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ABSTRACT

This document contains eight articles that offer a nonpartisan evaluation of the pros and cons associated with tax reforms. They were written by members of the Technical Study Group, which was established by the New York State Department of Education in 1994 to examine the generation of revenue for public education. The work of the study group comprises four broad categories: an overview and critique of the property tax as practiced in New York; proposals for reforming the real property tax; proposals for shifting tax burdens away from real property; and proposals for generating resources through improvements in the management of educational systems. Following the executive summary by David H. Monk, the contents include: (1) "Raising Revenues for New York's Public Schools: A Synthesis of Options for Policymakers" (David H. Monk); (2) "Discrepancies Between Ideal Characteristics of a Property Tax System and Current Practice in New York" (Dick Netzer and Robert Berne); (3) "Taxpayer Burden and Local Educational Finance in New York" (Hamilton Lankford and James Wycoff); (4) "Regional School Taxing Units: The Texas Experience" (Catherine Clark); (5) "Statewide Taxation of Nonresidential Property for Education: A Policy Proposal for New York State" (Helen F. Ladd and Edward W. Harris); (6) "Reducing Reliance on the School Property Tax: Rationales and Results" (Robert P. Strauss); (7) "Reducing Local School Property Taxes: Recent Experiences in Michigan" (C. Philip Kearney); and (8) "Finding Resources by Changing Management and Organization" (Allan Odden). The executive summary lists policy options for the consideration of New York State officials. (LMI)

New York State Board of Regents

Study on the Generation of Revenues for Education

Final Report

The University of the State of New York

The State Education Department

New York State Board of Regents

Study on the Generation of Revenues for Education

Final Report

David H. Monk, Chair
Department of Education
College of Agriculture and Life Sciences
Cornell University

February 3, 1995

Foreword

It is with gratitude that I accept the enclosed report on behalf of the Board of Regents from the Regents Study Group on the Generation of Revenues for Education. This study has engaged some of the nation's leading scholars on tax and school revenue issues and has produced a body of information, geared to New York State, at a time when public interest is at an all-time high. The study provides policymakers with a non partisan evaluation of the pros and cons associated with a number of widely discussed but seldom analyzed tax reforms.

In response to the high quality and timely work of the Regents Study Group, the Regents have incorporated three recommendations in their 1995-96 proposal to the State Legislature and Governor on school aid, dated February 3, 1995. The Regents recommended that:

- The Governor and Legislature create an interagency task force to evaluate and make recommendations concerning the administration of the property tax in New York State consisting of representatives of pertinent State agencies and local officials;

- The Governor and Legislature enact an enhanced income tax *circuit breaker* for real property taxes to provide relief for certain tax payers where the property tax burden is excessive in relation to their incomes; and

- The Regents Subcommitttee on State Aid continue to engage experts for the purpose of reviewing policy options which could result in the reform of funding for school districts. They would consider topics such as the use of sales and income tax to support schools, taxation of commercial properties on a statewide basis, and regional taxing units.

I join the members of the Board of Regents in urging the Legislature and Governor to consider and act upon our recommendations.

R. Carlos Carballada
Chancellor, Board of Regents

New York State Board of Regents Study on the Generation of Revenues for Education

Final Report

David H. Monk, Cornell University, Chair

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Acknowledgements

The work of the Technical Study Group was completed thanks to the efforts of many individuals who gave generously of their time and expertise. Brian Brent, an advanced graduate student at Cornell, provided logistical support for the Study Group and responded to data and reference needs of Study Group members. Deborah Cunningham served as our liaison with the State Education Department and organized communication and dissemination efforts. Ruth Henahan was instrumental in coordinating data requests and provided technical support as questions about the data arose. Andrea Hyary provided valuable assistance in the development of a background analysis that helped to launch the Study Group's research program.

In addition, numerous individuals from the State Education Department State Aid Work Group and various other State agencies provided information and/or reacted to earlier drafts of materials. Finally, Regent Carl Hayden and Acting Deputy Commissioner James Kadamus graciously hosted both meetings of the Study Group and helped the Group stay focused on the Charge from the Board of Regents.

We wish to acknowledge these many contributions and offer the hope that the resulting research will assist policy makers in their efforts to improve the operation of State fiscal systems.

D. H. Monk
Ithaca, New York

Contents

Executive Summary

David H. Monk

High and growing levels of dissatisfaction with tax burdens in New York State have prompted interest in the reform of how revenues are raised for public education. The New York State Board of Regents recognized the salience of this issue in its 1994 State Aid proposal where it called for the formation of a Technical Study Group to study the generation of revenue for public education. The State Education Department established the Study Group during the summer of 1994, and selected 12 members on the basis of their national reputations for research and technical areas of expertise.

The Study Group met twice, once in September on the Cornell University campus where it formulated its research agenda, and once in December in Albany to conduct a public symposium where its research findings were presented. The Study Group developed a series of Policy Briefs that provides a written record of the research that was conducted. In addition, the Study Group prepared this synthesizing document that is designed to draw the findings together in a way that will serve the needs of policymakers.

The work of the Study Group can be grouped under four broad headings:

(1) an overview and critique of the real property tax as it is practiced in New York;

(2) proposals for the reform of the real property tax;

(3) proposals for shifting tax burdens away from real property; and

(4) proposals for generating resources through improvements in the management of educational systems.

Overview and Critique of the Real Property Tax

Members of the Study Group examined the burden imposed on New York taxpayers in the form of property taxes and found that it has been rising in recent years. The magnitude of the burden has increased by 13 percent since the 1980s, but in an absolute sense the level of burden is not high by historical New York State standards. Moreover, most of the increase is due to a cyclical slowing in the growth of income and shifts in funding responsibilities from State to local governments.

Current New York State property tax practices were contrasted with a set of ideal standards, and large discrepancies were found. Even more important is the fact that large discrepancies were found between current New York practices and prevailing common practices in other states. These discrepancies included: a) the absence of a clear standard of value; b) a heavy reliance on small administrative units to administer the tax; c) the use of atypical methods to assess "hard-to-assess" properties such as utilities and transportation carriers; d) highly complex and obscure methods for providing tax preferences; e) infrequent revaluations of properties; and f) the presence of a dual system that provides a separate set of rules for the operation of property taxes in New York City and Nassau County.

Proposals for the Reform of the Property Tax

These discrepancies prompted an exploration of administrative reforms that would improve the operation of the New York system. Attention was also paid to a series of more fundamental changes in the design of New York's tax on real property. Particular attention was paid to reforms of circuit breakers, shifts in responsibility for the administration of the tax to regional taxing units, and the taxation of nonresidential properties at the State rather than the local level.

Property taxes are widely considered to be regressive taxes, and the Study Group found elements of regressivity in the property tax that currently operates within New York. Circuit breakers, in particular, are designed to reduce the regressive nature of the property tax. New York currently operates a circuit breaker program, although it is quite modest in size.

The study provides first approximation estimates of the cost of implementing alternative types of circuit breaker reforms. These costs ranged between a high of $832 million for the adaptation of a Vermont-style circuit breaker and a low of $304 million for a modest expansion of the current New York circuit breaker. These estimates overstate the likely costs because they are based on the assumption of full participation, and experience teaches that not all eligible taxpayers participate in circuit breaker programs.

The study reports the Texas experience with shifting the administration of the property tax to regional units of government. The potential for this type of reform to enhance equity without requiring additional State dollars is explored. The study also provides insight into the quantitative impact of shifting nonresidential properties to the State. The empirical analysis demonstrates that such a shift by itself would likely have adverse effects on the pursuit of student equity goals and would require a supplemental equalizing program of State Aid. The study provides insight into alternative designs of this offsetting program of State Aid.

Proposals for Shifting Taxes Away from Real Property

The study also considers the merits of policies designed to reduce reliance on the real property tax as a source of revenue for education. Two options in particular are examined: a) a shift to a local income tax; and b) a shift to a State sales tax that is similar to the reform recently pursued in Michigan.

A series of simulation analyses were conducted as a part of the study, and these provide insight into what would happen if New York abandoned the local property tax in favor of a local income tax. One of the findings is that on average a local income tax of between six and seven percent would be required, but there would be considerable variation around these averages. In particular, some low income areas would have to impose a local income tax at rates approaching 20 percent in order to maintain current spending levels. Local variation in income is an important cause of this variation, and the study includes an exploration of ways the State could intervene to offset these inequalities.

The analysis of a shift from local property taxes to state sales taxes is based on the recent experience in Michigan. The study reports that Michigan raised the state sales tax two percentage points and decreased the local property tax from an average of 34 mills to a state mandated level of 6 mills and a local levy of 18 mills on nonhomestead property (if authorized by voters). The study demonstrates a large shift in support from local to state sources in the first year of the reform (the state share increased from 33 percent to 79 percent) and a large decline in the role played by the tax on real property.

The study also contrasts the Michigan experience with the experiences of three other states that recently moved to reduce property taxes (California, Massachusetts, and Oregon). Michigan is the only state where the legislature replaced lost revenues. Indeed, in Michigan the reform led to a four percent increase in the overall level of funding. In the other states, no specific actions were taken by the legislature either to enact new taxes, raise rates, extend bases on existing taxes, or further earmark existing taxes. In these other states, the reduction of property taxes translates into increases in the state share but decreases in total levels of funding.

Proposals for Generating Resources for New Uses

Finally, the study includes an examination of the prospects of generating resources through improvements in the management of educational systems. The study provides an overview of recent research dealing with educational productivity and draws attention to on-going reforms that promise to improve efficiency. Explicit attention is paid to reforms of managerial structures that are designed to provide greater decision making autonomy at the individual school level of educational systems.

Conclusions

Members of the Study Group explored a wide range of policy options for New York State officials to consider. In broad summary form these include the following:

1. Reforms in the practice of taxing real property so that its administration corresponds more closely with best (or at least common) practice elsewhere in the nation.

2. Efforts to resolve concerns over a lack of correspondence between property taxes and ability to pay by instituting circuit breakers or other reforms that better match tax liability with ability to pay.

3. Attempts to address structural concerns over equity and efficiency in the operation of the property tax by instituting regional taxing units and/or taxing nonresidential properties at the State level.

4. Shifts away from reliance on the tax on real property either because of inherent flaws or because progress toward resolving manufactured flaws has been so difficult to achieve.

5. Efforts to generate resources through improvements in the productivity of schools and districts.

There are several observations to make about this list. First, the items are not mutually exclusive. The State could simultaneously work to reform its property tax system, reduce reliance on its use by shifting to alternative taxes (e.g., income and/or sales), and make managerial improvements and thereby reduce pressure on all sources of revenue. Clearly, it is possible to make progress on all fronts simultaneously, although there would be a risk of sending confusing signals to the public.

Second, the options are ordered roughly in terms of their relative level of ambition and degree of departure from the status quo. This is not to suggest that administrative reforms of real property tax administration will be easy to accomplish in any absolute sense. However, policymakers need to recognize that the property tax is in place, and that reconceptualizations of its structure and reductions in its use represent larger interventions than a relatively straightforward tightening and reform of existing administrative procedures. The final option regarding productivity improvements is in some respects the most fundamental and far reaching since it has implications for virtually every aspect of schooling systems.

Third, there is an important sense in which option #1 is a prerequisite for success with any of the property tax reform options. Option #1 needs to be taken seriously even by those who are highly critical of the property tax as a source of any revenue for public education. Michigan sought to eliminate the property tax but found it necessary to restore its operation, although at a much diminished level. The point is that movement away from the property tax as a revenue source is not the same as the elimination of the property tax, and so long as the property tax plays some role it makes good sense to adopt best practice administrative methods. It seems self-evident that the tax on real property will continue to play some role in New York State school finance in the foreseeable future.

Fourth, these options need to be viewed in light of buffers and other transitional adjustments that could significantly smooth the implementation of reform. Abrupt changes in tax policy can have serious and far reaching dislocating effects. Periods of gradual transition can help the system reach a new and ultimately more acceptable equilibrium with a minimum of disruption.

Fifth, and finally, there remain serious gaps in the knowledge base. A number of the Policy Briefs provide first approximations of the benefits and costs of commonly proposed tax reforms. This is an important step forward, but falls short of the kind of definitive analysis policymakers would prefer before committing themselves to ambitious reform agendas. Of course, it is always possible to do more research and to have more thorough studies, and a balance needs to be struck between the need to know more and the need to resolve pressing problems.

The Study Group's work provides a good example of how scholars can contribute to the development of policy. Members of the Study Group articulated concrete policy options and developed balanced assessments of their implications. The approach has been non-partisan and has not involved taking advocacy positions. It would be prudent now for members of the Board of Regents or other policy making groups within the State to use the work of this Study Group to narrow the range of options and to then pursue a more focused set of analyses.

Ultimately it is policymakers and not scholars who must make the difficult judgments where values are balanced and compromises are reached. These judgments can be better made thanks to the kind of information provided in this report. It has been a privilege for members of this Study Group to build this information base. Each member commented favorably on the process, and the collective hope is that the results will help to inform the very important debate that will transpire over the near term.

Raising Revenues for New York's Public Schools:

A Synthesis of Options for Policymakers

David H. Monk

Raising Revenues for New York's Public Schools:

A Synthesis of Options for Policymakers[1]

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[1] This report is based on research conducted by members of the New York State Board of Regents Technical Study Group on the Generation of Revenues for Education. The views expressed are those of the author and do not necessarily represent the official position of the Board of Regents.

I. Introduction

There is increasing awareness of a need to make fundamental change in how revenues are raised for public schools, especially tax revenues at the local level. As of March 1994, 28 states were involved in litigation dealing with the financing of education, and 11 states were reviewing the use of the real property tax as a major source of local tax revenue for public education. Some states, perhaps most notably Michigan and Texas, have implemented far-reaching reforms. The 1994 elections saw no fewer than 14 states with ballot propositions that dealt with school revenue issues,[2] and there is a growing sense that policy makers need to become more sensitive to inequities and inefficiencies associated with the generation of resources for education.

These are particularly pressing issues in New York State. The local share of school dollars is relatively large and has grown over the past decade. This growth has stimulated growth in local property tax burdens and has given rise to increasing levels of taxpayer dissatisfaction. Judging from budget defeats alone, it is clear that taxpayers are increasingly discontent. The outcome of the recent gubernatorial election, where the successful candidate ran on a tax reduction platform, adds further legitimacy to the claim that taxpayers in New York are looking for significant change in how revenues are raised for public services in general and schooling services in particular.

Within the past few years there have been several proposals in New York for far-reaching change in how resources are provided for public education. In the 1993 State of the State message, Governor Cuomo proposed that school districts be given the option of raising local revenues from income taxes raised at the county level. Proposals for reform have also emanated from the Legislature. Senator Cook and Assemblyman Luster cosponsored a bill during the 1994 session that would have provided districts with the option of shifting away from the use of the local property tax to fund school operating costs.

The New York State Board of Regents recognized the importance of these issues in its 1994 State Aid proposal where it called for the formation of a Technical Study Group to study the generation of revenue for education. The State Education Department established the Study Group during the summer of 1994, and selected 12 members on the basis of their reputations for research and technical areas of expertise. The Technical Study Group's membership is as follows:

David H. Monk, Cornell University, Chair

Dick Netzer and Robert Berne, New York University

Hamilton Lankford and James Wyckoff, SUNY-Albany

C. Philip Kearney, University of Michigan

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[2] *Education Week*, November 16, 1994, pg. 24.

Catherine Clark, Texas Center for Education Research

Robert Strauss, Carnegie-Mellon University

Helen F. Ladd and Edward Harris, Duke University and the Internal Revenue Service, respectively

Ronald Ferguson, Harvard University

Allan Odden, University of Wisconsin-Madison

Members of the Study Group held two public meetings. The first took place in September on the Cornell University campus, and the purpose was to learn more about the New York context and to choose topics for further analysis. The second meeting took place on December 13th in Albany where Study Group members presented the results of their research efforts. This document provides an overview and a synthesis of the Study Group's work. In addition, members produced a total of seven Policy Briefs that address in more detail various areas of the debate. These Policy Briefs are available from the State Education Department's Office of Central Services. Interested readers can find a complete citation for each Policy Brief in Appendix A of this document.

The work of the Study Group can be grouped usefully under four broad headings: (1) an overview and critique of the real property tax; (2) proposals for the reform of the real property tax; (3) proposals for shifting taxes away from real property; and (4) proposals for freeing resources through improvements in the management of educational systems. These rubrics will be used to organize this synthesis of the Study Group's work.

The synthesis begins in Section II with an overview and critique of the property tax in New York. The discussion sets the stage for the remaining sections of the report. In Section III attention turns to an exploration of a number of alternative property tax reforms. The presumption is that the property tax is a viable if flawed mechanism for supporting schools, and that it can be made to function more effectively through reforms of its administration and design. In Section IV, the focus moves to a very different point of view. There, the proposition is that the property tax is sufficiently flawed (either because of its inherent nature or because the prospects for administrative reform are so remote) to warrant a significant shift away from its use. In Section IV, the focus is on proposals designed to shift away from the property tax and toward alternative tax instruments, most notably taxes based on either income or sales. In Section V, the focus is on proposals to generate resources through improvements in how schools are operated. The presumption in Section V is that efficiency gains are possible within public education and that the realization of these gains will free resources for alternative uses.

The primary purpose of the Study Group has been to inform the debate over revenue issues that affect education in New York State.[3] The goal has *not* been to advocate one or even several avenues of reform. Instead, the hope has been to broaden horizons, to learn from the experiences of others, to make first approximation estimates of the impact of several different possible reforms, and ultimately to give policymakers in the State a better and more realistic sense of their options. While in certain cases individual authors of the Policy Briefs advocate particular policies, the Study Group as a whole has refrained from taking an advocacy position. The function of the Study Group is educational. The goal has been to explore the issues and to provide balanced assessments of the pros and cons associated with alternative policies.

II. Overview and Critique of the New York State Tax on Real Property

Any study of revenue for education in New York State must pay close attention to the tax on real property. In 1992-93, the property tax raised $11.370 billion dollars, or 91.4 percent of local revenues provided for public K-12 education. These property tax revenues comprised 51.1 percent of all revenues devoted to public K-12 education in that year.[4]

It is clear that the tax on real property is a veritable "workhorse" for raising public school revenues, and reasonably lies at the center of the Study Group's research agenda. The discussion begins with an overview of property tax burdens and then moves to a set of contrasts between an idealized property tax system and current practice within New York State.

Levels of Property Tax Burden and Incidence

The Policy Brief prepared by Professors Lankford and Wyckoff provides estimates of the level of burden imposed by taxes on real property in New York. They rely upon several measures of property tax burden and note that they dealt primarily with the statutory (in contrast to the economic) impact of the taxes in question. They conducted longitudinal as well as cross-sectional analyses at the State, regional, and individual taxpayer level. Their results are summarized below and provide background information about the impact of property taxes in New York.

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[3] See Appendix B for a copy of the official charge to the group.

[4] These figures come from the New York State Education Department, *Analysis of School Finances 1992-93*. Albany, New York.

Statewide burdens. On average, the property tax in New York in recent years has become somewhat more burdensome relative to the late 1970s. For localities outside New York City, the average ratio of total property taxes (including noneducational uses) to personal income was 6.3 percent in 1977. This ratio decreased to 5 percent in 1980 and remained at that level until 1989 when it began to increase. By 1992, this measure of burden had increased to 5.6 percent.

Lankford and Wyckoff note that measured in this way, the burden of property taxes in the non-New York City portion of the State increased 13 percent since the 1980s but is not extraordinarily high by historical standards. They found a similar pattern for New York City. At the same time, they found that during the early 1990s, reductions in State Aid to school districts as well as to other units of local government increased pressure on the local property tax as a source of revenue.

Regional burdens. The pattern of burden also varies across regions of the State. All counties experienced an increase in burden between 1987 and 1992, but well over half have lower burdens in 1992 than was the case in 1977. Again, the finding is that burdens have increased in recent years but are not high and in some cases are low by historical standards. Lankford and Wyckoff go on to note that in several of the counties where the nominal level of property tax burden appears to be high (e.g., upwards of 18 percent in one county) the numbers are misleading due to a need to adjust for tax exporting.[5]

Individual burdens. A number of difficulties attend the estimation of property tax burdens at the individual level. For example, income levels for individuals can fluctuate dramatically from one year to the next and can provide misleading indications of ability to bear a tax. Moreover, individual property tax burdens are to some extent a function of preference for holding housing assets. Policymakers need to be careful about mixing burdens that are chosen voluntarily with those that are unavoidable in a more fundamental sense.

With these caveats in place, Lankford and Wyckoff provide estimates of how individual property tax burdens are distributed across types of individuals using 1989 data. They found that the households most burdened by the property tax generally have relatively low levels of income, relatively high levels of house value, and are more likely to be headed by an elderly individual. The story these data tell is one where a disproportionately heavy property tax burden occurs for people who have retired and seen their current income reduced relative to previous earnings.

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[5] For example, some counties in the State are characterized by large amounts of resort properties owned by nonresidents and low levels of resident personal income. The level of property taxes relative to personal income can be high in such counties, but it would be misleading to conclude that the tax burden is high since a significant portion of the property tax is in fact paid by nonresidents.

