,625</td>
<td>$7.08</td>
<td>$7.81</td>
<td>$8.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SANDWICH</td>
<td>3.0%</td>
<td>5,217</td>
<td>4,737</td>
<td>110.1%</td>
<td>631</td>
<td>129.9%</td>
<td>405</td>
<td>4,812</td>
<td>4,904</td>
<td>$7.62</td>
<td>$6.86</td>
<td>$7.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>ORLEANS</td>
<td>12.5%</td>
<td>5,287</td>
<td>4,870</td>
<td>108.6%</td>
<td>2,516</td>
<td>481.9%</td>
<td>181</td>
<td>5,106</td>
<td>5,136</td>
<td>$2.03</td>
<td>$1.86</td>
<td>$2.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIDDLETON</td>
<td>3.7%</td>
<td>4,755</td>
<td>5,032</td>
<td>94.5%</td>
<td>754</td>
<td>144.4%</td>
<td>526</td>
<td>4,229</td>
<td>4,615</td>
<td>$5.61</td>
<td>$5.98</td>
<td>$6.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CARLISLE</td>
<td>8.7%</td>
<td>5,903</td>
<td>5,146</td>
<td>114.7%</td>
<td>773</td>
<td>148.1%</td>
<td>442</td>
<td>5,461</td>
<td>5,555</td>
<td>$7.06</td>
<td>$6.08</td>
<td>$7.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WESTON</td>
<td>4.4%</td>
<td>8,830</td>
<td>4,767</td>
<td>185.2%</td>
<td>1,560</td>
<td>298.8%</td>
<td>356</td>
<td>8,474</td>
<td>8,554</td>
<td>$5.43</td>
<td>$2.83</td>
<td>$5.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LINCOLN</td>
<td>15.5%</td>
<td>10,062</td>
<td>5,363</td>
<td>187.6%</td>
<td>1,654</td>
<td>316.7%</td>
<td>1,055</td>
<td>9,007</td>
<td>9,240</td>
<td>$5.45</td>
<td>$2.61</td>
<td>$5.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVERAGE</td>
<td>18.6%</td>
<td>4,944</td>
<td>5,621</td>
<td>88.0%</td>
<td>522</td>
<td>100.0%</td>
<td>1,258</td>
<td>3,687</td>
<td>4,158</td>
<td>$7.06</td>
<td>$8.36</td>
<td>$7.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL ($Mns)</td>
<td>4,049</td>
<td>4,769</td>
<td>427,564</td>
<td>1,030</td>
<td>3,019</td>
<td>3,405</td>
<td>3,019</td>
<td>3,739</td>
<td>3,405</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INCREASE</td>
<td></td>
<td>720</td>
<td>334</td>
<td>386</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cape Ann Economics
June, 1991
tion of $704 per student is 35% above the state average. It can achieve the foundation budget with a tax rate less than $10; accordingly, it is eligible only for minimum aid. Because of its wealth, it is left with a school tax rate of $7.88 - 20% below Worcester's.

Malden and Northampton have identical property tax wealth, but Malden spending falls 15% below the foundation budget while Northampton is only 3% short. Since both could achieve foundation level expenditures with less than a $10 tax rate, both are eligible only for minimum aid. Malden is required to increase its expenditures substantially; Northampton is not. As a result, the previous tax and expenditure gap between the two communities narrows substantially as a result of our program. Malden must increase its local effort 40%; Northampton only 10%.

While Sandwich and Orleans have similar expenditure levels, Orleans is far wealthier. Both are eligible only for minimum aid, and both therefore have modest increases in their previous tax rates. Because of its tremendous wealth, Orleans still has a tax rate of only $2.04. Indeed, eliminating all Orleans's aid would raise its tax rate to only $2.10.

Two Views of Fairness: At first glance, it is tempting to conclude that our plan is unfair, as it leaves Orleans with a tax rate of only $2 while forcing Worcester to raise its rate from $8.87 to $10. Another way of viewing the plan, however, is to observe that more than 100% of the new state aid is going to low income, low wealth communities like Worcester and Fall River. Aid to wealthy communities like Lincoln and Weston is decreased and the funds saved in this way, plus all new funds, are going to low income, low wealth cities and towns.