Property tax incidence. The analysis of individual tax burdens leads quickly to questions about the tax's degree of regressivity. The principle issue concerns variation in the ultimate incidence of the tax across taxpayers with differing abilities to pay. Taxes that constitute *larger* proportions of the fiscal capacity of those *less* able to pay are said to be regressive; progressive taxes have the opposite impact. Regressiveness is generally viewed as a disagreeable feature of a tax that undermines commitments to equity.

The property tax is commonly viewed as a seriously regressive tax, particularly within the popular press. Economists and others who have studied this question carefully tend to reach a more guarded conclusion and note that different features of the property tax can have either regressive or progressive features depending on a number of structural considerations.

Two of the Policy Briefs prepared by members of the Technical Study Group address the question of regressiveness explicitly. Lankford and Wyckoff stress the complexity of measuring the economic incidence of taxes and are careful to point out that their analyses of burdens are not sufficient to justify firm conclusions about the economic incidence of the property tax across taxpayers with differing fiscal capacities.

Professors Dick Netzer and Robert Berne also address the tax incidence question and explore the issue conceptually providing insight into how closely conditions in New York match the conditions under which the property tax is likely to have a net regressive impact. They reach the conclusion that a property tax that is relied upon as heavily as is the case in New York will likely have a net regressive impact. They go further and conclude that many of the unique methods New York currently employs to administer its property tax serve to exacerbate the regressive impact. As they put it, ". . . it is difficult to think of a feature of the property tax system in New York that differs greatly from the usual practice in other states that does *not* add to the regressivity of the tax in New York (pg. 10)."

Conclusions about property tax burdens. Lankford and Wyckoff conclude that the increase in property tax burdens in New York is real but not as large as is commonly supposed. They also conclude that the growth has occurred primarily due to cyclical slowing in the growth of income and shifts in funding responsibilities from state to local governments. In their view, these increases in burden do not stem from inherent flaws in the property tax instrument as a device to raise revenues for public services such as education. However, they do see problems with the current administration of the property tax for some individuals, particularly for retired individuals with relatively modest levels of current income. Lankford and Wyckoff argue for making reforms in the existing property tax to better enable it to function as a source of revenue for public schools.

Netzer and Berne reach a similar conclusion regarding the regressive impact of the tax. They draw attention to the administrative problems surrounding the property tax system in New York and advocate reform at this level.

These arguments set the stage for the following comparison between an idealized property tax system and the current administrative realities in New York. The Policy Brief prepared by Professors Dick Netzer and Robert Berne provides this kind of comparative analysis.

Ideal Characteristics of a Property Tax System

According to Netzer and Berne, an ideal property tax system needs to be:

- transparent and straightforward, in the sense of being comprehensible by ordinary voters and property owners;
- systematic, in the sense of having few, if any, internal contradictions, that is, features that work to offset or negate other features for some groups of taxpayers (and therefore may be inadvertent, rather than deliberate, policy choices);
- and reasonably related to the policy objectives that animate the various provisions, rather than clumsy and inappropriate expressions of the policy preferences.

They go on to note the crucial importance of an appropriate administrative foundation for any tax on real property. The importance of this administrative foundation is particularly noteworthy given the fact that in contrast to virtually all other tax instruments the real property tax relies upon an administrative agency to determine the basis for tax liability. Administrative deficiencies can quickly call into question the very legitimacy of the tax.

The Netzer and Berne Policy Brief spells out the components of a good administrative structure. The recurring theme in their list of components is clarity, uniformity, and correspondence to established legal standards. They emphasize the importance of keeping the system up-to-date, and note that according to the International Association of Assessing Officers, best practice requires annual revaluations of properties. Finally, they recognize the importance of establishing a statewide means of ensuring equalization across the various taxing jurisdictions.

Discrepancies Between Ideal Standards and Current Practice in New York

Large discrepancies exist between current practice in New York State and the ideal standard that is envisioned by Netzer and Berne. What follows is a summary of the discrepancies as perceived by Netzer and Berne:

1. There has not been a clear standard of value specified in the Real Property Tax law since 1981. The New York courts have required some degree of "uniformity" in assessments, but the courts have not provided clear guidelines. Paraphrasing Professor Netzer at the December 13th symposium, " . . . it is as if tax administrators were told that for income tax purposes they could define taxpayers' income as they saw fit."

2. Assessments tend to be handled at the individual city and town level and this gives rise to several problems:

a) loss of scale economies owing to the small size of many of these jurisdictions;

b) inconsistencies in the level of training provided to assessors;

c) difficulties associated with establishing equalization rates due to the small number of parcels changing hands in some of the smaller jurisdictions;

d) and inconsistencies in the treatment of different classes of properties.

Netzer and Berne note that in more than 40 states, property tax administration is done largely by county-level organizations, rather than by smaller units of government.

3. New York's treatment of various types of "hard-to-assess" pieces of property also departs from commonly accepted practice in many other states. Professors Netzer and Berne note that property of utilities and transportation carriers in New York is valued in regrettable ways that are used in almost no other state.[6] It is worth noting that the special rules governing the assessment of agricultural properties recently were the subject of a conference sponsored by the New York Farm Bureau, the American Farmland Trust, and the Legislative Commission on Rural Resources (1994). Judging from the results of this conference, dissatisfaction with the existing special rules is widespread both within and outside the Agricultural sector. There is,

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[6] More specifically, they point out that utility properties in New York are valued by local assessors on a basis almost wholly unrelated to the value of taxed assets as operating utility property. The rules result in very high levels of taxation of utility property, with bonanzas for some jurisdictions at the expense of everyone else in that utility's service area. They offer the recent experiences with the Shoreham nuclear power plant as a good example of these effects. They also note that railroad properties are assessed under rules that also produce very high levels of property taxation, compared to the treatment of railroad property in all other states. However, railroad properties are assessed at the state level, so the problem does not lie solely at the local level.

in fact, an ongoing study of the impact of real property taxes on farming in New York that is being conducted by the Agricultural Advisory Council under provisions of the 1992 Agricultural Protection Act.

4. New York's system for providing tax preferences is exceedingly complex, obscure from public view, and functions in ways that foster regressivity.

5. Annual reassessment is unknown and typically reassessment is infrequent. The "welcome-neighbor reassessment tax" is common in some parts of the State. As Netzer and Berne put it, "The result of infrequent reassessment often is a markedly lower level of assessment of properties that have increased most in value recently, compared to those whose value has increased modestly or even declined (pg. 4)."

6. The dual system that exists within the State whereby New York City and Nassau County operate under a unique set of rules promotes inequity within the system.

This discussion provided an overview and critique of how the tax on real property currently functions within New York State. Various conclusions can be drawn, and each tend to point in different directions for policy. Members of the Technical Study Group explored the viability of two distinct policy directions: (1) maintenance of the property tax but with reforms in its operation; and (2) reductions in reliance on the real property tax. These policy directions are explored, in turn, within the following sections of the report.

III. Reform of the Tax on Real Property in New York

The presumption carried throughout this section is that the tax on real property in New York is seriously flawed but redeemable in a number of alternative ways. Several distinct strategies for reform will be examined. First, the focus will be on reforming a number of administrative practices within a largely intact system. In other words, the strategy will be to maintain the property tax at the local level and make a number of relatively minor (although not necessarily easy to accomplish) administrative reforms. Second, there is an assessment of mechanisms designed to address the regressive features of the property tax. Third, the focus shifts to a more ambitious reform that entails establishing regional taxing units. Fourth, and finally, attention will be given to a proposal to shift nonresidential property to the State level. It is worth stressing that these approaches to reform are not mutually exclusive. Indeed, a recurring theme will be that the administrative reforms explored first are in many respects, prerequisite for realizing the more ambitious reforms discussed later in the section.

Administrative Reforms

The basic goal here is to bring New York into compliance with administrative practices that are common elsewhere in the country. The policy options for reform include

the following:

1. Adopt market value as the legal standard of value and explicitly require uniformity in terms of market value, adopt statewide rules governing the degree of intra-class differentials that is permissible, and establish rules governing the frequency of re-valuation.

2. Rely upon counties to administer the property tax system and thereby a) take advantage of the scale economies that are available, and b) reduce the difficulty of achieving accurate equalization rates.

3. Rely increasingly on the State to assign value to special (hard-to-assess) properties such as public utilities and transportation carriers and simplify the rules that give rise to the values. New York's experience with assessing railroad properties makes it clear that simply moving assessment responsibilities to the State level is no guarantee of achieving straightforward and transparent assessing practices that are widely perceived to be fair.

4. Reduce the utilization of complex and obscure rules that currently govern the distribution of tax preferences for eligible taxpayers.

Circuit Breakers

While Netzer and Berne argue that many of the administrative reforms described above would reduce the regressive nature of the property tax's impact, they concede that additional steps could be taken to directly address this regrettable feature of the New York property tax. In particular they draw attention to circuit breakers, and Lankford and Wyckoff also address the circuit breaker option.

Lankford and Wyckoff view the circuit breaker as an important means by which states can reduce the burden of the property tax on low income individuals. In addition, they note in passing that tax deferral mechanisms or reverse equity mortgages (sometimes called reverse annuities) can achieve a similar result. Tax deferral mechanisms permit certain households to borrow from the state or a financial institution against some portion of the equity in their home to pay their property taxes. The relative ranking of these policy options depends on how the problem of burden is viewed.

Lankford and Wyckoff chose to focus their attention on the circuit breaker option largely because New York has some experience with it and because alternative versions exist in a number of other states. There is simply less known about tax deferral mechanisms

which is unfortunate since they have several desirable properties.[7]

The New York State circuit breaker allows homeowners and renters to claim a credit (or a refund) from the State's personal income tax for individuals with total household income of up to $18,000. The maximum credit is $375 for the elderly and $75 for the nonelderly with income of less than $1,000. The size of the credit is inversely related to income and can never exceed half of the individual's property taxes. Finally, taxpayers with houses whose market values exceed $85,000 (or who pay monthly rents in excess of $450) are not eligible for the circuit breaker.

Lankford and Wyckoff found that in 1991, New York provided circuit breaker credits to fewer than 450,000 households per year. The average credit was $96. They note that compared to many other states, New York's circuit breaker is very limited in its generosity. They report that 34 states have circuit breaker programs of some kind, and that three-quarters of these have average benefits per recipient that exceed those of New York. Moreover, Lankford and Wyckoff estimate that fewer than half of all of those eligible for a circuit breaker in New York actually file for one.

Lankford and Wyckoff developed a simulation model to estimate both the cost and the impact of alternative circuit breaker programs on the patterns of burden associated with the property tax. They examined three alternatives: a) a version that is similar to that provided in current law but with an expansion in eligibility and benefits; b) a program patterned after the Vermont circuit breaker; and c) a program patterned after the Wisconsin circuit breaker. Based on full participation, the estimated costs of these programs ranged from a high of $832 million (for a New York application of the Vermont plan) to a low of $47 million for the current New York approach.[8] Not surprisingly, the Vermont model offers the greatest tax relief to the largest number of low income taxpayers with the highest property tax burdens.

The purpose of the Lankford and Wyckoff analysis is to illustrate alternative approaches to circuit breaker reform. They provide first approximation estimates of the likely costs as well as the expected distribution of benefits.

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[7] For more information about experiences with reverse equity mortgages throughout the nation, see Brent and Monk (1994).

[8] Based on current experience with circuit breaker programs, the "full participation" assumption substantially overstates the cost of any of these programs.

Regional Taxing Units:
The Texas Experience

Periodically, New York State has considered reorganizing school districts in part for the purpose of achieving greater equity in funding. The logic is simple and compelling: there will be less variation in fiscal capacity among geographically larger compared to geographically smaller units of governance. Progress with these reorganization efforts has slowed in recent years, and the Board of Regents has recently been engaged in a broader study of school district organizational change that is designed to identify innovative ways to realize organizational improvements (Monk and Kadamus, in press).

These reorganization efforts have occasionally focused on the reorganization of taxing jurisdictions to the exclusion of school district administrative units. The idea is to broaden the tax bases of school districts while maintaining local autonomy regarding schooling practices (Dembowski and Kemmerer, 1984; Lamitie, Glasheen, and Bentley, 1981).

The State of Texas has been experimenting recently with variations on this theme, and the Study Group included Dr. Catherine Clark who provided an analysis of the Texas experience with what can be described as "regional school taxing units." Each of these taxing units was an aggregation of local school districts and existed solely to collect and apportion taxes on a regional basis.

Most of the local school districts received exactly the amount of money they would have received if they had simply adopted and levied the tax themselves. The exceptions were the high wealth school districts. Taxpayers in these districts paid more property taxes to the regional district than their local school districts received back. The "excess" revenues were distributed to the eligible component districts of the regional units in place of the State's foundation program aid. Thus, the device served to capture a portion of the proceeds of a local property tax within wealthy jurisdictions and transform it, in effect, into a form of State Aid.

The Texas system of regional taxing jurisdictions has been since declared unconstitutional by the Texas Courts. However, the constitutional defects are not directly applicable to New York, and it is important not to lose sight of the lessons that can be learned from the Texas experiment.

What is required to make this system work is the political will to put into place a more aggressive redistribution mechanism than has been present in New York. What Clark shows is that mechanisms exist within the confines of a local (albeit regional) property tax system that permit the realization of significant equity improvements without a) the infusion of new state resources and b) the loss of individual school district autonomy.

Clark also stresses the importance of having a relatively well designed property tax system in place *before* efforts are made to "get fancy" with tax base consolidation proposals.

She is not optimistic about the prospects of such proposals in New York given the existing deficiencies that were reviewed earlier in this report. It may be that past efforts to make progress with tax base consolidation proposals have been stymied precisely because of the numerous inequities and inefficiencies that are already present within the property tax system. Clark notes that Texas made progress a number of years ago to bring its property tax system into compliance with prevailing best (or at least common) practices.

The Texas experience poses some challenging questions for policymakers in New York. For example, "What is it about New York that makes even the most fundamental reforms of property tax administration so difficult to achieve?" And, in a similar vein, "Why has this progress been possible in a place like Texas and not in a place like New York?" Clark's analysis suggests that the intervention of the judiciary in Texas can help to explain the differences. She notes that court decisions coupled with tight compliance dates and threats to shut down the system can prompt fundamental reforms.

Statewide Taxation of Nonresidential Property

Professor Helen Ladd and Edward Harris, writing in their Policy Brief, see considerable merit in the real property tax as a source of local revenue for social services, including schooling services, but question the wisdom of taxing nonresidential properties for educational purposes. They draw a sharp distinction between residential and nonresidential properties and advance several arguments for restricting the local property tax for education to residential properties alone.

Their first argument is that a local property tax on *residential* property receives high marks as a revenue source for K-12 education largely because it strengthens linkages between the spending or benefit side and the tax or cost side of the education budget. In making this argument, Ladd and Harris draw on one of the fundamental principles of public finance, the benefit standard of taxation, and note that it is good practice to make whatever linkages are possible between those who pay and those who benefit from the services being delivered. In this case, payments are based on the value of residential property and benefits are either direct in the form of an education for children or indirect in the form of increases in home value.

In contrast, they argue that local property taxes on *nonresidential* property are less appropriate sources of revenue because while firms benefit from an educated labor force they typically draw on labor pools that extend beyond the local school district. Thus it makes more sense, on the basis of the benefit principle described in the previous paragraph, to tax business property for education purposes at the regional or state level.

In their second argument, Ladd and Harris recognize a potential for local property taxes on nonresidential properties to have economically distorting effects. On the one hand, individual school districts with large amounts of business properties will have an incentive to "overinvest" in education relative to private goods. On the other hand, the location

decisions of businesses can be distorted, since businesses have an incentive under the current system to locate in places where property taxes are relatively low.

Their third argument is more speculative and prompts the empirical analysis that Ladd and Harris contributed to the study. The hypothesis is that a shift of nonresidential properties to the state level coupled with an aid program that directs the proceeds of the tax back to the constituent districts could give rise to greater student equity.

They note that the validity of this proposition depends on a number of features, most especially:

-- how nonresidential properties are currently distributed among school districts;

-- how decision makers in schools respond to changes in the tax base and changes in new aid; and

-- how the formula is designed that distributes the revenue from business property back to the local school districts.

In their empirical analysis, Ladd and Harris show that simply removing nonresidential property from the local district tax rolls has undesirable effects on the pattern of spending. In particular, it has a negative effect on spending, it increases variation in spending across districts, and it makes spending somewhat more highly correlated with property wealth and income measures of district fiscal capacity. Thus, it is clear that the design of the state aid mechanism for redirecting business property revenues back to the districts is crucially important.

They experimented with several alternative designs. In general they found that a flat grant per pupil type of redistribution did little to improve the equity results and that highly equalizing payback mechanisms are required to make the summary equity indicators improve.

This, in itself, is an interesting result. It suggests that nonresidential properties are not concentrated in relatively high wealth school districts of the State. The results for New York City are also particularly interesting. Because there is such a large proportion of nonresidential properties in the City, the elimination of these properties from local rolls has a significant adverse impact on the City's ability to spend. Given the magnitude of the loss, it is difficult for "conventional" state aid programs to make up the difference, where "conventional" is construed to mean aid that varies inversely with standard measures of district fiscal capacity. The Ladd and Harris results show that New York City would need a special adjustment of some kind (perhaps similar in nature to the current Regents proposal for Extraordinary Needs Aid or perhaps based on a cost of education index) to avoid an adverse effect on a district that enrolls roughly one third of the pupils in the State.

In contrast, the Ladd and Harris results indicate that this type of reform works to the significant advantage of districts that as a class have relatively few nonresidential properties. In particular, the approach has significant beneficial effects for rural districts within the State.

Ladd and Harris conclude that the shift of nonresidential property to the State level warrants further attention if for no other reason than that it can be expected to improve local decision making about education by strengthening the link between those who benefit and those who pay. It would also reduce incentives for firms to choose location on the basis of education related tax differences. Their work demonstrates the care that will be necessary to design an appropriate equity-enhancing program of State Aid based on the proceeds of the tax on business properties. They demonstrate that it is possible to achieve desirable results and encourage policymakers to keep this option under consideration.

IV. Reducing Reliance on the Real Property Tax

While Ladd and Harris question the appropriateness of taxing nonresidential property at the *local* level for education, they clearly support the use of the tax on real property as a source of revenue for schools. In contrast, questions can be raised about the use of any and all property as the basis of a tax at either the local or State level that is intended to support education. This is the line of argument developed by Professor Strauss in his Policy Brief for the Study Group.

Moreover, the property tax, even one that is well administered, can be viewed as defective to the degree that it is "overrelied" upon as a source of revenue for schools. This was the conclusion reached in Michigan, and the Policy Brief prepared by Professor Kearney provides an update and analysis of the Michigan effort to move away from the property tax as a source of revenue for its K-12 schooling system. The Michigan case is particularly instructive since contrary to what much of the popular press coverage would suggest, the tax on real property remains an important (although less dominant) source of support for public schools in Michigan.

The presumption running throughout the following discussion is that policymakers need to focus on something other than fixing the administration and design of the real property tax. The proposition is that while improving administration and design may have virtue, these reforms by themselves will not address the most fundamental problems.

Substitution of a Local Tax on Income

Strauss makes a three part argument for abandoning (or significantly reducing) the real property tax for education. His first point is that public education plays a key role in the redistribution of income within the social order. Second, he introduces a fundamental

normative principle of public finance which holds that redistributive functions of government ought to be financed through the use of broadly based taxes that are generated on the basis of ability to pay rather than benefits received. Finally, he argues that the tax on real property is not based directly on taxpayers' ability to pay. In making this argument he emphasizes the discrepancy that can exist between the value of housing and current streams of income and observes that taxes are paid out of income.

Strauss reaches the conclusion that it is fundamentally inappropriate to rely upon the property tax to support education. He contrasts education services with municipal services such as police and fire protection where he sees an important role for the property tax. He notes that the value of a taxpayer's property is a good barometer of the need for these types of services. According to his view, taxpayers with extensive property holdings ought to pay more for fire and police types of services than taxpayers with modest holdings, and a tax on property gives rise to this result.

Strauss thus justifies the use of the property tax on the basis of what public finance economists call the benefit standard. He is most comfortable with the property tax when it is used to finance services that are directly connected to housing and the maintenance of property. In Strauss's view, education does not meet this test, and the property tax is thereby dismissed as an appropriate source of revenue for education. Jeremiah Cosgrove made a similar point regarding the tax on farmland to support education at a recent conference. He noted that "cows and crops demand few government services; and in particular don't demand or require school services (New York Farm Bureau, the American Farmland Trust, and the Legislative Commission on Rural Resources 1994, pg. 10).

Strauss is more comfortable with alternative taxing instruments for education that are more closely linked to current levels of ability to pay. He sees the income tax as perhaps the tax that is most directly connected with ability to pay, and advocates a shift away from the property tax and toward income based taxing instruments for educational purposes.

There are several arguments that can be made to rebut Strauss's conclusion that the property tax is an inappropriate tax for education. First, education need not be viewed as an exclusively redistributive function of government. Instead it can be viewed, in part, as a service delivered to taxpayers. According to this view, the benefit standard is a relevant basis on which to establish a tax and real property, most especially residential real property, provides a reasonable measure of benefits received. Recall that Ladd and Harris noted that two kinds of benefits are relevant: (1) educational services for children; and (2) enhancements of home values.

Second, the property tax is not completely divorced from "ability to pay" considerations. While it is true that discrepancies can exist between taxpayers' income and property holdings, there is no denying that taxpayers with greater property holdings have greater ability to pay compared to taxpayers with lesser property holdings, so long as income levels are comparable. It may be difficult for the taxpayer with large holdings relative to current

income to pay higher property taxes, but there is no question that the greater property holdings contribute to an individual's financial well-being.

Third, there are a number of desirable features associated with the property tax. For example, it is commonly argued that property tax revenues are more stable than revenues based on either income or sales levels. School districts, it is argued, require the stability afforded by reliance on property tax revenues, and shifts to less stable income and sales taxes could put the welfare of children at risk.

There are, however, a few points to keep in mind about claims of property tax revenue stability. For example, property taxes are paid out of taxpayers' incomes, and when economic downturns arise and incomes drop due to rising unemployment and underemployment, taxpayers can be expected to have greater difficulty meeting their property tax obligations. Failure to pay property taxes gives rise to what is known as arrearage. In New York, arrearages on school taxes are passed along to county governments, so school districts are not directly involved. These missed payments, nevertheless, constitute a significant economic phenomenon that appears to be growing in magnitude. According to research under way at the Rockefeller Institute of Government, arrearages on the payment of New York school property taxes have increased by 40 percent between 1983 and 1993 in real dollars (Center for State and Local Government Studies, 1994).

In addition, Strauss is not convinced that property taxes are more stable than alternative taxes, and he presents empirical analysis in his Policy Brief that is consistent with his skepticism. His calculations suggest that in New York between 1983 and 1992, the level of volatility in the property tax growth rate was slightly greater than that of the growth in income. In other words, his calculations suggest that policymakers in New York need not worry that a shift away from property taxes would increase instability.

A further desirable feature of the property tax (at least from the perspective of some individual school districts) is the opportunity it offers to export taxes to non-residents. From a broad, macro perspective this is not necessarily a desirable feature, but from the individual school district's perspective the ability to tax business and commercial properties as well as non-residents who own vacation homes can be very attractive. A local tax on income, for example, would significantly reduce access to these non-resident revenue streams.

It needs to be emphasized that Strauss does *not* dismiss the property tax on the grounds that its use gives rise to inequalities in the level of support for education. He distinguishes clearly between two important features of a local tax: (1) the basis on which it is levied (e.g., property, income, sales, etc.), and (2) the degree of variation in fiscal capacity that is geographically linked. Strauss's complaint about the property tax for education is based on the former and not the latter consideration. Moreover, he shows very clearly in his empirical work that a shift from the local property tax to a local income tax does not solve the equity problems which stem fundamentally from the unequal distribution

of fiscal capacity throughout the State.

This distinction needs to be kept in mind by policymakers, since many of the complaints about the property tax are due to the fact that it is a *local* tax. The practical import of this distinction is that a shift away from a local property tax to a local tax of some other kind will not solve the problems stemming from the local nature of the tax. In the absence of an ambitiously equalizing program of State Aid, a local income tax would give rise to unequal levels of spending just as is presently the case with the local property tax.

Strauss demonstrates this result with his empirical analysis. He simulates two alternative approaches to the reform of New York's existing school finance system. First, he estimates what would happen if the existing local property tax were replaced by an optional local income tax with no change in the existing State Aid system. Second, he considers the effects of a fixed (Statewide) rate local income tax in conjunction with reforms in the State Aid system.

Strauss's first set of simulations demonstrates very clearly how a shift from local property to local income tax instruments does little to reduce inequalities within the system. He makes district by district calculations of what the local income tax would need to be in order to maintain spending at current levels, and he shows that for most districts, the necessary income tax rate would be on the order of 6 to 7 percent. However, he also shows that for some districts, especially the smallest, lowest income districts, the rate would be considerably higher and on the order of 21 percent.[9]

The second set of simulations includes a reform of the State Aid system that reduces the amount of inequality in the local income tax rates. More specifically, he envisions a mandatory, Statewide local income tax at alternative flat rates (specifically, he examines the effects of a 3 percent and a 2 percent flat rate) and a foundation type of school aid formula where the foundation is set at either the 1992 median per pupil spending level of $8,068 or the 75th percentile level of $10,167. These simulations reflect the assumption that districts can have less than the "mandatory" income tax rates so long as they can reach the foundation level of spending. The simulation results include cost calculations of save-harmless provisions that would be necessary if the State wished to allow districts spending more than the foundation level to continue to do so.

Strauss considers a proposal to allow districts wishing to spend in excess of the foundation level to do so by relying on a discretionary local income tax. According to his calculations, the add-on's necessary are relatively modest to permit districts to reach their current spending levels. He estimates that these incremental local income tax rates are in the 1-2 percent range.

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[9] Strauss also calculated what the income tax rate would need to be to replace the property tax on just residential properties. His estimate is 3.3 percent.

Several issues need to be kept in mind as policymakers consider the Strauss simulations. First, there is a potential for significant shifts in tax burdens to occur. Strauss's basic proposal in its simplest form removes taxes from businesses and commercial properties since their properties would no longer be subject to the local school tax. It also reduces access to non-resident property owners within districts, assuming the local income tax is limited to residents. Strauss addresses this issue by considering the possibility of building buffers and/or alternative taxes into the system.

Second, there is the potential to introduce economic incentives to establish residence in places with low add-on rates. Strauss estimates that the necessary add-on's would be modest, but it is possible for them to be larger, particularly if some of the poorer low spending districts began to increase spending levels. The meaning of "residence" for tax purposes would have to be clearly defined and noncompliance could become a problem.

Third, there is the question of stability. Strauss's calculations suggest that this would not be a serious problem, but the State needs to be mindful of the potential need for intervention.

Fourth and more generally, the State will likely find itself playing a larger role in educational affairs. This is a common result when reforms reduce reliance on local property taxes, although in this case the substitution of a local income tax for the local property tax retains an important element of local control. The potential for growth in State involvement that is caught up in Strauss's proposal stems primarily from the effects of the unequal distribution of income that gives rise to different abilities to provide educational programs. The maintenance of a local tax source sets the stage for the State having to play an equalizing role.

The potential for tax reform to shift responsibility to the State level is aptly illustrated by the recent reforms in Michigan. What makes the Michigan experience especially instructive for policymakers in New York is that the increase in State responsibility did not give rise to significant equity improvements in the distribution of educational opportunities across school districts. It is appropriate now to turn directly to the Michigan reform.

Substitution of a State Tax on Sales:
The Michigan Experience

Professor Philip Kearney's Policy Brief provides an overview and analysis of the recent Michigan tax reform. It is worth noting that the Michigan initiative differs in two important respects from what Strauss proposes for New York: (1) Michigan moved toward a sales tax rather than an income tax; and (2) Michigan significantly altered the mix of local versus state revenues entering the schooling system. More specifically, Michigan moved toward a state sales tax rather than a local option sales tax and thereby significantly increased the level of state support for its public schools.

The highlights of the Michigan reform are as follows:

(1) an increase of two percentage points in the State sales tax (from 4 percent to 6 percent);

(2) a decrease in the local property tax from an average of 34 mills to a State mandated levy of 6 mills on all property and a local levy (if authorized by voters) of up to 18 mills on non-homestead property;

(3) the opportunity for high revenue districts to levy an additional "hold-harmless" millage to maintain or increase modestly their prior year's per pupil revenue level, with voter approval; and

(4) the opportunity for all districts to levy an additional "enhancement" millage of up to three mills, with voter approval.

Kearney shows that the net short term effects of these reforms included a 4 percent increase in the overall level of funding, a substantial shift in funding responsibility from the local to the State level (the State share increased from 33 percent to 79 percent), and a substantial shift away from reliance on the real property tax instrument (the property tax share dropped from 66 percent to 32 percent).[10] It is instructive to contrast the *reduction* in reliance on the property tax that ultimately occurred with the Michigan Legislature's initial action to *eliminate entirely* the local property tax as a source of revenues for public schools.

The Michigan reform package is quite detailed and complex and exists in stark contrast to the "property tax eliminated" type of press coverage that it has attracted. One of the less well known features of the reform involves a number of revenue limitation provisions, including one that limits annual increases in the assessed values of individual parcels of property to five percent or the rate of inflation, whichever is less. On resale, the property is reassessed at the "official" standard of 50 percent of market value.

This limit on the growth of the property tax base could hold back what still amounts to an important source of revenues for schools. The revaluation provision ties the return to a market standard to the actual sale of the property and will likely give rise to significant "welcome-neighbor" types of tax inequities where individual taxpayers with identical properties find themselves paying significantly different levels of tax. Such provisions are in clear violation of the best practice standards listed earlier that were provided by Berne and Netzer.

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[10] The 32 percent can be broken down into a 21 percent share from the local property tax and an 11 percent share from the State property tax.

New York policymakers need to keep the Michigan context in mind as they evaluate the relevance of these reforms. As Kearney puts it,

> In 1993-94, and immediately prior years, there was a substantial imbalance among the three major sources of tax revenues. Property taxes in Michigan were 25 percent higher per capita in comparison to the 15 most populous states, and 33 percent higher per capita than the U.S. average. Sales taxes were 30 percent lower per capita than the 15 most populous states, as well as 30 percent lower per capita than the national average. Income taxes were 25 percent and 38 percent higher than the fifteen most populous states and the U.S. average respectively. In short, the property tax was over utilized, the sales tax under utilized, and individual and corporate income taxes substantially higher on a per capita basis than the U.S. average (pg. 9-10).

New York, in contrast, ranks high on all three of the tax instruments. The "overreliance on one type of tax relative to another" was a more relevant argument for Michigan than it is today for New York. Indeed, in New York, the more common complaint is about an over-reliance on all types of taxes. The final section of this synthesis document examines the prospects of freeing revenues through improvements in school system efficiency.

Kearney draws attention to an important difference between Michigan and the three other states that have moved to reduce property taxes (California, Massachusetts, and Oregon). Michigan is the only state where the legislature replaced lost revenues. In the other states, no specific actions were taken by the legislatures either to enact new taxes, raise rates or extend bases on existing taxes, or further earmark existing taxes. In these cases, the reduction of property taxes translates into increases in the state share but decreases in total levels of funding.

Kearney concludes his analysis by sharing a number of the concerns that are growing in Michigan about how the reformed system will function over the longer term. Some of these concerns stem from worries about the lack of stability associated with sales tax revenues. The fear is that a significant economic downturn could have devastating effects on revenue streams for education. As indicated above, there are additional concerns about how the revenue limitations will play themselves out over time.

It is clear that New York policymakers need to exercise care in drawing lessons from the Michigan experience. The situations are different in important respects. Nevertheless, the reform in Michigan provides important insights into what can happen when opposition grows to a highly visible tax such as that on real property. The lessons offered regarding the prospects of losing local sources of revenue and local governance autonomy need to be taken very seriously.

V. Generating Resources for New Uses

Finally, attention turns to ongoing efforts to improve the local management of schools. These efforts to improve the efficiency of the schools have at least two implications for the generation of revenues for education. On the one hand, if gains in efficiency can be realized, policymakers will have the option of using the savings either to invest in additional school services or to provide tax relief.

On the other hand, if the public perceives that the schools are running more efficiently and that they are receiving good value for their tax dollar, there could emerge a greater willingness to support public schools.

A great deal of research has been conducted during the past 30 years or so that seeks insight into sources of greater efficiency for schooling systems. Assessments of this research and its implications for the reform and financing of public schools are available elsewhere and need not be repeated (see, for examples Hanushek (1994) and Monk (1992)). Suffice it to say that progress is being made but that the pace is frustratingly slow.

Two members of the Study Group explored aspects of the contemporary efficiency debate taking place in education finance. Professors Ferguson and Odden offer observations about how policymakers can take advantage of the research advances that are currently being made.

Shifts Toward the Use of More Productive Inputs

Professor Ferguson's research is focused on the transformation of monetary resources into learning performance gains for students. He has conducted studies in Texas and Alabama, and he shared a number of his most important findings with members of the Technical Study Group.[11]

One of Ferguson's major theses is that monetary resources can have significant implications for levels of pupil learning. He believes that the skepticism that has grown up around this proposition in recent years is an unfortunate result of earlier mis-specified studies of educational productivity.

He offers several examples of the kind of mis-specification that he believes has led critics to question the potential for resources to make a difference in education. For example, he reports that in his research he has found that teacher salary levels are positively correlated with pupil learning gains, but only in places where there exist competitive market conditions. His claim is that higher teacher salaries need to be paid to attract high quality talent in places where prospective teachers have alternative higher paying or otherwise more

[11] For an example of Ferguson's research, see Ferguson (1991).

attractive career opportunities. Looked at from the opposite direction, his findings suggest that districts can afford to pay relatively low salaries in places where either competing wages are low or where there are important intrinsic satisfactions associated with teaching. These intrinsic satisfactions might stem from features such as the presence of motivated and responsive students, supportive parents, effective administration and instructional leadership, and good working conditions.

He makes the important point that teachers are motivated by more than salary, and argues that simply mixing places that vary in terms of their overall attractiveness to teachers in a single study can obscure the very real positive effects of higher salaries on teacher effectiveness.

Ferguson's second example of a costly resource that can have significant productivity effects is average class size. Reductions in average class size constitute relatively expensive educational innovations. Ferguson has found positive effects of reductions in class size, but only down to the point where classes have students numbering in the low twenties. He claims that reductions beyond this point have little positive impact on pupil performance but significantly contribute to higher schooling expenses.[12] On the basis of these results he encourages schools to reduce class sizes to roughly the low twenties but to not go beyond this point. He notes that studies which fail to maintain this distinction risk producing misleading results and could suggest that differences in average class size have little impact on pupil performance.

While Ferguson's findings are structured in terms of the effects of spending dollars on schools, they also have implications for the prospects of reducing expenditures. Simply put, the proposition is that less could be spent on schools without adversely affecting the performance of students. Specifically, his results suggest that average class sizes could increase up to the low twenties (assuming of course that there are places in the State where average class size has dropped below this point) without having adverse effects on students. His findings also suggest that teacher salaries may be higher than needs to be the case in selected low competition areas of the state. Assuming these kinds of savings can be realized without reducing the performance levels of teachers, reductions would result in the level of resources needed to support the schools, and tax pressures could be reduced.

Improvements in Local Management

Professor Odden focuses his attention on steps that can be taken to reform the management structures of schools and school districts. He reasons that if management can become more efficient, it will be possible for the benefits to take the form of enhanced educational opportunities for students. Of course, it would also be possible to use these

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[12] For contrasting results that are based on data from different states, grade levels, and research methodologies, see Finn and Achilles (1990) and Glass and Smith (1979).

efficiency gains to provide tax relief.

Odden asserts that the existing educational administrative system worked well enough in the past but has failed to meet the needs of today's and certainly tomorrow's schools. He is particularly critical of the top-down, highly bureaucratized management structures that he sees throughout the U.S. educational system.

He advocates developing a system that involves " . . . having the top of the education system create goals, set curriculum standards, and develop tough tests that indicate what students know as well as what they can do in core academic subjects, and then decentralize accomplishment of these objectives largely to school sites (pg. 1)."

He justifies his vision for decentralization on the nature of the work that is conducted within educational organizations. He draws upon principles of management and argues that when work is a) complex; b) collaborative; and c) characterized by considerable uncertainty, it is best for the organizational structure to be highly decentralized. In Odden's view, effective educational work by its very nature is complex and collaborative. He also stresses its uncertain character given the limited understanding of the ingredients of good schooling under widely differing conditions.

Odden's Policy Brief considers a number of design issues as he envisions a site-based management and finance system that will permit educational organizations to function more effectively. According to Odden, an effective site-based management system for education will have the following four features:

- *power* over budget and personnel within the organization will be redistributed so that considerable autonomy exists at the school site level;
- *knowledge and skills* will be gained by employees at the decentralized level so that they can function effectively in their new roles;
- *information* about the performance of the organization will be readily available to those operating at the site;
- *rewards* will be structured to align the self-interest of individual decision-makers at the site with larger organizational goals.

Odden reports evidence showing that the first three ingredients of success (power, knowledge and skills, and information) have been found to be strongly associated with smoothly operating school based management programs in a recent international study of a wide variety of school decentralization efforts. He reports that these factors have also been found to be strongly related to changes in curriculum and instruction that included teaching for understanding, teaching problem solving to diverse students, and teaching an integrated and cross-disciplinary curriculum.

Odden recognizes that site-based management is not a panacea. He acknowledges that it has yet to be shown that the approach has dependable positive effects on pupil performance and that there are a number of implementation pitfalls that need to be avoided. One of the continuing challenges lies in distinguishing sites that claim to be operating according to the principles of site-based decision making from those that have actually made the transformation. So long as these two types of sites exist in the field, it will be difficult to estimate the actual effectiveness of the approach.

There is a potentially important source of savings caught up within the site-based management reform. Odden's vision of reform includes clear roles for both the central management level and the site level. Recall that he argues for locating responsibility for setting systemwide goals and standards at the central management level. It is at the site level that much of the management decision making takes place. Ambiguity surrounds the function of organizational levels that have historically existed at the district and regional levels. It may be possible to realize savings at this level of the organizational structure.

A number of Odden's proposals dovetail with points made in other Policy Briefs. For example, recall the regional taxing jurisdictions discussed by Catherine Clark. It could be that this is the sort of role that a regional administrative unit could play in the kind of site-based decision making world envisioned by Odden. The Board of Regents' ongoing study of organizational change is also examining the meaning of school district organizational structure in light of contemporary reform efforts (Monk and Kadamus, in press). In particular, the Compact for Learning, the Board of Regents' blueprint for reform, contains numerous elements that are consistent with the vision developed by Odden.

Odden's proposals for site-based management can also be viewed in light of the discussion in the Netzer and Berne Policy Brief about the ongoing debate in New York State over the fiscal independence of the Big Five City districts. Netzer and Berne are skeptical of the argument that greater fiscal independence of the Big Five City districts would lead to beneficial results.

In particular, they see a desire to raise spending for education lying behind the movement to gain independence for the large city districts, and they are not convinced that a separate structure in fact would give rise to this result. Indeed, they see some reason to expect lower spending since there would be a loss of access to the tax base (i.e., the schools would lose access to income and sales tax revenues of the cities). The advice from Netzer and Berne is to move in a different direction and take steps to change the dependent governance system for the Big Five City school districts so that it is more in tune with the municipality. As an example of such a reform for New York City, they suggest the possibility of giving the Mayor the power to appoint more than two of the seven members of the current school board.

It is important to realize that the debate over greater or lesser centralization of management at the macro (whole system) level is quite distinct from the merits of greater

decentralization at the local school level. In other words, the New York City system simultaneously could become more fiscally dependent upon municipal units of government and more decentralized at the individual school level. Indeed, greater centralization at the macro level may be necessary for real progress to be made toward the decentralized management systems that are in line with what Odden proposes.

Odden closes his Policy Brief with discussion about what an educational finance system would involve that was organized around the school rather than the district as the key organizational unit. He notes that many of the potential benefits of such a system could be realized with relatively modest manipulation of the existing system. In particular, he proposes maintaining (at least in the short run) the school district as the unit of the system but requiring the districts to allocate 85-90 percent of all dollars--both general and categorical--to schools in a lump sum.

He next proposes a multitiered financing system that promises to be highly equalizing and sensitive to the differing needs of students. His reform is ambitious and includes provisions for a) differences in the cost of providing education across regions of the State; b) meeting the professional development needs of teachers and others at the site level; c) reformed compensation systems that are geared to measures of both what individual teachers know and are able to do and to measures of collective accomplishment; and d) the supply of discretionary dollars to the site level.

Odden's proposals are oriented around an interest in having educational systems operate with greater efficiency at higher levels of performance. Policymakers need to keep in mind that what drives many of the efforts for what has come to be known as "systemic reform" is the belief that virtually all students can reach high levels of scholastic performance. Gains in efficiency have the potential to reduce pressure on demands for new revenues, but the drive to raise the level of performance of schooling systems works in the opposite direction. It is difficult (although not impossible) to square efforts to reduce tax support for education with serious efforts to raise the performance level of the system.[13]

Odden makes passing reference to a largely neglected feature of the revenue debate in education: namely, the identification and utilization of nontraditional sources of revenue for public schools. Available evidence is fragmentary and tends to be anecdotal, but it appears that financially strapped public schools are relying increasingly on various nontraditional sources or revenue, including grants from businesses and foundations, support from parent organizations such as booster clubs, and the proceeds of user fees and advertising charges. Odden cautions the State about restricting districts' ability to raise revenues in this fashion. He sees the phenomenon as an essentially healthy, nonequity

[13] The conditions are demanding. Specifically they require the savings realized from improved efficiency to exceed the extra resources required to raise the system to the new and higher level of performance.

threatening effort by parents and others to support their public schools. So long as the magnitude of these revenue streams stays modest, Odden is inclined to encourage their development.

More needs to be known about these alternative revenue sources. While they may be relatively unimportant today, the kinds of fiscal pressures likely to face public schools in the future could stimulate significant growth in the magnitudes of these funds. Since schools and districts are likely to vary widely in their ability to raise these revenues, there could be significant long term implications for the pursuit of equity targets.

VI. Conclusions

Members of the Study Group explored a wide range of policy options for New York State officials to consider. In broad summary form these include the following:

1. Reforms in the practice of taxing real property so that its administration corresponds more closely with best (or at least) common practice elsewhere in the nation.