What Do We Offer Wealthy Communities? Under Proposition 2 1/2, cities and towns may raise their property tax levy only 2 1/2% per year. The ongoing state fiscal crisis has meant cuts in local aid, with the largest proportional reductions for wealthy communities. We recommend that every community be given the option of maintaining current per-pupil expenditure levels, adjusted for inflation, without need of a Proposition 2 1/2 override. With this provision, suburban communities will be able to maintain current high quality school programs. Moreover, our minimum aid plan guarantees that future aid reductions will be gradual.
While we do not require communities indefinitely to maintain expenditure above the foundation level, we do recommend that communities currently above the foundation not be allowed to make cuts deeper than those implied by level-funding on a per-pupil basis. Lincoln's current budget, for example, is $10,000 per pupil. If inflation next year is 5%, it could choose to raise its budget to $10,500 per pupil, or leave it at $10,000 per pupil. Over a five year period, this provision would give the Lincoln town meeting considerable discretion over school spending, which could remain at $10,000 or rise with inflation to approximately $12,500 (if inflation remains at 5% per year).

Proposition 2 1/2 and School Committee Autonomy: By requiring below-model communities to raise their expenditure to foundation budget levels, we undoubtedly reduce town meeting and city council discretion over school budgets. Communities do retain the right to decide whether or not to raise or continue spending above the minimum; we are not in favor of school committee autonomy and leave this discretion with city council and town meeting.

We are comfortable with the general framework of 2 1/2, which gives voters the right to decide on extraordinary increases in property taxes. We do not agree, however, that the annual ceiling should be held below the inflation rate. In effect, our plan modifies Proposition 2 1/2 so that communities can raise the school levy enough to maintain inflation-adjusted per pupil expenditure levels. Should communities wish to raise expenditure above this amount, however, the normal 2 1/2 override procedures would apply.

In separating school from municipal finances, we recommend that a new levy limit be established for non-school expenditures. If the current levy limit in a community is 102% of the total property tax levy, the new municipal limit would be 102% of the municipal levy.

Expenditure Totals: The bottom rows of the Table School Reform Plan - 1991 gives statewide totals for our plan. The average district has 18.6% low income enrollment, and currently spends $4,944 per pupil. This comes to $4.0 billion statewide. Under our plan, total spending will rise by $720 million, to $4.8 billion. Of this increase, $334 million will come in the form of increased aid payments while $386 million will be required from increased property taxes. In addition to the increase in aid payments to local schools, we recommend that the state provide another $167 million per year:

D-28
(1) School Construction: $50 million should be budgeted for increases in the school building assistance program, to pay the state share of the new facilities which will be necessary to accommodate our increased commitment to pre-school programs.

(2) Innovation: $50 million will be used to fund the Education Innovation Center included in our recommendations for revamping the Department of Education.

(3) Incentives: $50 million will be used to cover the cost of incentive payments to those schools and faculties which exceed their improvement targets.

(4) Extraordinary Enrollment Increase: $3 million will be put in a special reserve to meet the needs of those districts experiencing extraordinary increases in enrollment. As a practical matter, funding will be based on prior year enrollment; with normal changes in enrollment this should be adequate. Those few systems with October enrollment 5% or more above the previous year, however, may need funding for extra teachers.

(5) "Circuit Breaker" Relief for Low Income Families: $15 million will be used to expand existing state programs to help low income property taxpayers stay in their homes. We are conscious of the fact that our recommendation to require increases in local property tax funding as well as increases in state assistance may impose a hardship on those homeowners whose property tax obligations are particularly high in relation to their income.

The state currently has two programs to help such families. One budgets $15 million in direct state assistance; our recommended $15 million will allow a doubling of this program and a broadening of guidelines to include all eligible low income taxpayers. The second state program gives taxpayers the option of deferring their tax obligation; the tax is eventually paid out of the proceeds of the house sale when the home passes from one generation to the next. We recommend that this option also be made available to all low income property taxpayers.
Regional Schools: As regional school finance rules are somewhat different from those for city or town schools, we've given some thought as to how the MBAE plan would be applied to regional districts. The foundation budget is particular to each student - by grade level, type of program (bilingual, vocational), low income status, and region of the state. Essentially, the foundation budget follows the students, so each district will have a foundation budget which reflects the mix of its student body.

The obligation to support each student flows back from the region to the student's home community. Once the total obligation of each community is calculated (for students in all the districts to which it belongs), it is possible to determine whether the community is eligible for foundation assistance or for minimum aid. This calculation will be made separately for each community in a district, so poor towns are not penalized for joining a district with wealthier neighbors.

The actual state payment would be made directly to the district, as is now the case.

The district's budget would be subject to the same rules as regular schools - it cannot fall below the foundation level or last year's nominal expenditure per pupil, whichever is higher. It may rise with enrollment and inflation. Within this band, town meetings decide. As is currently the case, both towns must concur in a two community district and two thirds in a larger district.