2. Efforts to resolve concerns over a lack of correspondence between property taxes and ability to pay by instituting circuit breakers or other reforms that better match tax liability with ability to pay.

3. Attempts to address structural concerns over equity and efficiency in the operation of the property tax through the use of regional taxing units and/or by taxing nonresidential properties at the State level.

4. Shifts away from reliance on the tax on real property either because of inherent flaws or because progress toward resolving manufactured flaws has been so difficult to achieve.

5. Efforts to generate resources through improvements in the productivity of schools and districts.

There are several observations to make about this list. First, the items are not mutually exclusive. The State could simultaneously work to reform its property tax system, reduce reliance on its use by shifting to alternative taxes (e.g., income and/or sales), and make managerial improvements and thereby reduce pressure on all sources of revenue. Clearly, it is possible to make progress on all fronts simultaneously, although there would be a risk of sending confusing signals to the public.

Second, the options are ordered roughly in terms of their relative level of ambition and degree of departure from the status quo. This is not to suggest that administrative reforms of real property tax administration will be easy to accomplish in any absolute sense. However, policymakers need to recognize that the property tax is in place, and that reconceptualizations of its structure and reductions in its use represent larger interventions

than a relatively straightforward tightening and reform of existing administrative procedures. The final option regarding productivity improvements is in some respects the most fundamental and far reaching since it has implications for virtually every aspect of schooling systems.

Third, there is an important sense in which option 1 is a prerequisite for success with any of the property tax reform options. Recall how Clark stressed the importance of putting the property tax house in order before seriously considering the implementation of regional taxation units.

Option 1 also needs to be taken seriously by those who are more critical of the property tax as a source of any revenue for public education. Michigan's case is instructive because policymakers there sought to eliminate the property tax but found it necessary to restore its operation, although at a much diminished level. The point is that movement away from the property tax as a revenue source is not the same as the elimination of the property tax, and so long as the property tax plays some role it makes good sense to adopt best practice administrative methods. It seems self-evident that the tax on real property will continue to play some role in New York State school finance in the foreseeable future.

Fourth, these options need to be viewed in light of buffers and other transitional adjustments that could significantly smooth the implementation of reform. Abrupt changes in tax policy can have serious and far reaching dislocating effects. Periods of gradual transition can help the system reach a new and ultimately more acceptable equilibrium with a minimum of disruption.

Fifth, and finally, there remain serious gaps in the knowledge base. A number of the Policy Briefs provide first approximations of the benefits and costs of commonly proposed tax reforms. This is an important step forward, but falls short of the kind of definitive analysis policymakers would prefer before committing themselves to ambitious reform agendas. Of course, it is always possible to do more research and to have more thorough studies, and a balance needs to be struck between the need to know more and the need to resolve pressing problems.

The Study Group's work provides a good example of how scholars can contribute to the development of policy. Members of the Study Group articulated concrete policy options and developed balanced assessments of their implications. The approach has been non-partisan and has not involved taking advocacy positions. It would be prudent now for members of the Board of Regents or other policy making groups within the State to use the work of this Study Group to narrow the range of options and to then pursue a more focused set of analyses.

Ultimately, it is policymakers and not scholars who must make the difficult judgments where values are balanced and compromises are reached. These judgments can be better made thanks to the kind of information provided in this report. It has been a privilege for members of this Study Group to build this information base. Each member commented favorably on the process, and the collective hope is that the results will help to inform the very important debate that will transpire over the near term.

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Appendix A

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Appendix B

Charge to the Study Group

The Study Group is charged with the following tasks: to identify pertinent issues for study in the area of revenue generations for education, and to explore a range of potential solutions to identified problems. Members of the Study Group will prepare Policy Briefs that are responsive to issues and possible solutions identified by the State Education Department in a (Background paper that was prepared by staff).

These Policy Briefs will be designed to inform policymakers about the conceptual underpinnings of problems associated with the generations of revenues for education. The advantages and disadvantages of each policy alternative will be discussed with emphasis placed on implications for student and taxpayer equity, to the extent possible. The feasibility of implementation will also be addressed.

Discrepancies Between Ideal Characteristics of a Property Tax System and Current Practice in New York

Dick Netzer and
Robert Berne

Discrepancies Between Ideal Characteristics of a Property Tax System and Current Practice in New York

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I. The Property Tax in Practice in New York State

A "Good" Property Tax System

Legislatures and state constitutions can and do make a wide range of policy choices with regard to the role of the property tax in the finances of that state's state-local fiscal system and with regard to the structure of the property tax itself. In all states, the property tax is a tax on the capital value of privately-owned property, but states differ with respect to:

- what types of property are subject to tax at all;
- the definition of the value of the property subject to tax; and
- what fraction that value is the base for property taxation.

In all states, some classes of taxable property are, by law, treated more favorably than others, but states differ with respect to:

- which classes are favored and by how much; and
- how much variation in tax burdens within major classes is acceptable.

Moreover, in all states, there are specific statutory and/or constitutional property tax preferences for narrowly-defined property uses or capital investments, with a wide range of variation in these provisions. Finally, in most states, there are statutory and/or constitutional limitations on the total amount of property taxes a local government may levy, but those limits vary considerably among the states that impose them.

Ideally, all these choices that the voters and legislature make should add together to a system that, when implemented, is:

- transparent and straightforward, in the sense of being comprehensible by ordinary voters and property owners;
- systematic, in the sense of having few, if any, internal contradictions, that is, features that work to offset or negate other features for some groups of taxpayers (and therefore may be inadvertent, rather than deliberate, policy choices); and
- reasonably related to the policy objectives that animate the various provisions, rather than clumsy and inappropriate expressions of the policy preferences.

In short, the system should be one that strikes ordinary people as essentially fair, even when many disagree with some of the specific policy choices.

A good property tax system must have not only internal consistency in policy choices but also an appropriate administrative foundation. It is impossible to know whether the policy choices are working out as intended, or if taxpayers to whom tax preferences have been extended are fully utilizing (or even aware of) those preferences, if there is erratic and unintelligible administration. Unfortunately, it is not easy to administer the property tax well. From an administrative standpoint, the real property tax is unlike all other major taxes in the American system: the other major taxes begin with self-reporting of tax liability by taxpayers, and the major task of tax administration is to verify the facts and calculations in the tax returns. That process involves computer matching of the information on returns with other computerized information and audits of a sample of tax returns. In contrast, the most important task of tax administrators with respect to the real property tax is to determine, themselves, the basis for tax liability, the taxable value of real property, parcel by parcel.

Conceptually, the key features of good administration[1] are:

a. An initial determination of the value of each parcel that matches the legal standard and does so uniformly and contemporaneously. In the great majority of states, the legal standard for valuation is the market value of the property (that is, the price at which the property would change hands between a willing buyer and willing seller in an arm's-length transaction), or some specified fraction thereof. So, good practice involves an initial determination of market value by the assessor, before any percentage is applied to convert market to taxable value. States vary in their requirements with regard to how current valuations must be. Some require, explicitly or implicitly, revaluation to current market value annually. Other require frequent reassessment cycles, such as requiring that all parcels by reassessed every four years, one-fourth done each year. Still others require only rather infrequent reassessment, such as once in a calendar decade, the Connecticut standard for many years. Best practice is considered to be annual revaluation.

b. Explicit statement of the steps that convert the initial determination of market value to taxable value, to the taxpayer in the tax bills and on the formal assessment "roll" and to the public, in the form of reports that show aggregates by property type and perhaps location within the assessing jurisdiction.

That is, the record for any parcel would show clearly:

i. The market value determined by the assessor;

ii. that value times the assessment percentage specified by law (whether for all classes of property uniformly or differentially by class of property) or, if local

[1]In this paper, "good administration," "good practice" or "best practice" refer to practices recommended in the "standards" for assessment administration published by the International Association of Assessing Officers.

option is permitted, the percentage used in that jurisdiction;

iii. the amounts of any partial exemptions, like homestead or veterans exemptions and the reductions in taxable value resulting from other provisions of the tax law, like abatements for selected new investments; and

iv. the net taxable value.

Good practice is most likely to be achieved by professional property tax administration organizations that can take advantage of the very large economies of scale inherent in tax administration and that can deploy the specialized knowledge and experience needed to value some types of property including most nonresidential property. Thus, in more than 40 states, property tax administration is done largely by county-level organizations, rather than by smaller units of government. Valuation of public utility and transportation carrier property is done by a state agency in 42 states. In a few states, major types of commercial and industrial property is valued by a state agency. In many states, a state agency is authorized to provide assistance to local assessors in the valuation of specialized types of property, and frequently does so.

Another step in the property tax administration process in nearly all states is inter-jurisdictional equalization of values by a state agency. Equalization is necessary both for the implementation of statewide policies (in state school-aid calculations and for determining tax and debt limits) and for the determination of the tax liabilities of individual taxpayers whenever there are overlapping taxing and assessing jurisdictions, like state agency assessment of the value of utility property or school district boundaries that are not coincident with the boundaries of the assessing jurisdiction. The equalization process should be understandable, it should yield results that truly do equalize among jurisdictions, and it should be seen as essentially fair. Most states use the county as the unit for equalization, because primary assessment is done at that level, rely primarily on evidence derived from actual market sales of real property and based the equalization rates on data that are quite up-to-date.

What is Wrong with the Property Tax System in New York?

The one-word answer is, for all practical purposes, "everything." Although there are numerous local assessment jurisdictions that do a competent and effective job, within the boundaries set by state law, the Real Property Tax Law mandates many bad practices and permits other local assessors to persist in even worse ones. At one time, New York State was a leader in state and local government tax policy and tax administration, including property tax policy and administration. For example, it was the first state to establish a state-level equalization process about 140 years ago. But innovation in tax policy and administration largely stopped in the early 1930s, and New York did not deign to copy the innovations developed in other states. By the end of the 1930s, New York State had become among the laggards in almost every aspect of property tax policy and administration. Few

New Yorkers, including those active in the formation of tax policy, are at all aware of this backwardness.

New York State in effect has two somewhat different property tax systems, one that is in effect only in New York City and Nassau County and one that applies to the rest of the state. There also are some provisions that apply statewide, to New York City and Nassau as well as to the rest of the state. The discussion of deficiencies that follows begins with provisions and conditions that are statewide in application; the discussion ends with provisions unique to New York City and Nassau.

a. There has been no standard of value specified in the Real Property Tax Law since 1981 (there was, for nearly 200 years before that). As noted earlier, most states have, in their laws or constitutions, a specific requirement that property subject to tax be assessed uniformly at its "true value" or "full value"--almost invariably construed to be market value--or some specified percentage of market value (possibly differing by class of property). In deciding on cases, New York courts have required some degree of "uniformity" in assessments, but the courts have no clear statutory guidelines.

b. Local assessment is largely done at the city and town level, not countywide (in some cases, there is village assessment, as well). A state agency participates in primary assessment in only one instance, the valuation of railroads. Although some local assessors do a valiant job, many do not; many have very limited professional experience and training (although state law encourages training for local assessors). Systematic differences in levels of assessment among different types of property (residential, commercial, industrial, etc.) are widespread, although such differences are explicitly authorized by statute only in three cases: for railroad property, for land used for agriculture and for New York City and Nassau County generally. Large variations in the level of assessment of individual properties of the same type are the rule, rather than the exception. Annual revaluation is unknown and, typically, re-assessment is infrequent. Despite court rulings, "welcome stranger" re-assessment, under which the only property reassessed will be property sold in the preceding year, is common in some parts of the state. The result of infrequent reassessment often is a markedly lower level of assessment of properties that have increased most in value recently, compared to those whose value has increased modestly or even declined.

c. The property of utilities and transportation carriers is valued in ways that are used in almost no other state. In nearly all other states, valuation is done by a state agency and the enterprise is valued as an entity, using market-related data to set value; in New York, the utility property within a jurisdiction is valued by local assessors on a basis almost wholly unrelated to the value of taxed assets as operating utility property. The rules result in very high levels of taxation of utility property, with bonanzas for some jurisdictions at expense of

everyone else in that utility's service area.[2] An outstanding example is the Village of Shoreham in Suffolk County and the Shoreham school district, which for years received very large property tax payments from LILCO for the nuclear generating plant (which did not operate), payments that derived from higher utility rates paid by all LILCO customers. In any other state, the Shoreham plant would have reduced the utility's property tax payments.

d. All real property tax preferences, whether they are widely available or very narrow in scope, are framed in exceedingly complex terms, difficult for taxpayers to obtain without expensive professional assistance and, in most places, obscured from public view, in detail or even in the aggregate (New York City is the exception, with regard to providing public information on tax exemptions and abatements). For example, for many years, the standard form of the veterans exemption provided that the amount of the exemption was determined by the amount of Federal veterans benefits the applicant had received, so that the applicant had to obtain a complete record of prior benefits and the assessor had to go through an elaborate translation of that record into the exemption amount. Every other state that provided a veterans property tax exemption offered a flat dollar amount (perhaps higher for disabled veterans). All the varied housing preferences require the submission of more or less complicated forms, because none of them are unconditional (like the homestead exemptions of many states, always a flat dollar amount[3]). The quantitatively more important preferences, like those for industrial development and some types of housing, usually involve administrative discretion and can lead to protracted negotiations (and inconsistent determinations).

e. Because there are so many small assessment jurisdictions in New York, the equalization process is inherently difficult and imperfect. For example, the State Board of Equalization and Assessment cannot rely on data on sales of real property nearly to extent done by its counterparts elsewhere simply because there are so few sales in a given year in many small places. Also, small jurisdictions are more vulnerable to market-indicated changes in equalization rates than are larger places, so SBEA has developed a process that substantially mutes the effects of year-to-year market changes. Further, considerations of cost and staffing require SBEA to use shortcut methods of estimating: it is far more costly to perform inter-jurisdictional equalization when there are nearly 1,000 assessment jurisdictions than when there are 100 or fewer counties to equalize, the case in most other states. A final problem is that the Legislature, unlike those in other states, freely intervenes in the process and may direct the SBEA to adopt "special equalization rates" for particular places.

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[2]The transportation property of railroads is assessed by a state agency, the State Board of Equalization and Assessment, under rules that also produce very high levels of property taxation, compared to the treatment of railroad property in all other states.

[3]A flat dollar exemption is progressive with respect to income or wealth, by definition; the complexity in New York's preferences often does nothing to assure progressivity.

One awkward result of the process stems from the interaction of the process itself with the heavy extent of overlapping boundaries. Segments of a school district may be found in several towns and villages with separate assessment machinery. It is not uncommon for a school district property tax levy increase in a year of less than 10 percent to result in a 50 percent increase in school taxes in one or more segments of the district. The numbers of taxpayers in such cases may be small, but the situation adds to the public conviction that the New York property tax is not only incomprehensible but also fundamentally unfair.

f. One of the most important property tax reforms of the past generation has been the widespread adoption of the "circuit breaker," a credit (either against the state income tax or, in most states, refundable in cash if there is no income tax liability) to offset property tax payments that are large percentages of household income. The purpose of the circuit breaker is to reduce or eliminate the regressivity of the residential component of the property tax in states in which property taxes are relatively high (see below for more on this point). New York's circuit breaker is significantly more difficult for taxpayers to claim than in most other states with the circuit breaker, and is very modest in amount.

The system that is specific to New York City and Nassau County has its own special deficiencies. In a dozen other states, there is what is known as "classification," under which property is divided into classes--types of property, usually related to the use of the property--and taxed at different effective rates (that is, the tax paid in one class is a different percentage of market value than that paid in other classes). Ordinarily, the classification system is quite straightforward; usually, the different classes are assessed at different percentage of market value. For example, the assessment percentages might be the following:

30 percent, for agricultural and small residential properties;
40 percent, for commercial and industrial and apartment properties; and
50 percent, for utility property.

Such a system is simple in application and simple to comprehend.

When New York's Legislature enacted the NYC-Nassau classification system in 1981 (over the governor's veto, a rare occurrence in New York), it chose instead to adopt a system that was anything but simple, but rather one that was fiendishly complicated and internally contradictory, and required almost constant legislative tinkering to correct for the unintended effects.

The instrument for assuring different tax treatment of the different classes in this system is not a differential in the assessment percentage (or differential tax rate, as is occasionally done elsewhere), but a freezing of the "class share" of the total tax levy, that is, the percentages of total property taxes levied in a given year paid by all the properties within each class: in concept, if, in the base year, a class of property paid 20 percent of the total levy, that share would remain at 20 percent.[4] The base year was 1982. The law provided for four classes: one-, two- and three-family houses (Class I), other residential property (Class II), utility property (Class III) and all other, essentially business, property (Class IV).

The law provided that the local governing body could change the share of a class by up to 5 percent (not five percentage points) each year, and that class shares had to be revised every five years on the basis of changes in underlying values of property. Because the value of Class I residential property rose sharply during the 1980s, local legislators used their authority to reduce its share by the maximum amount and persuaded the legislature to permit them to defer the five-year updating of class shares. The result has been a large decline in property taxes on Class I property.

But the freezing of class shares was only the first step in the new system. Other steps included:

--A very low ceiling on the permitted annual increases in the assessed value of individual Class I properties (not more than 20 percent over a five-year period), which complicated the process of assigning class shares. But a more important consequence was the effect on the relative tax burdens within Class I. In the prime residential neighborhoods, in which residential property values increased especially rapidly during the 1980s, the ratio of assessed to market value declined substantially more than was the case for other residential neighborhoods. Homeowners in the prime neighborhoods tend to be much more affluent than those in ordinary residential neighborhoods, so that the tax burden within the class tended to shift from the best-off homeowners to the least well-off homeowners.

--The Legislature provided that cooperative and condominium apartments buildings could not be valued as such, but rather had to be valued as if they were rental buildings; in New York City, with rent regulation, the per unit value of a cooperative building can be ten or more times that of a comparable rental building.

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[4]Massachusetts voters had approved a constitutional amendment providing for classification on a "class-share" basis a few years before 1981. By 1981, it was abundantly clear that the mathematical properties of that system lead to preposterous and unacceptable results in many places, and the Massachusetts system was substantially changed. If Massachusetts was the model for the framers of the New York law, they apparently stopped reading about Massachusetts too soon.

--In all classes other than Class I, assessment increases for individual properties had to be phased in over a five-year period, even if the increase was a correction for decades of gross underassessment.

--The very favorable treatment of Class I produced demands for parallel treatment, and the Legislature responded with the creation of new subclasses and the shifting of property into Class I, including most of the vacant privately-owned land in New York City.[5]

--Because of the many contradictions within the system (some the result of simple arithmetic), the Legislature has found it necessary to make transitory adjustments to the system almost every session.

Reforming New York's Property Tax

Reform should make the property tax in New York more like the tax that is used by the great majority of the states. Although New York, like every other state, is unique in some respects, it shares a long list of American institutions, traditions, values, and economic characteristics. It is not plausible that, when New York practices depart from practices in all other states as much as they do with regard to the property tax, New York is right and all other Americans are wrong--especially when many of the New York idiosyncracies stem from not changing practices that are a century or more old when everyone else has done so.

The priorities should be:

a. Adopt market value as the legal standard of value and explicitly require uniformity in terms of market value. If local option regarding the percentage of market value at which assessments are to be made is desired, the law should be explicit about how that percentage assessment level is to be adopted and by whom.

b. Adopt statutory rules on the degree of intra-class inequity that is permissible (or, at least, a statutory statement of intent to guide the courts), and on the frequency of re-valuation.

c. Explicitly require local assessors to begin the valuation process by establishing and publicly recording a market value for each parcel, and only then making adjustments (also publicly recorded) to arrive at taxable assessed value.

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[5]Because vacant land was underassessed even in comparison with 1-3 family houses in 1981, this will, within a few years, make vacant land effectively tax-exempt, the opposite of sound tax policy.

d. Strongly encourage the shift of primary assessment to the county government level (by constitutional amendment if necessary).

e. Encourage local assessors to ask the state property tax agency to help or take over the primary assessment of hard-to-assess classes. Consider a constitutional amendment to transfer authority state-wide for certain types of commercial and industrial property, as is done in several other states.

f. Reform both the process and substance of valuing utility and railroad property to match the prevailing system in the majority of the states, if need be by constitutional amendment.

g. Simplify tax preferences, make more of them automatic rather than discretionary and reduce the number of separate provisions by consolidation.

h. These reforms will permit a more straightforward equalization process, with greater reliance on market transactions, less administrative adjustment and more up-to-date results.

i. Wholesale reform of the New York City-Nassau system by adopting a conventional type of classification system, perhaps by using assessment percentages or tax rates that reflect the status quo, but allowing changes over time that reflect relative changes in market values.

None of these reforms can be implemented instantaneously upon passage of the requisite legislation, so a period of transition to the new arrangements is inevitable; the deadlines for implementation are likely to be three or more years after passage. For those reforms that do require constitutional amendment, time before full implementation will be especially long. Therefore, it seems unnecessary to provide explicitly for transitional arrangements for individual taxpayers, except perhaps in extreme cases--for example, phasing in increases in property tax *liability* (not assessments) of more than some high percentage over several years (a 100 percent increase in all assessments in a given jurisdiction is unlikely to increase anyone's tax liability by much, if at all).