Annual Procedure: Each year, in advance of the fiscal year, a foundation budget would be calculated for each community. In normal times, this calculation would be automatic, based on equalized valuation and enrollment. In extraordinary times, such as a prolonged period of declining valuations but rising school costs, or during a major state crisis, budgets would be determined by a commission made up of public and private sector representatives and headed by the Massachusetts Taxpayers' Foundation. In any case, this commission would meet to review the process every three years, or at the call of the Governor, and report its findings on the system and recommendations for improvement.

Conclusion: We believe that the financial recommendations we have made lay the basis for achieving educational excellence in Massachusetts. They provide substantial new funds for low income communities while capping their
tax rates at a reasonable level. At the same time, we have not dealt punitively with wealthy communities and have modified the 2 1/2 ceilings to allow them to maintain current school quality. While modifying 2 1/2 to allow for inflation and the move to model budget expenditure levels, we have maintained the general framework which requires override votes to enact unusually large spending increases.
FOUNDATION BUDGET ASSUMPTIONS

ASSUMPTIONS - SALARIES

<table>
<thead>
<tr>
<th>Position</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>37</td>
</tr>
<tr>
<td>Principals</td>
<td>60</td>
</tr>
<tr>
<td>Aides</td>
<td>9</td>
</tr>
<tr>
<td>Clerical</td>
<td>18</td>
</tr>
<tr>
<td>Nurses</td>
<td>24</td>
</tr>
<tr>
<td>Custodians</td>
<td>24</td>
</tr>
<tr>
<td>&quot;Combat Pay&quot; Bonus</td>
<td>10%</td>
</tr>
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</table>

MAINTENANCE

<table>
<thead>
<tr>
<th>Description</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Feet per Teacher</td>
<td>2,200</td>
</tr>
<tr>
<td>Maintenance Employees per 100,000 Sq Feet</td>
<td>6.0</td>
</tr>
<tr>
<td>Maintenance Overtime/1000 Sq Ft</td>
<td>32</td>
</tr>
<tr>
<td>Utilities/1000 Sq Ft</td>
<td>1,014</td>
</tr>
<tr>
<td>Bldg Maint Supp'les/1000 Sq Ft</td>
<td>901</td>
</tr>
<tr>
<td>Extraordinary Maintenance - per Teacher</td>
<td>3,379</td>
</tr>
</tbody>
</table>

BENEFITS, INSURANCE, MISC.

<table>
<thead>
<tr>
<th>Description</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Insurance Participation Rate</td>
<td>90%</td>
</tr>
<tr>
<td>Premiums per Enrollee</td>
<td>4,166</td>
</tr>
<tr>
<td>Other Insurance per Employee</td>
<td>442</td>
</tr>
<tr>
<td>Staff Development - % of Teacher Salary</td>
<td>2.5%</td>
</tr>
<tr>
<td>Misc, Legal per Student</td>
<td>33</td>
</tr>
</tbody>
</table>

INFLATION FACTORS

<table>
<thead>
<tr>
<th>Description</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>4.1%</td>
</tr>
<tr>
<td>Books, Equipment</td>
<td>5.1%</td>
</tr>
<tr>
<td>Utilities, Maintenance Supplies</td>
<td>6.1%</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>15.0%</td>
</tr>
</tbody>
</table>
FOUNDATION BUDGET ASSUMPTIONS

**SPECIAL PROGRAMS**

<table>
<thead>
<tr>
<th>Pre-School Yrs</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-School %</td>
<td>50%</td>
</tr>
<tr>
<td>Use low income? (1=yes, 0=no)</td>
<td>1</td>
</tr>
<tr>
<td>Offer Pre-School to all Children? (Yes=1)</td>
<td>0</td>
</tr>
<tr>
<td>Offer Extended Year to all Children?</td>
<td>0</td>
</tr>
<tr>
<td>Extra Counselors, Teachers per 100 Low Inc Studs</td>
<td>3</td>
</tr>
</tbody>
</table>

**Summer**

- Cost per Teacher per Day (Half-Day Program) | 76 |
- Students per Teacher | 15 |
- Weeks per Year | 12 |
- Cost per Student per Year | 364 |

**Extended Day**

- Cost per Teacher per Day | 87 |
- Students per Teacher | 15 |
- Weeks per Year | 35 |
- Cost per Student per Year | 1,213 |