II. Regressivity of the Property Tax in New York, in Practice

The Incidence of the Property Tax, in Theory

There is little dispute among public finance economists about the distribution of the burden of the American property tax by income class in concept. The conventional wisdom is as follows. The American property tax is a tax on the value of a large fraction of the physical capital stock of the nation. The immediate impact of the imposition of such a tax, or an increase in the rate of an existing tax, is to lower the rate of return on the capital that

is subject to the tax. Because capital is relatively mobile over time between uses of capital (that is, taxed versus not taxed, in this case) and places, the impact of the tax will be diffused in time over the entire stock of capital. But, by and large, the size of the entire stock of capital is not very sensitive to its overall rate of return, so the burden of the tax in time take the form of a reduction in the rate of return on capital. Because ownership of capital increases sharply with income, the overall burden of the property tax must be distributed progressively.

There are some qualifications to the general proposition. First, the supply of capital is not entirely insensitive to the rate of return; the more sensitive it is, the less progressive the distribution of the tax burden. Second, the sensitivity of the supply of capital in any one country, even the U.S., is increased, the more open to the global economy that country is. So, increasing global economic integration reduces the overall progressivity of the American property tax.

But the property tax is not a national tax that changes uniformly across the country. It is a local tax, with enormous variations in structures, rates, and amount and direction of change. The nation-wide effects are the end result of many local economic changes, as capital shifts among uses and places in response to tax changes in particular places. When a local government increases its property tax by more than all other places are increasing their taxes, that will encourage capital to move to those other places.

Over time, places with above-average property tax rates will suffer shrinkages in the local capital stock. The migration of capital from high-tax states (and especially from the very highest tax localities within those states) to low-tax states will be associated with the migration of other mobile resources, notably the most skilled and talented people, to the low-tax places. The result is that the burden of the high property taxes is borne by the least mobile economic actors in the high-tax community: relatively unskilled workers, the demand for whose services declines as the economy contracts; consumers who are tied to that location, who face higher prices for consumer goods and services; owners of existing businesses that can't be moved to other locations; and owners of land. The higher the tax rates relative to the national average, the more the tax burden is borne this way. By and large, this "excise tax" component of the local property tax is regressive in incidence.

The situation is the opposite in places in lower than average property tax rates, or which lower their tax rates relative to what most places are doing simultaneously. Here there is a negative "excise tax" effect, which is likely to be progressive in incidence. So, from the standpoint of a single school district, or even that of all the school districts in a single state, a decision to raise school property taxes will tend to make the local tax system more regressive; a decision to lower school property tax tends to make the local tax system more progressive.

The Incidence of the Property Tax in Practice

So, what is the situation in New York State? To begin with, in most of the state, effective property tax rates are well above the U.S. average; this is especially the case for business property.[6] Over the long period during which these disparities developed, an important degree of regressivity became a characteristic of the property tax in New York.

This has been greatly exaggerated by administrative practices and the nature of tax preferences, which have produced very large variations in effective tax rates within individual jurisdictions that typically vary inversely with the wealth and income of those who bear the tax burden. For example, infrequent revaluation of residential property, or the assessment increase limits in the New York City-Nassau system, must result in reduction over time in the effective rates on property in the better parts of a city or town relative to the effective rates in the less desirable sections. It is inconceivable that property owners in the less desirable neighborhoods will have higher incomes than those in the most desirable neighborhoods. Another example is the almost universal undervaluation of vacant land (nonagricultural) relative to other property, often by drastic margins. Poor people are not landowners, whatever New York City real estate developers may claim. The ownership of urban land may be more concentrated than that of any other form of wealth.

Among the tax preferences, the most spectacularly regressive examples are found in the New York City-Nassau classification system, notably the taxation of rental apartment property at much higher effective rates than those applied to owner-occupied small buildings, coops and condominiums: income levels of renters are far below those of owner-occupants. An important degree of regressivity stems from the very high property taxes in New York on public utility property. Such taxes are reflected in customers' utility bills; consumer expenditure for utility services is quite regressive.

Indeed, it is difficult to think of a feature of the property tax system in New York that differs greatly from the usual practice in other states that does not add to the regressivity of the tax in New York.

How to Make the Property Tax Less Regressive

Clearly, reducing property taxes relative to what is happening in the rest of the nation is the most direct way to reduce the regressivity of the property tax in New York. But it is also the most expensive way to do so, and will have the desired progressive effects mainly in the long run. There are more immediate and less costly steps that can be taken, however.

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[6]In New York City, Class I residential property is taxed at effective rates that match some the lowest-tax states in the country, but apartment and business property is taxed at effective rates that probably are higher than those in any other places, other than devastated small industrial cities like Camden, NJ, and East St. Louis, IL.

The structural and administrative reforms suggested in Section I, above, would go a long way to reduce some of the most egregious forms of regressivity, when fully implemented.

But beyond these reforms, a substantial enlargement of the circuit breaker (the "real property tax credit") would be desirable. The property tax is relatively important in state-local finance in New York, especially for schools, and there is every sign that if anything, it will become more important as a consequence of the State government's fiscal problems (rather than a deliberate decision that heavier reliance on the property tax is a good thing). The regressive results of this can be mitigated by making the circuit breaker more generous and simplifying the process of applying for it, to ensure a high take-up rate.

Much of the impetus behind the circuit breaker in New York and most other states has been concern for elderly homeowners with modest incomes and more valuable houses bought when their incomes, before retirement, were relatively higher. In New York and elsewhere, the circuit breaker for senior citizens usually is more generous than that for younger households. Logically, the income-poor/house-rich condition of many senior citizens could be better addressed by tax deferrals, like reverse-equity mortgages held by the taxing jurisdictions, for the problem is not one of poverty but of liquidity. Forgiving taxes rather than deferring them amounts to a transfer from other taxpayers to future heirs, and is likely to be regressive in most cases. However, tax deferrals of this type are unpopular among both senior-citizen homeowners and their potential heirs, and have not fared well in the few states that have offered them.

III. School District Fiscal Dependency

With the exception of the five largest cities in New York State, all of the other more than 700 school districts are fiscally independent entities that are in effect special purpose local governments. In the five largest cities -- Buffalo, New York City, Rochester, Syracuse, and Yonkers -- the school district is part of the city government. Because there are over 700 of one type of school district (fiscally independent) and only five of the other (fiscally dependent), questions will be asked why all school districts are not fiscally independent.

The most recent example is the report of the New York State Special Commission on Educational Structure, Policies and Practices which, in its final report, "Putting Children First," released in December 1993, recommended that "New York State's five largest city school districts should be given fiscal independence."[7] The arguments presented to justify the recommendation included a lack of direct control over their budgets by the school districts and an absence of accountability to the voters. The report states, "[F]iscal independence for the Big 5 city school districts would align resources with authority and

[7]New York State Special Commission on Educational Structure, Policies and Practices, "Putting Children First," December 1993, page 45.

make school officials more accountable for school performance. Schools could truly put children first. Children would not be placed in direct competition for resources with municipal services."[8] The call for fiscal independence also has been a response to the actions of city governments in tough fiscal times, where increases in state aid for education is apparently used to lower local taxes or increase spending on other municipal services, rather than to raise school spending. "[I]n addition, fiscal independence can protect school programs from disproportional budget reductions in difficult financial times when city officials look to protect city operations at the expense of schools."[9]

In this brief section, the issues surrounding the question of fiscal independence are presented for review by the policy community. It is important to recognize at the outset that the issue of fiscal independence should be examined as part of a broader set of governance and finance issues. That is, it should not be viewed in isolation from questions such as how schools are financed, who is responsible for decision making, and the nature of accountability.

There are at least three simultaneous decisions that citizens need to make to arrive at a choice about school finance. First, citizens need to decide the division between public and private spending. Embedded in this decision is the complexity of a Federal system of government, but let us assume that there is a choice between public and private spending that translates into the local government budget. Second, citizens need to make choices among education and other public services such as police, fire protection, day care, health care, roads, and recreation. Third, citizens will want to influence how the funds for education are spent, for example on basic education, support services, extracurricular activities, and so on. The traditional criteria that are used to judge these decisions include efficiency and equity. Thus we could assess whether alternative designs of governance and finance systems produce efficient and equitable decisions about public and private spending, spending on education versus other public services, and the specific nature of education spending.

Although this may be a reasonable conceptual approach with which to assess the advantages and disadvantages of fiscal independence versus dependence, it is not the typical starting point for the debate as the quotes from the recent commission suggest. Instead, an arguments is often presented that there is an apparent "preference" for education that somehow gets subverted when the school district and the local government are the same entity. The arguments about putting children first and eliminating the direct competition for funding between education and other public services is not consistent with the efficient and equitable three part decision framework presented above.

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[8]New York State Special Commission on Educational Structure, Policies and Practices, "Putting Children First," December 1993, page 45.

[9]New York State Special Commission on Educational Structure, Policies and Practices, "Putting Children First," December 1993, page 45.

In fact, there is little reason to believe that fiscal independence would actually address the problems commonly cited as reasons for the change. For example, if a citizen had to choose a tax rate for the city government separate from the school district, what would be the conceptual or practical arguments to suggest that education spending would be favored in such an arrangement? Or if two tax rates are set, why would the citizen be prevented from using school aid to lower local contributions or to increase spending on other municipal services? In fact, if those were the citizen preferences, they could be accomplished with a separate school district and a separate local government, or when the schools are part of the local government. An explanation for the preference for fiscally independent school districts may lie in the idea that a separate school district governance system would differentially encourage participation among those with greater preferences for education such as those with school age children, but this seems to be equivalent to designing a hurdle or imperfection in the system (the need to vote twice) to stack the deck in favor of those who desire more education spending. (It is also possible that this system brings out those with preferences for less education spending, such as those who are retired.) The real question is whether the advocates for fiscal independence actually want "better" decision making, or really want more funding for schools, and see fiscal independence as a way to accomplish that goal.

If greater spending on education is the real goal of the advocates of fiscal independence, even this more narrow rationale is subject to question. First, in all but the Big Five cities the school districts are fiscally independent, but in the 57 other cities with fewer than 125,000 people that have fiscally independent school districts, the tax rate is set by the elected school board, not by a popular vote as is the case in the other 650 school districts. Thus, it is not a direct citizen vote, but instead a decision by elected officials. But why, other than because of some imperfections in the political process, would elected school board members be more likely to spend greater amounts on education than the current elected mayor and the elected city council? Again, it may be related to those who care about education differentially participating in the separate school governance process.

Second, in the Big Five cities if they had fiscally independent school districts, what is the tax base that would be used by the schools? The likely answer is the property tax, but it is not clear that this would lead to greater education spending. In particular currently in New York City, the local tax revenues are composed of a combination of the property, sales, and income taxes. If, as would be likely, a newly created independent school district had to rely solely on the property tax and lose access to the sales and income tax, there is some evidence to suggest that education spending could be less. For example, in New York City the City Council and the last two mayors have stated publicly that the property tax should be frozen, despite the fact that single family homeowners face a relatively low tax burden and there exists allowable taxing capacity under the constitutional limit. Moreover, the entire tax and spending limitation movement of the last decade and a half has been, in part, a reaction to high and increasing property taxes. Finally, surveys of the popularity of various taxes repeatedly show that the property tax is among the least popular taxes, and the regressive nature of the property tax in New York State is discussed earlier in this paper.

Thus, the result of a switch to a sole reliance on the property tax in New York City could possibly result in less spending on education than currently is the case and a more regressive tax structure.

The argument presented by advocates of fiscal independence for the Big Five school districts that has not been addressed is the so-called mismatch between those who raise the resources for schools (in this case the city government) and those who are responsible for school performance (in this case the school boards of the Big 5 city school districts).[10] The so-called mismatch can be addressed on the "governance" side of the equation as well. For example, many who have studied the admittedly dysfunctional school governance system in New York City have argued for a closer alignment of fiscal responsibility and education performance by giving the Mayor the power to appoint more than just two of the seven members of the school board, which is the current case. In 1991, the Temporary State Commission on New York City School Governance recommended that the Mayor be given four out of nine appointments, with the other five going to each of the borough presidents.[11] Not surprisingly, mayors have advocated for a majority of the appointments on the school board. The point here is that fiscal responsibility and educational performance can be made more consistent without changing fiscal dependency but instead by changing the nature of the governance system.

If the most compelling arguments for fiscal independence are based on the notion that municipal governments somehow "steal" state aid that is intended for education, then a policy option worth considering is the use of matching grants that provide city school districts with x dollars of state aid for every y dollars of local spending, a state aid mechanism that is common in states other than New York. The matching rate could even vary to take into account fiscal stress or ability to pay; Massachusetts developed such a plan based on research by Helen Ladd and her colleagues. The effect of the matching rate would be to deter local governments from using state aid to lower local contributions; the higher the matching rate, the larger the deterrence.

While the specific arguments in favor of fiscal independence do not appear to be strong, there are no compelling arguments that suggest that a fiscally dependent school system will lead to inefficient or inequitable decisions about public versus private spending, education versus noneducation spending, and the specific components of educational expenditures. The need for reform and professionalization is equally strong for city governments and urban school systems. It is possible that the arguments for fiscal independence stem from a preference for education, that upon closer inspection is not likely to be addressed with a change from the current system.

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[10]The school boards are elected in Buffalo, Rochester, and Syracuse, and appointed in New York City and Yonkers.

[11]Temporary State Commission on New York City School Governance, "Governing for Results: Decentralization with Accountability," April 1991, page 16.

At a time when there is increased attention to the integration of education and non-education services for children (that is education and services delivered by municipalities and the State), especially in urban areas, the advantages and disadvantages of fiscal independence need to be analyzed carefully. It might not be too far-fetched to think that with some changes in governance and finance, we can maintain independent school boards and improve local services by making all school districts fiscally dependent and coterminous with local governments.

Taxpayer Burden and Local Educational Finance in New York

Hamilton Lankford
and James Wyckoff

Policy Brief Property Taxation, Taxpayer Burden, and Local Educational Finance in New York

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Many people believe that New York faces a fiscal crisis in the finance of K-12 education. A variety of indicators suggest that the property tax is a major source of fiscal stress for local governments. Property taxes per capita in New York state increased by over 120 percent from 1981 to 1992, which amounts to more than a 40 percent increase in real, inflation adjusted, 1992 dollars. Voters appear to be venting their frustrations over large property tax increases on school budget referenda. From 1981 through 1988, 14 percent of districts had their initial proposed budgets defeated in referenda. Since 1989 that figure has nearly doubled and exceeded 31 percent in 1994. Arrearages on the payment of school property taxes have increased by 40 percent from 1983 to 1993 in real dollars.[1] These are many of the same symptoms that led Michigan to completely redesign the way it raises revenue for education, and has led to significant reductions in the use of the property tax in Oregon and Nebraska. Indeed, the property tax is an increasing source of concern to many New Yorkers.

In response, New York policy makers have proposed a number of policy solutions. Governor Cuomo proposed a local option income tax surcharge in conjunction with a limitations on local property taxes. Senator Cook and Assemblyman Luster and others have proposed a local-option phased state takeover of school district operating expenditures with the eventual elimination of the portion of the property tax used to finance operating expenditures. A number of other proposals also aimed at reducing the reliance on the property tax have been proposed in recent years.

However, neither the evidence used to identify the "crisis" nor the policies proposed to address it provide a good sense of the problem. Policy discussions within New York, and in most other states, regarding the financial challenges facing K-12 education often involve one of three issues: expenditure efficiency, inequities across students, and inequities across taxpayers. While related, these are conceptually distinct questions that usually call for different policies. Unfortunately, policy debates frequently do not proceed from a clear identification of the policy problem to a set of policies that redress the problem. As a result, policies are enacted that either have unintended consequences or do not address the perceived problem.

For example, some would argue that indicators of fiscal stress such as increasing defeats of school budget referenda or large increases in the real property tax per capita are symptoms of an underlying problem of uncontrolled educational expenditure growth. Others would suggest that the structure of school finance in New York is the root problem. With a shrinking share of school expenditures covered by state aid, and a state aid formula that is only mildly equalizing, these analysts argue that the property tax data signal inequitable

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[1]These data come from the following sources: property tax increases--the authors' calculations using the local Government Database from the NYS Office of the Comptroller, referenda voting--NYS Council of School Superintendents (1994), arrearages--Center for State and Local Government Studies (1994).

opportunities across school districts for school children. A third perspective identifies the primary issue to be inequities facing taxpayers within and across school districts.

In New York, each of these perspectives--expenditure efficiency, student equity, and taxpayer equity--has merit and warrants attention. However, each may call for somewhat different policies. For example, if the issue of interest were student equity, the focus should be on policies that take into account interdistrict disparities in resources and needs. This issue can be addressed using several approaches including modification of the state aid formula or shifting financing away from localities toward the state, as identified by several commission reports and studies in New York. Alternatively, policies that address the within and across district disparities in property tax burdens would be appropriate if the major concern is taxpayer equity. For example, attention to assessment practices and individual burdens (through the use of a circuit breaker or reverse equity mortgages), coupled with a district power-equalizing aid formula, or regionalization of nonresidential property, will minimize inequities across taxpayers. Thus, depending on the objectives of policymakers, a mix of policies could be developed that blended concern for student and taxpayer equity, along with other policy goals.

Throughout this policy brief our focus is on the way New York school districts raise local revenue for education. Moreover, we believe that most of the recent popular concern over the & use of the property tax taps taxpayer frustrations about property tax burdens and assessment problems. Although student inequities are an important and legitimate issue in New York,[2] and in some cases are closely related to taxpayer inequities, we do not believe that this is the source of much of the current public dissatisfaction. In addition, we will not focus on the issue of expenditure efficiency, even though there is some evidence that the public is rightfully concerned over K-12 school expenditures in New York. Finally, we take as given the State's role in funding education. Although we believe that the State is at least in part responsible for fostering the current perceived fiscal crisis by reducing the state share of education finance, many commissions and studies have addressed this issue in detail. Further, we do not favor a system where the state--in fact or effectively--is the sole financial resource for public education. Local control and financing of education is important for the fiscal and intellectual well being of public education. (California provides some useful lessons here.) What remains is a focus on local revenue for K-12 education.

It is the intent of this policy brief to examine the fiscal environment in which New York uses the property tax to raise local revenue for education. Is the property tax at the center of a crisis in local educational finance? What are the important issues in assessing policies relating to the local revenue component of education finance? What are helpful ways of thinking about issues of taxpayer equity? Finally, what do we need to know to be able to formulate informed policy?

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[2]See, for example, Berne and Picus (1994) and recent commission studies.

The following points sum up the message of our policy brief:

- Our analysis indicates that local revenue sources have come under some increased pressure in recent years, but not nearly so much as popular opinion would suggest.

- The property tax should not be abandoned as the primary source of local revenue, as it is not the source of most perceived problems.

- However, we believe that the way the property tax is applied in New York can be significantly improved to reduce taxpayer inequities and the perception that the tax is unfair overly burdensome.

- Some policy proposals to restructure the New York State property tax require more information.

Criteria for Evaluating Whether a Tax System is 'Good'

Is the property tax a good mechanism for localities to use to raise revenue? Public finance analysts use several criteria to evaluate the efficacy of a tax system. These criteria typically include efficiency, equity, stability, ability to generate revenue, and administrative compliance.

- **Efficiency**: A tax is considered efficient if individuals (or firms) do not alter their behavior in response to the tax. For the property tax, this criteria frequently arises in the context of competitiveness. The property tax is inefficient to the extent that people alter their location or purchasing decisions in an attempt to avoid the tax.

- **Equity**: A tax is considered equitable if individuals in similar tax circumstances are treated the same, while those in different circumstances are treated differently. For the property tax, equity has two aspects. First, those with equal ownership of land and structures should pay the same tax. Second, the tax should take into account individuals' abilities to pay--usually measured by income. Here it is important to differentiate statutory burden --who is legally liable for the tax--from economic incidence--who ultimately bears the burden of the tax once individuals have altered their behavior in response to the tax. In assessing equity, it would be ideal to measure the economic incidence of the tax relative to a measure of ability to pay the tax, such as income.

Understanding the incidence of the property tax in New York is complicated as it is necessary to know who bears the statutory burden and how the behavior of individuals transforms the statutory burden into the economic incidence. Even understanding the

statutory burden requires accounting for taxes that are exported from the taxing jurisdiction to residents in other places. Exporting of the property tax can occur in at least three ways.[3] Individuals who reside outside the jurisdiction may own property in it. A good example is the ownership of seasonal property in resort areas, like the Adirondacks. Alternatively, the portion of the tax that falls on nonresidential uses, such as utilities or industrial property, may be exported to people outside the jurisdiction either because the firm is owned by individuals residing outside the jurisdiction or because the products produced by the firm are purchased by people residing outside the jurisdiction. Finally, to the extent that residents itemize property tax payments on their state and Federal income tax forms, a portion of the tax is exported to taxpayers outside the jurisdiction in question. Depending on the types of property, where owners reside, and their use of property tax deductions, a large portion of the statutory burden of the tax may lie outside the taxing jurisdiction, and thus is not a burden to local residents resulting from the jurisdiction's own property tax. Although exporting is conceptually easy to understand, empirically determining the extent of exporting is a more involved matter. For example, what portion of property taxes on commercial business get exported? We will analyze the statutory burden of the property tax below.

Moving from statutory to economic incidence requires a detailed understanding of how property tax rates differ across jurisdictions, and the responsiveness of homeowners, renters, and owners of other types of property to these differential tax rates over an extended period of time. Since the data available to us only indicates who is legally liable for the property tax, we have no way to infer economic incidence without knowing, among other things, elasticities of consumer demand and input supply. Such an analysis is well beyond the scope of this policy brief. In general terms, economists believe that the economic incidence of the property tax can be anywhere from mildly regressive to mildly progressive, depending on the specific circumstances and the behavior of individuals.

- **Stability:** It is desirable to have a revenue source that does not suffer from large year to year fluctuations, especially for school districts, who have limited authority to borrow. The property tax is often viewed as being a stable revenue source, especially relative to income and sales taxes. The stability results from the relative insensitivity of property assessments to changes in cyclical economic conditions. This stability may come at the expense of revenue generation and tax equity.

- **Revenue generation:** The property tax is considered by most analysts to be inelastic with respect to changes in income; as income increases, the full value of property does not increase proportionately. As a result, in order to meet expenditures that increase more quickly than income (at least historically), school districts must increase effective tax rates.

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[3] The issue of tax exporting should also have important implications for the design of the state aid formula, when income is used in the measure of district wealth.

- **Compliance**: Compliance with the property tax is relatively easy for property owners. The tax is generally simple, especially relative to the income tax. Administration of the property tax system is another matter. Although simple conceptually, defining the value of property has been a source of many of the perceived problems with the property tax. In particular, assessments that are left to the discretion of localities invite wide variation both within and across jurisdictions. Infrequent, uneven, and large reassessments appear to be the major source of the perceived unfairness of the tax.

Each of these criteria should be taken into account when analyzing the merits of alternative local revenue sources for education finance. Ultimately, good tax systems balance the advantages and disadvantages of particular taxes to arrive at a system that makes sense. We believe two issues continue to fuel concern over the use of the property tax--the tax is perceived as unfair and overly burdensome. The unfairness largely results from inequitable assessment and reassessment practices, both within and across jurisdictions. Other policy briefs address this issue in more detail. We turn to a discussion of the perception that the property tax has in recent years imposed extraordinary burdens on taxpayers.

Measuring the Burden of the Property Tax

Popular discussions of the burden of the property tax typically focus on its statutory burden--who has the legal obligation to pay the property tax bill. Concern over taxpayer statutory burden was one of the major factors behind Michigan's sweeping changes and seems to be one of the issues of concern in New York. Both because the popular debate is often couched in statutory terms and because empirical estimates of the economic incidence are difficult, we will spend most of our effort exploring statutory burden.

It is important to differentiate questions of whether the property tax is becoming generally too burdensome within the State or certain regions from questions of whether certain individuals are overburdened by the property tax. We draw this distinction by dividing our discussion of burden between an analysis of burdens for the State and its regions and an analysis of the burdens of individuals. The first analysis considers whether the property tax is generally too burdensome. The second examines individual burdens and what might be done to alleviate them.

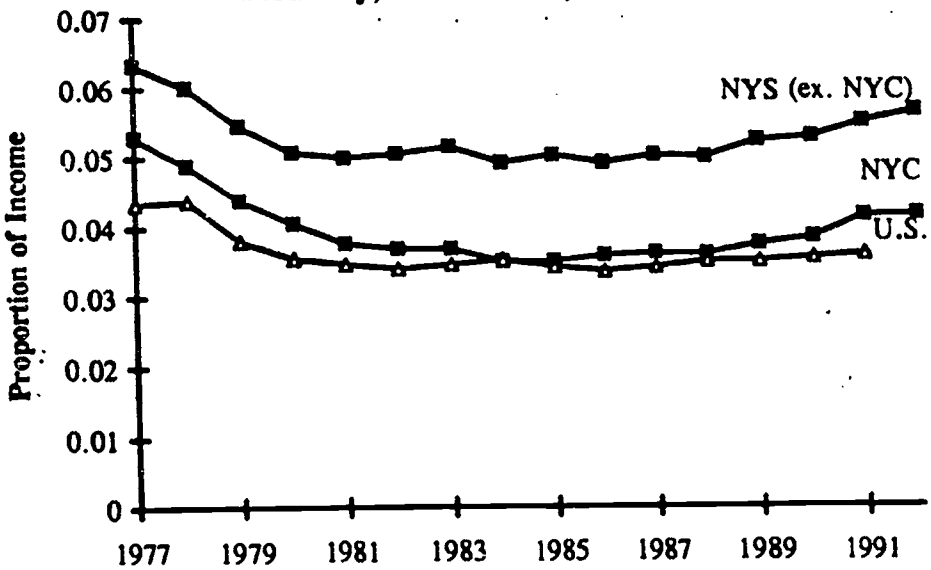
Regional Burdens

Statutory burden can be measured in a variety of ways. One method is to examine total property taxes per capita. This measure does not really capture the burden the tax imposes as it does not take into account taxpayers' ability to pay. As a result, two other measures are often used to illustrate burden: how much of each dollar of income goes to pay the tax and the tax relative to the value of property being taxed. Each of these measures has important uses in evaluating the burden of the property tax. The appeal of the effective or full value tax rate--the property tax divided by the full value of property--is that

since real property wealth is defined as the base for paying the tax, taxpayer equity is usefully defined as whether households living in districts with similar education expenditures have the same tax rate. However, taxes must be paid from income or savings, of which property wealth is only a part.

An alternative to measuring taxpayer equity by using effective tax rates is to examine how much of personal income goes to pay the tax. Since the property tax is ultimately paid by individuals, the portion of personal income claimed by the property tax, which takes into account the resources available to pay the tax, is a more sensible measure of the burden of the property tax. We would like to present estimates for both effective tax rates and property taxes as a proportion of income. However, until quite recently the method used to estimate full value in New York made time trend comparisons misleading. As a result, we have chosen not to present trends for effective tax rates. Unless otherwise stated, we employ property taxes as a proportion of personal income to measure the *burden* of the property tax.

Figure 1
Total Property Taxes Relative to Personal Income, New York City, Rest of State, and U.S.



On average, the property tax in New York state in recent years has become somewhat more burdensome than it has been since the late 1970s. For example, figure 1 shows property taxes as a proportion of personal income for New York City, localities of the state outside New York City, and the United States from 1977 through 1992.[4] Although the focus of this policy brief is on local revenues for education, we include total property taxes, whether used for schools or municipal purposes. Because property taxes employed for education are unavoidably linked to property taxes for municipal purposes, an analysis of the burden of the tax should encompass both uses. For localities outside New York City, the average ratio was 6.3 percent in 1977, decreased to 5 percent in 1980 and remained there until 1989, when it began to increase. By 1992 taxes as a percentage of personal income had increased to 5.6 percent. Measured this way, the 1992 tax is about 13 percent more burdensome that it was during most of the 1980s, but 1992 levels are not extraordinary by historical standards. Property tax burdens in New York State outside New York City are substantially higher than the U.S. average, only three states had higher average local property tax burdens than New York in fiscal year 1991. In general this reflects the fact that New York has higher expenditures by both school districts and other local governments than most U.S. localities. The pattern of change in New York City is the same as that for the rest of the state, although burdens appear to be much lower. The lower burden reflects New York City's use of a local personal income tax, that allows property tax rates to be lower. Since the goal of this policy brief is to examine property tax burdens, we do not examine other forms of local taxation.

The recent statewide increase in burden is a result of a cyclical slowing in personal income growth and a shift in funding responsibilities from the state to local governments than anything inherent in the property tax. From 1980 to 1989 personal income for New York state grew at 7.8 percent per year. From 1989 to 1992 that rate slowed to 5.0 percent. At the same time personal income growth was slowing, the portion of local government, including education funded by the state, declined as a result of the recession. From 1980 to 1989 state aid grew so that in 1989 it accounted for about 43 percent of all school district revenue, as shown in table 1. However, because of real reductions in aid for education averaging 1 percent per year, that share declined to less than 40 percent for the 1989 to 1992 period. In effect, real reductions in state aid led to an increased emphasis on the property tax and other revenue sources, and reduced the overall growth in education spending.

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[4] The data used in this portion of the analysis comes from the New York State Comptroller's Local Government Data Base and the Bureau of Economic Analysis county data on resident personal income. The U.S. data come from U.S. Bureau of the Census, various years. Data for all of the figures in the text are presented in the Appendix.

Table 1
The Role of the Property Tax as Revenue to
Local Governments and School Districts, 1982-92

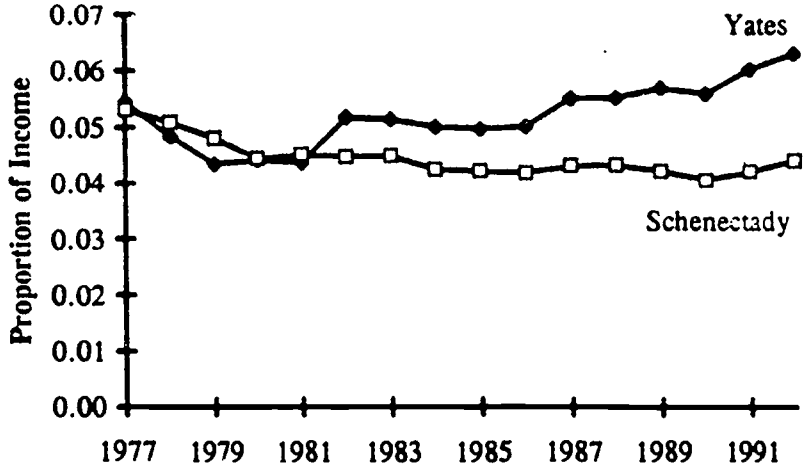
	Share of Total Revenue		
	1982	1989	1992
All School Districts			
Real Property Taxes	50.7	48.2	49.6
Non-property Taxes	0.7	0.8	0.8
State Aid	37.7	42.6	39.7
Federal Aid	6.0	4.6	5.6
Other Revenue	4.9	3.9	4.3
All Non School Local Governments			
Real Property Taxes	20.0	21.7	24.0
Non-property Taxes	23.9	27.8	25.8
State Aid	16.2	14.3	12.6
Federal Aid	16.9	9.5	10.0
Other Revenue	22.9	26.7	27.5

A similar change occurs when we isolate revenue for local governments net of school districts. Property taxes grew a little over 4 percent per year from 1982 to 1989 in real terms. From 1989 to 1992 property taxes increased by about 7 percent per year. This increased growth is largely attributable to reductions in state aid to nonschool local governments that occurred over this period. State aid for nonschool local governments fell by about 1 percent per year in real terms from 1989 to 1992. Thus, as a result of reductions in state aid for schools and other local governments during the 1989-92 period, the property tax assumed a more prominent position in the finances of local governments.

If the personal income growth rate and the state share of local government expenditures (including education) had remained the same over the 1989-92 period as they were during 1980-89, the burden of the property tax would have been 4.4 percent in 1992, a reduction from 1989. Thus, the increase in burden which occurred over the 1989 to 1992 period appears to be largely due to cyclical swings in the economy.

The pattern of burden over time can vary substantially across regions of the state,[5] as shown by the experience in Schenectady and Yates counties, as depicted in figure 2. Both counties had roughly the same burden in 1977 and similar experiences through 1981. Since then, localities (including school districts) in Yates county have on average experienced dramatic increases in the burden of the property tax. Total property taxes of localities in Yates county accounted for 4.4 percent of personal income in 1981. By 1992 that figure had increased to 6.3 percent, a 45 percent increase. In contrast, the average burden of localities in Schenectady county changed little over the same period, with the property tax burden slightly less in 1992 than in 1981. Appendix table 1 provides a summary of property tax burdens for localities (including school districts) aggregated to counties in New York. All counties have experienced an increase in burden between 1987 and 1992, the average being a 14 percent increase. However, well over half of all counties have lower burdens in 1992 than in 1977, with the average burden 3 percent lower in 1992.

Figure 2
Total Property Taxes Relative to Personal Income, Schenectady and Yates County Averages



[5] Ideally, we would present this analysis by school district. The scope of this project and the difficulty of dealing with the complexity of overlapping jurisdictional boundaries forced us to limit our regional analysis to counties. County aggregates provide a flavor of what we would see at the school district level, although there would likely be more variation in burdens. Some school districts may have much greater burdens than those indicated here. When school districts cross county boundaries school district property taxes are allocated to the county in which the district office is located.

The burden of the property tax appears to vary significantly by county. The top graph in figure 3 shows total property taxes as a percentage of residential personal income for the 57 counties and New York City in 1991. Several counties have averages that exceed 7 percent. However, this measure of burden is not accurate. As noted above, some of the taxes collected in a jurisdiction are paid by individuals living in other jurisdictions--a portion of the property tax is exported. This exporting needs to be taken in to account to accurately measure the local burden of a jurisdiction's property tax. A crude adjustment for exporting is made in the bottom graph in figure 3, using information about the distribution of property types.[6] Because there is wide variation in the distribution of property types, even across counties, the burden after accounting for exporting is frequently different from that without accounting for exporting. Average burdens are about 15 percent smaller. More importantly, the variation across counties in burdens is only about half as large. Although there are still important differences in the burden of the property tax across jurisdictions, they are not nearly so large as when exporting is ignored.[7]

This evidence suggests that perceived increases in property tax burdens are probably overstated and do not result from inherent flaws in the tax. Much of the general increase in burden of the property tax has resulted from cyclical economic conditions. However, regionalization of the property tax base may be a useful way to address regional disparities in burden. Furthermore, current burdens are not as high as those in the late 1970s. In several places, much of what appears to be a very high burden is exported. However, it is likely that most individuals in some school districts bear a higher than normal property tax burden, even accounting for exporting. It may also be the case that some individuals bear extraordinarily high burdens even though they live in districts where burdens on average are not high.

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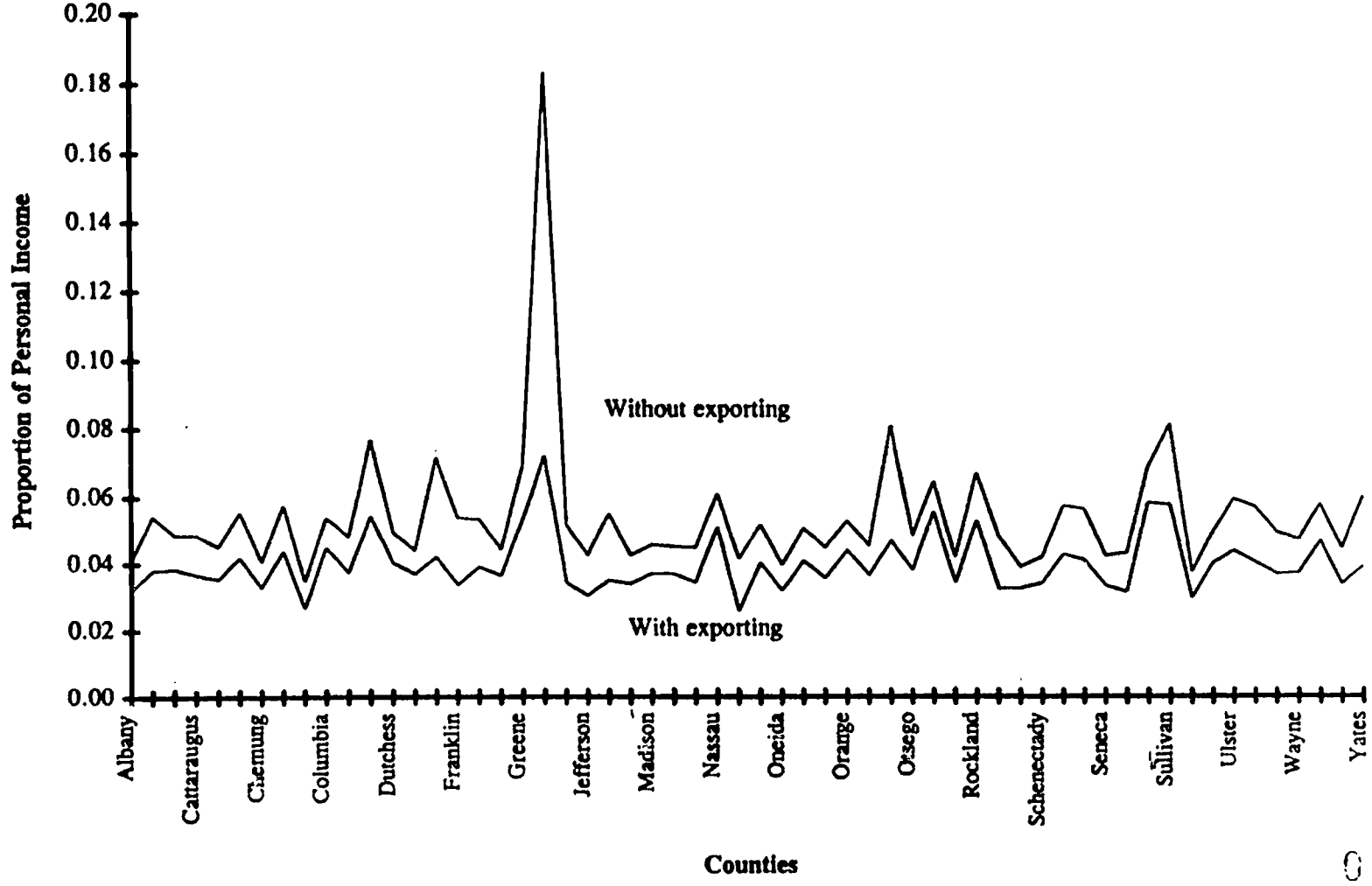
[6] The graph is based on the following assumptions about what portion of the property tax is exported by property type: nonseasonal single family homes-0 percent, seasonal homes-80 percent, agricultural property 40 percent, vacant land-40 percent, commercial property-40 percent, recreational property-25 percent, community service property-25 percent, industrial property-60 percent, public service property-60 percent, and forest property-80 percent.

[7] This analysis has not accounted for the exporting that results from the deduction for property taxes on both the federal and state personal income taxes. High income taxpayers who itemize effectively frequently reduce their net property tax burdens by more than 35 percent. Exporting through property tax itemization is likely to be large in some school districts, e.g., high income, suburban districts. From an equity perspective this is troubling as the subsidy is generally inversely related to ability to pay.

Figure 3
The Burden of the Property Tax With and Without Exporting, by County, 1991



Individual Burdens

We measure individual property tax burdens using property taxes as a percentage of total household income, which is consistent with the burden measure used for regional aggregates.[8] In practice the measure is the portion of current income used to pay property taxes, e.g., 1989 property taxes divided by 1989 income. This measure can misrepresent the burden for individual households. Annual income can fluctuate greatly so that some individuals may appear to bear an unreasonable burden solely because current income does not accurately represent their financial circumstances over a longer period. In addition, people's incomes systematically fluctuate over their lifetimes. As a result, people who are retired may appear to bear an unusually heavy burden when property taxes are compared to current income. Again, their current income may not accurately reflect their ability to pay. One final caveat of using property taxes as a portion of personal income to measure burden is needed. People with the same income may choose to own homes with greatly different values. In such cases, what is perceived as burden is merely a reflection of individual preference. With these qualifications in mind, we use property taxes and current income to quantify individual burdens resulting from the property tax.

For many individuals, the property tax is extraordinarily burdensome when measured using current income. Among households who own their homes in New York state outside New York City,[9] the median household paid about 4 percent of their 1989 household income for property taxes. However, 10 percent of these homeowners paid at least 12 percent of their income in property taxes. Table 2 shows the relationship between tax burden, household income, value of house, effective tax rate, and likelihood that the head of household is at least 65 years-old. Households who are most burdened by the property tax generally have less income and higher house values and are disproportionately headed by the elderly. These data are consistent with the story of someone who has retired and seen their current income reduced relative to the income received over their working years, and has lived for sometime in a home that has substantially increased in value, thus significantly increasing property taxes. Based on these data a large number of households in New York can reasonably find their property taxes very burdensome. However, average effective tax rates for individuals change little as property tax burden rises. This suggests, at least in the aggregate, that individuals with higher burdens are not subject to substantially higher tax rates.

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[8] The data for this portion of the analysis comes from the 1990 Census of individuals for New York state, excluding New York City. The Census collects data on income of households, property taxes paid on primary residence, and value of that residence.

[9] Due to limitations in the Census files available to us, we are unable to include New York City in this analysis.

Table 2
The Relationship Between Property Tax Burden, Household Income, House Value, Effective Tax Rate, and Age for Homeowners in New York Outside New York City, 1989

Ratio of Property Taxes to Household Income	Mean Household Income	Mean Value of House	Effective Tax Rate	Percentage with Head 65+ years	Proportion of Households
0.0 to 0.02	$66,428	$81,208	0.98	18	16
0.02 to 0.04	$64,408	$119,909	1.83	15	29
0.04 to 0.06	$53,441	$143,736	2.02	19	22
0.06 to 0.08	$43,305	$155,890	2.08	28	12
0.08 to 0.10	$34,405	$159,669	2.11	37	6
0.10 to 0.15	$26,166	$160,923	2.12	45	7
0.15 to 0.20	$18,343	$161,820	2.13	54	3
more than 0.20	$10,103	$167,003	2.13	56	

From this analysis of the burden of local property taxes, we conclude that property taxes are burdensome for some individuals in New York. Therefore, it is important to examine ways that the property tax can be modified to address high individual burdens.