**Summer, Extended Day - Expenses % of Salary** | 20% |

**Percent of Teachers with Extra Time** | 33% |

**Extra Teacher Months** | 1 |

**Parents as Teacher** | 540 |
**Years Offered Each Student** | 2.0 |

**SPECIAL EDUCATION**

| SPED FTE (in School) Students % Total | 3.5% |
| SPED Students Tuitioned Out % Total | 1.0% |
| Sped Tuition Students % Consortium | 60% |
| Sped Tuition - Consortium | 16,250 |
| Sped Tuition - Private | 21,666 |
| SPED FTE (in School) - Voc Schools | 4.3% |
| Sped Tuitioned out - Voc Schools | 0.0% |
### Foundation Budget Assumptions

#### Assumptions - Student/Faculty Ratios

<table>
<thead>
<tr>
<th>Class Type</th>
<th>Class Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-School</td>
<td>15</td>
</tr>
<tr>
<td>Elementary</td>
<td>22</td>
</tr>
<tr>
<td>Jr. High</td>
<td>25</td>
</tr>
<tr>
<td>Sr. High</td>
<td>18</td>
</tr>
<tr>
<td>Sped Class</td>
<td>8</td>
</tr>
<tr>
<td>Biling Class</td>
<td>15</td>
</tr>
<tr>
<td>Occ Class</td>
<td>10</td>
</tr>
</tbody>
</table>

**Support (Guidance, Library, etc.) per 100 students**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular, Biling, Occ</td>
<td></td>
</tr>
<tr>
<td>Elem</td>
<td>1.45</td>
</tr>
<tr>
<td>JrHigh</td>
<td>2.80</td>
</tr>
<tr>
<td>SrHigh</td>
<td>0.42</td>
</tr>
<tr>
<td>Sped</td>
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</tr>
<tr>
<td>Guidance, Therapy</td>
<td>7.60</td>
</tr>
<tr>
<td>Supervisors</td>
<td>1.50</td>
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<tr>
<td>Principals</td>
<td></td>
</tr>
<tr>
<td>Elem</td>
<td>0.30</td>
</tr>
<tr>
<td>JrHigh</td>
<td>0.35</td>
</tr>
<tr>
<td>SrHigh</td>
<td>0.35</td>
</tr>
<tr>
<td>Aides</td>
<td></td>
</tr>
<tr>
<td>Elem</td>
<td>1.20</td>
</tr>
<tr>
<td>JrHigh</td>
<td>0.20</td>
</tr>
<tr>
<td>SrHigh</td>
<td>0.08</td>
</tr>
<tr>
<td>Sped</td>
<td>12.50</td>
</tr>
<tr>
<td>Clerical</td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td>0.45</td>
</tr>
<tr>
<td>SPED</td>
<td>2.00</td>
</tr>
<tr>
<td>Central</td>
<td>0.20</td>
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<tr>
<td>Central Administrators</td>
<td>0.25</td>
</tr>
<tr>
<td>Nurses</td>
<td></td>
</tr>
<tr>
<td>Elem</td>
<td>0.15</td>
</tr>
<tr>
<td>Jr High</td>
<td>0.10</td>
</tr>
<tr>
<td>Sr High</td>
<td>0.05</td>
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</tbody>
</table>

**Substitute Expenditure per Student**

<table>
<thead>
<tr>
<th>Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elem</td>
<td></td>
</tr>
<tr>
<td>Jr High</td>
<td>49</td>
</tr>
<tr>
<td>Sr High</td>
<td>195</td>
</tr>
</tbody>
</table>

**Equipment/Supplies per Student**

<table>
<thead>
<tr>
<th>Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS</td>
<td>387</td>
</tr>
<tr>
<td>Elem, JrHigh</td>
<td>249</td>
</tr>
<tr>
<td>Sped</td>
<td>442</td>
</tr>
<tr>
<td>Voc</td>
<td>663</td>
</tr>
</tbody>
</table>

**Athletics Exp per Student**

<table>
<thead>
<tr>
<th>Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jr High</td>
<td></td>
</tr>
<tr>
<td>Sr High</td>
<td>195</td>
</tr>
</tbody>
</table>

**Extra-Curricular Activity per Stud**

<table>
<thead>
<tr>
<th>Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elem</td>
<td>22</td>
</tr>
<tr>
<td>Jr High</td>
<td>32</td>
</tr>
<tr>
<td>Sr High</td>
<td>43</td>
</tr>
</tbody>
</table>

**SPED Contracts per Stud (in Misc)**

812
Massachusetts Business Alliance for Education (MBAE)

Corporate Headquarters
900 Technology Park Drive
Billerica, MA 01821
Telephone (508) 667-8800
Facsimile (508) 667-8873

Administrative Offices
405 Grove Street
Worcester, MA 01605
Telephone (508) 754-9425
Facsimile (508) 831-1303