Policies to Address Taxpayer Inequality

Problems with individual taxpayer equity call for policies targeted to individuals, not policies targeted to the system as a whole, or to local governments. To varying degrees, states employ four different policies to address high individual burdens arising from property taxation. First, about 20 states have enacted the ability for the state or local governments to differentiate among property types and apply lower rates to residential than to other property types, thus decreasing the burden on homeowners. Second, 48 states, including New York, offer some form of homestead exemption to provide property tax relief to all or certain demographic groups, such as the elderly. Third, 35 states offer circuitbreakers to households for which property taxes constitute a high portion of the household incomes. Finally, an increasing number of states have some form of tax deferral, where certain households can delay their property tax payments, or reverse equity mortgage, that effectively allows designated household to borrow from the state or a financial institution against some portion of the equity in their home to pay their property taxes. Reverse equity mortgages, or reverse annuities are often limited to 80 percent of home equity, and principal and interest are usually deducted from equity at the time the house is sold.

New York currently employs three such policies: property classification, the circuit-breaker tax credit and the homestead exemption. Each has limited impact. Jurisdictions in a few counties in New York, for example in Nassau and Suffolk counties, employ property classification. Within state designated limits, New York localities provide homestead exemptions for the elderly and veterans. Municipalities may grant exemptions of up to 50 percent of assessed value to individuals who are at least 65 years-old. The elderly can have up to $16,500 in income and still receive the 50 percent exemption. Lower exemptions are available to elderly with income up to $21,300. In 1991, approximately 117,000 parcels had some type of exemption, averaging about 34 percent of assessed value.

In New York, homeowners and renters with household income no greater than $18,000 can claim a credit (or a refund) on their state personal income tax. This property-tax circuit breaker allows a credit of as much as $375 for elderly and $75 for nonelderly with income less than $1000. The size of the credit decreases as income increases and can never exceed half of an individual's property taxes. The credit is limited to households with houses worth no more than $85,000 or monthly rents of $450 or less. For renters 25 percent of rent counts as the value of the property tax.[10] In 1991, New York provided circuit breaker credits to fewer than 450,000 households, who on average received $96 each. The elderly claimed 60 percent of the total credits, while renters claimed 71 percent.[11] Relative to many other states, New York's circuit breaker is not very generous. Three quarters of the states with circuit breakers provide average benefits per recipient that exceed those of New York.[12] We estimate that fewer than half of those eligible for the New York circuit breaker credit actually claim it.

The type of policy that makes sense depends on how the problem is viewed. Many economists would argue that the problem, if there is one, is with capital markets. They would argue that individuals who have high property taxes relative to their incomes have made choices to own valuable assets--their homes. (This may include some of the elderly with high burden, low income, and valuable homes shown in table 2). If the implied income stream from that asset were included in a measure of income that accounted earnings over lifetimes, some of the burden of the property tax would vanish. Nonetheless, these people may not have the money to pay their property taxes. The policy solution implied by this reasoning is that government should not, on equity grounds, offer a subsidy to these people. Instead, they may need some mechanism to liquidate part of their wealth. The reverse equity mortgage is the obvious choice. However, experience in states offering some type of tax deferral suggests that few eligible households participate. This indicates that either homeowners are unaware of these programs, or that property taxes do not actually threaten

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[10] The provisions of the circuit breaker have remained unchanged since 1986.

[11] Information on New York's circuit breaker comes from New York State Department of Taxation and Finance, *Analysis of 1991 Personal Income Tax Returns*.

[12] A complete summary of circuit breakers in other states can be found in the Appendix, Table 1.

home ownership for many households.

Alternatively, the property tax may represent a true burden to many people, for example, because they have modest means but live in a community that must have high property tax rates to fund even a basic education. Property tax reductions for these individuals through a circuit breaker would address this perceived inequity and increase the progressivity of the tax. To assess how alternative circuit breakers could alter the pattern of burdens associated with the property tax, we develop a simple computer simulation model. We use individual level data from the 1990 Census to simulate the effect of the current New York circuit breaker and alternatives to it. The intent with most circuit breakers, including New York's, is to provide middle and lower income people with some relief from the property tax. To assess the success of various circuit breakers in providing this relief we compare how the distribution of property tax burdens (property taxes as a portion of income) for people with less than the median household income ($35,000 in 1989) is affected by various circuit breaker designs. For comparison purposes we simulate the current New York circuit breaker and three alternatives.[13]

The three alternative are illustrative of how expanding either the generosity or scope of the program would affect the distribution of burdens. The first alternative is similar to the current New York circuit breaker, with an expansion in eligibility and benefits.[14] The second and third alternatives indicate how the Vermont and Wisconsin circuit breakers would distribute benefits if applied to New York households.[15] Since the programs differ in design, they lead to varying numbers of eligible households, benefit levels, and hence, aggregate property tax reductions (which equal program cost). Because less than half of those eligible participate in the current program, actual property tax reductions, and costs,

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[13] In each case we assume that everyone who is eligible participates. Even though this is clearly incorrect, developing a model that accounts for participation is beyond the scope of this policy brief.

[14] Individuals with up to $35,000 in household income, house values up to $112,000, or rent of $362/month (a reduction from current limits of $450/month) (which are the median values in New York) are allowed to participate. The property tax for renters is equivalent to 25 percent of rent. Benefits are equal to the difference between property tax payment and a graduated percentage of household income. Benefits are limited to $1500.

[15] Vermont's circuit-breaker is available to households with income of $45,000 or less, and provides benefits to homeowners and renters (20 percent of rent is tax equivalent) as the difference between property taxes and an increasing portion of income. Benefits are limited to $1350.

Wisconsin provides benefits to homeowners and renters (25 percent of rent is tax equivalent) with less than $19,154 in household income. If income is $8000 or less the benefit is 80 percent of total property tax. If income is more than $8000 the credit is 80 percent of the difference between property taxes and 13 percent of income above $8000. The credit can never exceed $1450.

are likely to be less than half of those indicated. The effectiveness of the various circuit breakers in reducing property tax burdens is indicated by the bottom portion of the table. We have calculated the distribution of tax burden net of the circuit breaker for all households with income less than $35,000. Without any circuit breaker, the 90th percentile (i.e., the top 10 percent) of the ratio of property tax to income is .193. At the 75 percentile, the burden is .107, and so on. The imposition of the current New York circuit breaker modestly reduces the burden ratios at the 90th and 75th percentiles to .185 and .102, respectively. Taxpayers who find themselves bearing the heaviest property tax burdens receive substantial assistance from the three alternative circuit breakers. For example, burdens at the 90th percentile fall from .185 under the current New York plan to .143 under the alternative New York plan, .126 with the Wisconsin plan and .091 with the Vermont plan. The impact of the program on the distribution of property tax burdens needs to be balanced by the size of the subsidy.

Circuit breaker programs can be designed to target benefits in a variety of ways. Traditionally, most circuit breaker programs target on the basis of income, age, and property tax characteristics. A circuit breaker could also examine the characteristics of the school district, e.g., relatively high effort, or low spending districts. In this way, benefits could be targeted to households that have high burdens resulting from the low wealth of their district. We believe that expanding New York's circuit breaker offers the potential to address important individual burdens arising from the property tax. To be cost effective, the design needs to target subsidies to individuals who bear high burdens brought about by circumstances largely beyond their control.

Table 3
Circuit Breaker Simulation for Non-New York City Households

	Type of Circuit Breaker Plan				
	No C-B	Current NY	Revised NY	Wisconsin	Vermont
Mean benefit per household	na	$103	$549	$685	$689
Number of households	na	460,358	553,929	753,076	1,207,968
Full Participation property tax reduction (000)	na	$47,416	$304,107	$515,857	$832,290
Distribution of burden for homeowners with income < $35,000					
90th percentile	.193	.185	.143	.126	.091
75th percentile	.107	.102	.062	.075	.050
Median	.057	.056	.045	.047	.045
25th percentile	.023	.023	.023	.019	.023
10th percentile	.000	.000	.000	.000	.000

Unresolved Research Issues

We have tried to identify what we view as some of the major issues in considering the use of the property tax in raising local revenue for education. We have also suggested ways of conceptualizing these issues and have provided some preliminary data analysis. Before we would feel comfortable in reaching a set of policy recommendations, there are several issues that could be resolved with further research.

First among these would be a careful analysis of the incidence of the property tax in New York. Understanding who bears the ultimate burden for the property tax in different types of communities would provide a sense of the progressivity of the property tax relative to alternative taxes, and would provide information needed to assess actual burdens. Better data are also needed to assess how statutory burdens have changed over time. We were not able to put together data over a long number of years that had both property tax and income information for school districts. This data would allow an analysis similar to that performed for counties to be done for school districts. The issue of exporting also needs to be examined in more detail. Here we made somewhat arbitrary assumptions about what portion of the tax for each property type is exported. A more refined analysis would

examine employment and business sales patterns for various industries to get a more informed estimate of exporting. A more detailed model of the circuit breaker could be developed. For example, a model that took into account characteristics of school districts could more effectively target benefits. Also, it would be necessary to account for individual participation in the program to estimate program costs. Finally, and perhaps most importantly, we believe it is necessary to connect analysis like that presented here with both expenditure and state aid information. As we suggested at the outset, the State faces important questions about expenditure efficiency, student equity, and taxpayer equity. Unless these issues are addressed jointly, it is likely that policy changes that attempt to 'fix' one set of problems will lead to unintended consequences for the others.

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Appendix Table 1
Summary of Circuit-Breaker Programs*

State	Eligibility	Property Tax Equivalent for Renters	Income Ceiling	Maximum Benefit	Average Benefit
Arizona					
Homeowners	age 65 +	5% of rent	$3750/$5,500	$502	$266
Renters	all		$25,000	$40	$38
Arkansas					
Homeowners	age 62+		$15,000	$250	$118
California				96% of tax	
Homeowners	age 62+,		$24,000	payment on 1st	$80
Renters	disabled, blind	$250		$34,000 full value	
Colorado					
Homeowners	age 65+,	20% of rent	$7500/$11,200	$500	$336
Renters	disabled, blind			$500	
Connecticut					
Homeowners	age 65+, disabled	35% of rent	$19,400/	$1250	$450
Renters			$23,000	$900	$385
DC					
Homeowners	all	15% of rent	$20,000	$750	about $300
Renters	all		$20,000	$750	
Hawaii					
Renters	all		$30,000	$50	$49
Idaho					
Homeowners	age 65+, disabled		$15,920	$600	$284
Illinois					
Homeowners	age 65+, disabled	30% of rent	$14,000	$780	$272
Renters	age 65+, disabled				
Indiana					
Homeowners	age 65+		$10,000	$140	
Renters	age 65+				
Iowa					$251
Homeowners	age 65+, disabled	27.5% of rent	$12,000	$1000	
Renters	age 65+ disabled				
Kansas					
Homeowners	age 55+,	15% of rent	$17,200	$600	$196
Renters	disabled, child < 18 years				
Maine					
Homeowners	age 62+, disabled	15% of rent	$8400/	$400 elderly	$369 elderly
Renters		25% elderly	$10,500	$3000 nonelderly	352 general

Maryland					
Homeowners	all	15% of rent	none	unlimited	$593
Renters	age 60+, disabled			$600	$278
Michigan					
Homeowners	all	17% of rent	$82,650	$1200	$503
Renters	all				
Minnesota					
Homeowners	all		$60,000	$400	$290
Renters	all		$35,000	$1000	
Missouri					
Homeowners	age 65+		$15,000	$750	$262
Renters	age 65+			$750	
Montana					
Homeowners	age 62+	15% of rent	none	$400	$236
Renters	age 62+			$400	
Nevada					
Homeowners	age 62+	8.5% of rent	$19,100	$500	$210
Renters	age 62+			$500	
New Jersey					
Homeowners	all	18% of rent	$100,000	$500	
Renters	all			$500	
New Mexico					
Homeowners	age 65+		$16,000	$250	$141
Renters	age 65+			$250	
New York					
Homeowners	all	25% of rent	$18,000	$375 elderly	$93
Renters	all			$75 nonelderly	
North Dakota					
Homeowners	age 65+, disabled	20% of rent	$13,000	$400	$317
Renters	age 65+, disabled			$230	$95
Ohio					
Homeowners	age 65+, disabled	NA	$16,500		$199
Oklahoma					
Homeowners	age 65+, disabled	NA	$10,000	$200	$117
Oregon					
Renters	age 58+		$10,000	$2100	$560
Pennsylvania					
Homeowners	age 65+, disabled	20% of rent	$15,000	$500	$257
Renters	age 65+, disabled				
Rhode Island					
Homeowners	age 65+, disabled	20% of rent	$12,500	$200	$170
Renters	age 65+, disabled				
South Dakota					
Homeowners	age 65+, disabled		$9000/$12,000	none	$145
Renters	age 65+, disabled				
Tennessee					
Homeowners	elderly, disabled	NA	$8200		$89
Utah					
Homeowners	age 65+		$17,325	$450	NA

Renters	age 65+				
Vermont					
Homeowners	all	24% of rent	$45,000	none	$518
Renters	all				
West Virginia					
Homeowners	age 65+	12% of rent	$5000		NA
Renters	age 65+				
Wisconsin					
Homeowners	all	25% of rent	$19,154	$1450	$425
Renters	all				
Wyoming					
Homeowners	age 65+, disabled		$10,000/	$630 single	$521
Renters	age 65+, disabled		$14,000	$723 married	

* Taken from Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism*, volume 1, 1994, pp. 138-144.

Appendix Table 2
Total Property Taxes as a Proportion of Residential Personal Income, 1977-1992, New York Counties

County	Total Property Tax Relative to Personal Income									Percentage Change		
	1977	1979	1981	1983	1985	1987	1989	1991	1992	1977-82	1982-87	1987-92
Albany	0.049	0.045	0.041	0.040	0.037	0.037	0.037	0.041	0.043	-18.2%	-7.8%	17.0%
Allegheny	0.052	0.045	0.044	0.051	0.050	0.051	0.050	0.054	0.054	-4.5%	3.1%	6.2%
Broome	0.049	0.041	0.037	0.040	0.041	0.043	0.045	0.049	0.050	-20.3%	8.8%	15.9%
Cattaraugus	0.052	0.045	0.044	0.046	0.045	0.046	0.045	0.049	0.049	-11.5%	0.2%	5.3%
Cayuga	0.052	0.043	0.042	0.045	0.047	0.043	0.043	0.045	0.045	-16.9%	0.8%	3.6%
Chautauqua	0.050	0.045	0.044	0.047	0.049	0.051	0.051	0.055	0.058	-12.1%	15.0%	13.5%
Chemung	0.043	0.038	0.039	0.041	0.040	0.042	0.040	0.041	0.042	-2.1%	-1.4%	1.6%
Chenango	0.053	0.046	0.048	0.048	0.045	0.047	0.051	0.057	0.057	-10.4%	-1.0%	20.9%
Clinton	0.039	0.036	0.037	0.038	0.034	0.034	0.034	0.035	0.037	-3.9%	-8.3%	9.1%
Columbia	0.050	0.043	0.042	0.044	0.041	0.040	0.045	0.054	0.053	-14.0%	-7.0%	31.9%
Cortland	0.044	0.040	0.046	0.046	0.044	0.043	0.042	0.048	0.049	7.8%	-9.5%	13.2%
Deleware	0.076	0.071	0.071	0.073	0.071	0.070	0.071	0.077	0.078	-1.1%	-6.3%	10.8%
Dutchess	0.059	0.045	0.042	0.042	0.041	0.044	0.048	0.050	0.052	-27.9%	2.9%	19.0%
Erie	0.053	0.044	0.041	0.044	0.042	0.039	0.042	0.044	0.045	-21.0%	-6.8%	15.8%
Essex	0.071	0.061	0.062	0.066	0.061	0.064	0.062	0.072	0.070	-7.5%	-2.3%	8.8%
Franklin	0.057	0.052	0.053	0.056	0.054	0.054	0.053	0.054	0.055	-4.1%	-0.8%	2.1%
Fulton	0.040	0.033	0.034	0.037	0.040	0.042	0.045	0.053	0.053	-8.5%	15.1%	26.6%
Genesee	0.044	0.041	0.034	0.041	0.037	0.039	0.039	0.044	0.045	-16.7%	4.5%	17.8%
Greene	0.065	0.053	0.054	0.053	0.053	0.055	0.060	0.069	0.072	-15.9%	-0.5%	31.8%
Hamilton	0.197	0.178	0.173	0.167	0.156	0.164	0.170	0.183	0.187	-18.7%	2.2%	14.0%
Herkimer	0.053	0.049	0.051	0.051	0.049	0.052	0.047	0.052	0.053	-4.3%	2.0%	3.0%
Jefferson	0.054	0.046	0.046	0.047	0.042	0.039	0.038	0.043	0.046	-10.7%	-18.2%	17.3%
Lewis	0.072	0.064	0.062	0.062	0.054	0.056	0.053	0.055	0.056	-12.6%	-10.8%	0.4%
Livingston	0.047	0.037	0.036	0.040	0.037	0.040	0.039	0.043	0.044	-17.8%	4.0%	9.7%
Madison	0.051	0.044	0.044	0.044	0.042	0.043	0.042	0.046	0.048	-12.9%	-4.2%	12.8%
Monroe	0.056	0.046	0.041	0.044	0.042	0.043	0.041	0.045	0.047	-26.9%	3.9%	10.1%
Montgomery	0.041	0.035	0.040	0.043	0.037	0.038	0.040	0.045	0.046	-2.7%	-5.2%	22.6%

Nassau	0.077	0.065	0.057	0.058	0.057	0.057	0.060	0.061	0.063	-26.5%	-0.4%	10.7%
New York City	0.053	0.044	0.038	0.037	0.035	0.036	0.038	0.038	0.041	-30.1%	-1.7%	15.0%
Niagra	0.050	0.041	0.042	0.045	0.047	0.048	0.049	0.052	0.054	-13.1%	11.7%	12.4%
Oneida	0.045	0.035	0.038	0.034	0.033	0.034	0.035	0.040	0.043	-16.4%	-10.2%	27.5%
Onondaga	0.053	0.047	0 045	0.047	0.047	0.047	0.048	0.051	0.051	-15.9%	3.8%	9.4%
Ontario	0.043	0.037	0.033	0.037	0.035	0.037	0.039	0.045	0.049	-16.8%	3.8%	32.2%
Orange	0.067	0.055	0.049	0.047	0.045	0.045	0.048	0.053	0.055	-28.5%	-6.8%	21.8%
Olreans	0.045	0.038	0.035	0.039	0.038	0.041	0.043	0.045	0.046	-16.0%	7.5%	14.2%
Oswego	0.071	0.061	0.061	0.059	0.061	0.069	0.074	0.081	0.080	-13.6%	13.0%	16.2%
Otsego	0.047	0.041	0.045	0.047	0.046	0.045	0.045	0.048	0.048	-4.3%	1.1%	5.6%
Putnam	0.088	0.066	0.059	0.059	0.054	0.054	0.057	0.065	0.067	-33.3%	-7.8%	24.7%
Rensselaer	0.045	0.037	0.037	0.040	0.038	0.037	0.038	0.042	0.043	-16.2%	-0.9%	17.2%
Rockland	0.087	0.072	0.062	0.065	0.062	0.062	0.062	0.067	0.067	-27.6%	-1.5%	8.0%
St. Lawrence	0.052	0.043	0.044	0.046	0.042	0.047	0.045	0.048	0.047	-10.0%	0.1%	1.2%
Saratoga	0.044	0.040	0.038	0.036	0.032	0.031	0.034	0.039	0.042	-9.9%	-21.7%	32.8%
Schenectady	0.053	0.048	0.045	0.045	0.042	0.043	0.042	0.042	0.044	-15.6%	-3.6%	1.9%
Schoharie	0.067	0.060	0.063	0.060	0.054	0.054	0.054	0.057	0.058	-4.8%	-14.8%	7.3%
Schuyler	0.050	0.045	0.048	0.053	0.054	0.055	0.052	0.056	0.058	9.7%	-0.3%	6.0%
Seneca	0.051	0.041	0.041	0.041	0.036	0.037	0.039	0.042	0.044	-19.8%	-8.4%	17.6%
Steuben	0.043	0.039	0.040	0.047	0.043	0.045	0.043	0.043	0.046	10.9%	-4.9%	0.6%
Suffolk	0.079	0.073	0.064	0.065	0.065	0.063	0.070	0.069	0.072	-18.6%	-1.7%	13.6%
Sullivan	0.084	0.074	0.069	0.073	0.068	0.070	0.072	0.081	0.085	-15.7%	-0.7%	21.2%
Tioga	0.036	0.033	0.034	0.036	0.032	0.033	0.036	0.037	0.041	-2.4%	-6.8%	23.4%
Tompkins	0.053	0.047	0.044	0.043	0.043	0.045	0.046	0.049	0.052	-16.8%	0.6%	16.2%
Ulster	0.071	0.054	0.057	0.051	0.050	0.052	0.053	0.059	0.062	-26.0%	-1.5%	19.1%
Warren	0.072	0.059	0.056	0.056	0.050	0.048	0.051	0.057	0.058	-24.3%	-12.9%	22.4%
Washington	0.049	0.043	0.045	0.050	0.046	0.045	0.045	0.049	0.052	-4.8%	-4.9%	17.4%
Wayne	0.054	0.044	0.042	0.046	0.043	0.042	0.044	0.047	0.050	-16.1%	-7.0%	18.1%
Westchester	0.069	0.060	0.052	0.055	0.053	0.053	0.054	0.058	0.058	-21.6%	-0.5%	8.1%
Wyoming	0.048	0.047	0 048	0.044	0.040	0.037	0.039	0.045	0.044	-1.1%	-20.9%	17.6%
Yates	0.054	0.043	0.044	0.051	0.050	0.055	0.057	0.060	0.063	-5.1%	6.6%	14.2%

Appendix Table 3
Property Taxes as a Proportion of Personal Income With and Without Exporting, by County 1991

County	No Exporting	Exporting
Albany	0.041	0.032
Allegheny	0.054	0.038
Broome	0.049	0.038
Cattaraugus	0.049	0.037
Cayuga	0.045	0.035
Chautauqua	0.055	0.042
Chemung	0.041	0.033
Chenango	0.057	0.044
Clinton	0.035	0.027
Columbia	0.054	0.045
Cortland	0.048	0.037
Delaware	0.077	0.054
Genesee	0.044	0.036
Greene	0.069	0.053
Hamilton	0.183	0.072
Herkimer	0.052	0.034
Jefferson	0.043	0.030
Lewis	0.055	0.035
Livingston	0.043	0.034
Madison	0.046	0.037
Monroe	0.045	0.037
Montgomery	0.045	0.034
Nassau	0.061	0.051
NYC	0.041	0.026
Niagra	0.052	0.040
Oneida	0.040	0.032
Onondaga	0.051	0.041
Ontario	0.045	0.036
Orange	0.053	0.044
Olreans	0.045	0.037
Oswego	0.081	0.047
Otsego	0.048	0.038
Putnam	0.065	0.055
Rensselaer	0.042	0.034

Rockland	0.067	0.053
St. Lawrence	0.048	0.032
Saratoga	0.039	0.033
Schenectady	0.042	0.034
Schoharie	0.057	0.043
Schuyler	0.056	0.041
Seneca	0.042	0.033
Steuben	0.043	0.031
Suffolk	0.069	0.058
Sullivan	0.081	0.058
Tioga	0.037	0.029
Tompkins	0.049	0.040
Ulster	0.059	0.044
Warren	0.057	0.040
Washington	0.049	0.037
Wayne	0.047	0.037
Westchester	0.058	0.047
Wyoming	0.045	0.034
Yates	0.060	0.039
Mean	0.054	0.040
SD	0.020	0.009
COV	0.375	0.216

Regional School Taxing Units:

The Texas Experience

Catherine Clark

Regional School Taxing Units
the Texas Experience

Catherine Clark
Texas Center for Educational Research
Austin, Texas
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Background

For over a decade, Texas has searched for an equitable and adequate system of funding public education. The Texas Supreme Court declared, first in 1989 and again in 1991 and 1992, that the system of public education finance in Texas was unconstitutional. The issue originally arose from the wide disparity in taxable property value among Texas school districts, ranging from less than $20,000 per student in the poorest school district to $14 million per student in the wealthiest district in 1985-86. Property taxes were (and still are) the source of more than 50 percent of the revenue for public education in Texas, so the impact of the disparities is considerable. The Court found that reliance on local funds led to substantial inequality of resources among school districts, despite the fact that the state's foundation school program provided considerable equalization to offset local inequalities. In its ruling, the Court concluded that the system violated the provision of the Texas Constitution requiring the legislature "to establish and make suitable provision for the support and maintenance of an efficient system of public free schools."[1]

Both the trial court and the first Texas Supreme Court ruling specified fiscal neutrality as the goal or required result of the school finance system. In 1987, the trial court found that:

> . . . the state is required to devise and continually sponsor a system of finance for our public schools that will give each school district the same ability as every other district to obtain, by state legislative appropriation or by local taxation or both, funds for educational expenditures including facilities and equipment.[2]

The Supreme Court ruled in 1989 in what is now called *Edgewood I*:

> There must be a direct and close correlation between a district's tax effort and the educational resources available to it; in other words, districts must have substantially equal access to similar revenues per student at similar levels of tax effort.[3]

The Dilemma of Reducing Wealth-related Disparities

One potential solution to the *Edgewood* school finance dilemma was to redistribute property tax revenues from high-wealth school districts through either a recapture mechanism (sending tax collections from high-wealth districts to the state) or through creation of regional school taxing units (sharing tax collections from high-wealth districts within a region). Although Texas law does not permit statewide recapture,[4] it offers a

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precedent for creation of regional taxing units. The Texas Education Code provides for county or multicounty school districts.[5] County equalization tax rates are also permitted within the Code, though only a few counties exercise this option.[6]

When the Texas Legislature met in 1991 following the second Supreme Court *Edgewood* ruling, it considered the regional tax base concept. Legislators were encouraged to consider county taxing units in *Edgewood II.* The Court wrote, "The Constitution does not present a barrier to the general concept of tax base consolidation." [7] Footnotes to this passage refer lawmakers to the countywide school district provisions of Chapter 18 of the Texas Education Code and to Article VII, Section 3, of the Texas Constitution that authorizes the legislature to provide for school districts composed of territory wholly within a county or in parts of two or more counties. As considered by the legislature, these new entities would be layered over existing independent school districts. To level out wealth disparities, some would have to encompass several counties. In effect, every piece of property in Texas would be in two school taxing units, the familiar district and the new regional unit.

At the time new legislation was being debated in the Texas Legislature, some policymakers believed that county or multi-county taxing units would not have to ask voters to authorize them to levy a tax.[8] Some experts thought the state could create the districts and split the tax authorization of existing independent school districts, giving part to the county taxing unit and leaving the remainder with the independent school district. The new taxing unit boundaries could be drawn so that all high-wealth districts would be within county or multicounty units that they would, in part, support. A system of county school taxing units would improve fiscal effort uniformity and improve taxpayer equity within the new units. Properly designed, regional tax bases and taxing units were believed to be a solution to the problem of meeting the requirements of *Edgewood* without consolidation.

Other experts were skeptical about the legal implications of a mandated statewide system of county school taxing units. First they noted that the legislature cannot compel one district to construct buildings and levy taxes for the education of nonresident pupils. A 1931 decision of the Texas Supreme Court prohibits the state from requiring property taxes collected in one school district to be diverted to other school districts.[9] In addition, school districts are quasi-municipal corporations, and district property is held in public trust for the people of the district for educational purposes. The legislature may not dispose of school district property (including revenue) in contravention of this trust. This trust would seem to rule out statewide recapture and might also rule out regional recapture schemes. Experts also speculated that a court might require the voters in these new taxing units to approve the tax authority. As the matter was debated, interested parties weighed in with concerns about creation of a new bureaucracy, skepticism that the amount of money redistributed would be too little to make a significant impact on equity, concerns about over reliance on property tax funding for schools, state "savings" at the expense of increased local property taxes, and questions about the perception that a uniform required tax levy for these new taxing units would violate provisions of the Texas Constitution that prohibit a statewide

property tax.[10]

When the legislative session ended in mid-1991, the Texas Legislature had passed a school finance reform bill that created regional school taxing units as the key to a more equitable system, despite what some Texans believed to be constitutional problems.

The County Education District Experiment

Creation of County Education Districts

In response to the *Edgewood* ruling of 1991, the Texas Legislature passed Senate Bill 351 and House Bill 2885. These laws created 188 County Education Districts (CEDs), combining all school districts within county or multicounty school taxing jurisdictions while also retaining the independent school districts as taxing units. The CEDs were based on the equalization district concept in law but embodied two features that would later create legal problems: the state-established tax levy and lack of local voter authorization for the CED tax.

Each CED was an independent school district established by consolidation of local school districts within its boundaries for the limited purposes of (1) exercising a portion of the taxing power previously authorized by the voters in those districts, and (2) distributing the resulting tax revenues to the component school districts. The rule for creating the CEDs was that none of them could have an average property wealth per student in excess of $280,000. Each public school district was a component member of the CED in the county it was assigned to in the Texas School Directory for the prior year.[11] The CED was given powers and duties of an independent school district such as acquiring real and personal property (presumably for administrative offices), suing and being sued (to enable the CEDs to collect delinquent taxes), and receiving funds. The CEDs were subject to Education Code budgeting and fiscal accounting requirements and could enter into contracts and employ personnel as necessary to perform their function of taxation. However, CEDs were given no role in the delivery of instructional or support services; independent school districts continued that function. To all but the most knowledgeable insiders, the system of public education in Texas operated just as it always had.

Governance and administration of CEDs. Each CED was governed by a board of trustees appointed by the respective boards of trustees of the component school districts. Each school district appointed one member to the CED board. In cases where there were fewer than three component districts, each school district appointed two members. Where a single countywide district also became a CED, the elected board of trustees for the independent school district also served as the board for the CED.[12]

CED taxing functions were relatively easy to establish in Texas because the property tax system is set up along county lines. Each of the 254 counties has a central appraisal

office. An appointed chief appraiser supervises a team of professional appraisers in assigning market value to real and personal property within the county. This process, referred to as "assessment" in many states, is called "appraisal" in Texas. As a taxing unit, a CED was required to tax property described on the tax rolls prepared by the county appraisal office. CEDs with boundaries extending into two or more counties participated in each of the respective appraisal offices. In other words, the CED would receive a roll for property within each of the component school districts from the appraisal office. Consistent with "equal and uniform" requirements of Texas law, the value for a given property was the same on the CED roll, the component independent school district roll, and all other municipal and county jurisdiction taxing rolls.

CEDs were subject to the so-called truth-in-taxation laws imposed on all taxing jurisdictions. These provide for taxpayer notification of value increases, an opportunity for taxpayers to appeal the classification or value of a property to an informal review panel, notice of rate and levy increases, and the opportunity to petition for a rollback of tax rates under certain circumstances. All taxing jurisdictions within a county use the same tax roll and operate under the same laws, so the CEDs imposed no new burdens on taxpayers with regard to notices and opportunity to appeal. The appraisal function in each county was not much affected by the CEDs. The only additional function was creation of an additional copy of the roll for the CED board. The primary administrative burden fell on the CED board to make sure that tax collections and distribution of revenue to school districts were handled efficiently. To effect this, most CEDs turned to component school districts or county tax collection offices for administrative support.

CED boards took a conservative approach to administrative matters. Most CEDs (59 percent) adopted operating budgets equal to or less than $15,000. These budgets typically covered the cost of printing, postage, banking, and insurance for the board. In most cases, the cost of appraisal and collection was borne by the component school districts. The net additional cost of the 188 CEDs as reported through budgets was $4 million. There is some evidence to suggest that this is an underestimate since at least 14 percent of the CEDs reported having no budget, meaning that component school districts absorbed the costs of operating a board of trustees, insurance, banking, postage, and other expenses.[13]

School finance equity with CEDs. The state's foundation school program has two components or tiers, both supported by state and local revenue. The first tier is a straightforward foundation program with a required local share tax rate. The first tier is highly equalized with the state providing about 55 percent of the total statewide foundation program allotment. The second tier is a guaranteed yield program. The state sets the yield per penny of tax (in 1991-92 the yield was $21.50 per pupil) and the local share is derived from taxes levied by the school districts. Districts with lower property wealth receive revenue from the state sufficient to bring them up to the stated yield. Districts with wealth per student of $215,000 or more raise all of their tier two revenue through local sources. If the guarantee were raised higher, the lower wealth districts would receive even more state aid per penny of tier two tax, and moderate wealth districts would also receive some state

aid for tier two. If the guarantee were lowered, less state aid would flow to school districts, and equity would be compromised because more districts would be raising unequalized local revenue.

Each CED provided the local share (called the "local fund assignment') of tier one of the foundation program for all the component school districts within it. In the 1991-92 school year, the CEDs were required to raise the amount of money determined by multiplying the taxable property value within the CED by 72 cents.[14] The CED tax rate rose to 82 cents in 1992-93 and would have risen to 92 cents in 1993-94. In September, each CED levied a tax to collect its required tier one local fund assignment for the school year. CED revenue was not used to fund tier two. In most cases, the actual tax rate adopted and used to collect the levy was different from the computational rate indicated in law. The CED rates varied because of differences in local appraisal practices, differences in tax collection rates, and because some individual district's tax bases had changed just prior to the implementation of CEDs.[15]

The CED distributed the funds collected from its tax levy on the basis of each component district's share of the property wealth, except that no district could receive funds in excess of its foundation program revenue level. In other words, most districts received exactly the amount of money they would have had if the independent school district had simply adopted and levied the tax itself. The exceptions were the high-wealth school districts. Taxpayers in these districts paid more property taxes to the CED than the school districts received back. The "excess" revenue was distributed to the component districts of the CED in place of state foundation program aid. If the CED collected more than the total local share for all the component districts, the excess was retained for distribution in future years. If the amount collected was less than the total local share, the state did not make up the difference and distributions were reduced.

The Results of CEDs

During the summer of 1991, Texas school districts acted quickly to implement CEDs. School boards appointed trustees to serve on CEDs, and meetings were convened in August and September to establish budgets for the CEDs and to adopt the property tax rate to generate the required local share. In most areas of the state, creation of CEDs was a smooth process, though boards and administrators were vocal in their dissatisfaction with the new law.

CED tax rates to raise the local share exceeded 72 cents in many CEDs. The statewide average CED tax rate was about 81 cents. Analysis of the sources for the increase revealed that about 5 cents of the increase was required to adjust to variation in valuation practices. About 3.5 cents was needed to cover the shortfall from collection rates of less than 100 percent. The remaining variation was due to other factors such as the impact of property tax exemptions. [16]

The impact of CEDs on school finance equalization was important and positive. For the first time, very wealthy districts lost their longstanding advantage to tax at lower levels while funding generous educational programs. The new laws contained provisions to cushion high-spending, high-wealth districts from the devastating budget cuts some would have to sustain. But over time (the laws had a four-year phase in) all districts would be constrained to raise no more than about $5,200 per student at the maximum allowable tax rate, regardless of wealth. Improved equity statistics showed that CEDs could achieve a high degree of wealth neutrality, particularly if the new laws were fully funded and hold harmless provisions removed.[17]

CEDs offered a means to achieve equity without significant new state aid. While some low-wealth school districts received large amounts of new revenue in 1992 and 1993, most school districts had roughly the same state and local revenue available to them as before, unless they raised local property taxes. Many districts raised local taxes (the levy increased over 10 percent in the 1991-92 school year) and, for a large number of districts, these revenues were unequalized. The continuation of unequalized local revenue, at least in the short term, was a source of concern to the plaintiff low-wealth school districts. However, the real challenge to Senate Bill 351 and House Bill 2885 came from high-wealth school districts that claimed that the CEDs were unconstitutional.

Litigation to Overturn CEDs

Almost as soon as the new laws were signed, plaintiffs filed suit against the state charging that the CEDs were unconstitutional. The trial court found them to be constitutional, but the Texas Supreme Court overruled that decision in January 1992, declaring the new taxing units to be unconstitutional.[18] In an unusual twist, the Court permitted the CED taxes to be collected for two years until the legislature developed a new school funding plan in 1993. One observer likened it to the court granting a divorce but requiring the couple to continue living together for two more years.[19]

In its *Edgewood III* decision, the Court found that the CEDs violated the Texas Constitution in two ways. First, the tax levied through the units amounted to an illegal state property tax. The Court agreed with the plaintiffs' argument that the CED tax is nothing more than an unconstitutional state property tax, evidenced by the fact that the law mandates the tax and prescribes what the levy must be. The very purpose of the CEDs, wrote the Court, was to levy a uniform tax statewide. "CEDs are mere puppets; the State is pulling all the strings. Though the hands collecting the tax be Esau's, the voice of authority is unmistakably Jacob's," the Court said.[20] The CED tax was also determined to have been levied without a constitutionally required local authorization. The justices wrote that they "consider it to be within the Legislature's power to create entities like CEDs before us as school districts."[21] What the Court objected to was the manner in which the CEDs were created, specifically the lack of voter approval for the CED tax and the appearance of a state property tax. In their conclusion, the Court again stressed the same argument it made in *Edgewood I* that "the system itself must be changed." The Court continued that "as

long as our public school system consists of variations on the same theme, the problems inherent in the system cannot be expected to suddenly vanish."[22] The Court offered little guidance to the legislature in developing a constitutional school finance plan other than to demand that it do so by June 1, 1993, or cause the public schools to face a cutoff of state funds.

The CED Epilogue: "Shed the Wealth" Options

In 1993, the legislature quickly readied a proposition that would amend the Texas Constitution and permit statewide property tax recapture for school finance equalization. On May 1, just a month before the deadline to enact a new school finance system, voters overwhelmingly defeated the proposition. "Robin Hood" schemes were easy to explain to the voters who clearly did not intend to send their local property taxes to the state for redistribution.

Promptly, legislative leaders moved forward with Senate Bill 7, a school finance bill that offered high-wealth school districts (again defined as those with $280,000 or more in property wealth per pupil) five options for lowering their property wealth to the required level. Among the options was one permitting districts to create a regional school taxing unit within which property tax revenue for education would be collected and shared. Districts that select this option must follow the required steps including an authorizing vote of the citizens. Other choices included voluntary district consolidation, detachment of business property and its annexation to another district, purchasing attendance credits from the state, and funding educational programs for nonresident students. High-wealth districts had about four months to act. For that reason, and probably because the CED experience lingered as an unpleasant one, none of the affected districts opted to create a regional taxing jurisdiction to effect wealth reduction. One school district detached property and the remaining 97 districts either purchased attendance credits from the state or supported the education of nonresident students.

Senate Bill 7 proved unpopular with several school district groups and it quickly became the target of more litigation. The law was upheld at the trial court level in early 1994, and plaintiffs appealed to the high court. As of December 1, 1994, Texas is awaiting a Supreme Court ruling (*Edgewood IV*) on the constitutionality of the law.

In summary, the school finance problem in Texas involves about 100 school districts (out of 1044) that have 3 percent of the students. Under Senate Bill 7, these problem districts have their property value and available revenue leveled down. Fiscal neutrality is virtually assured, assuming the plan is fully implemented and fully funded by the 1996-97 school year.[23] Funding *Edgewood* will require about $1 billion per year of new appropriations for 1995-96 and 1996-97. The Texas Legislature will have to effect this increase at the same time it is being pressured for reduced property tax burdens. In addition to the Senate Bill 7 obligation, the state must address equalized facilities and debt service components. Because the source of new state revenue is problematic, Texas school districts

could see further leveling down through a reduced foundation program and a lower guaranteed yield.

Lessons Learned from the CED Experiment

Regional school taxing units can create equity without new state money. The Texas experience demonstrates that regional school taxing units can serve to increase equity without infusions of large amounts of new state dollars. In fact, by substituting locally recaptured dollars for state dollars, the state actually has an opportunity to reduce its costs. The more that is recaptured, the more state savings can be realized. The local obligation is likely to increase, and the statewide local share for school funding will rise.

Attack the problem by eliminating high wealth. Regionalizing school taxing units represents a dramatic school finance change, one that is disruptive of local political processes and offensive to property wealthy districts. However, regional recapture (or even statewide recapture) is a way to eliminate the advantage of high property wealth without forced consolidation. In a regional school taxing unit system, the legislature can establish the level of "high" wealth that is politically tolerable and that generates the desired amount of revenue to be redistributed. Statewide recapture is administratively easier and does not require the creation of regional units. The advantage of regional school taxing units is that they permit the legislature to affirm some level of local control. If the Texas experience is a true guide, achieving a high degree of fiscal neutrality does not depend upon forming a few large tax bases that have identical values of wealth per pupil. The state can permit numerous units with varying wealth, so long as the state can continue funding the equalization program that would compensate for the resulting wealth differences among regional units.

Regional school taxing units can generate "state" aid and improve equity statistics. The state can decrease or keep level its overall funding commitment by using local revenue generated by high-wealth districts in place of state funds. Recapture options like CEDs and wealth reduction options are an increasing source of "state" revenue in Texas. In 1991-92, the CEDs redistributed $284 million to low-wealth school districts in place of state foundation program aid. In 1992-93 the level rose to $346 million. When high-wealth school districts shed their wealth under Senate Bill 7 provisions, $390 million was generated. Estimates for 1994-95 are that the high-wealth districts will redistribute $420 million. Increases in property values will result in increased levels of recaptured or redistributed money. Regional units reduce the wealth variations among school districts at the same time that they reduce the revenue variations. The effect of these changes is greatly improved equity statistics,[24] but problems arise on the adequacy side of the equation.

Regional school taxing units can support other state policies. For example, Texas could have distributed CED (or Senate Bill 7) revenue that was recaptured from high-wealth districts to provide tax relief to high-tax, low-wealth school districts. The "excess" revenue generated by higher taxes in high-wealth districts could be used for purposes other than as a substitute for state aid.

Compromises are inevitable. Failure to achieve complete wealth neutrality in Texas is due, in part, to political and financial compromises. Texas lawmakers phased in both the CED law and Senate Bill 7, in part to soften the effect on high-wealth school districts and on districts that needed to make dramatic tax rate increases. Senate Bill 7 creates a hold harmless provision for formerly high-wealth districts, permitting them to keep high expenditures if they raise their tax rates. The disadvantage of hold harmless provisions is that they delay the day of reckoning and may become a permanent part of the school finance system. Texas also set the maximum wealth level high enough to keep the large urban districts from having to share their resources.

The major financial compromise in Texas was phased-in state funding. This reduced the pressure on the state to raise taxes in order to increase state aid dramatically. However, the courts now hold the state responsible for fully funding the school finance system within two years. Failure to fund the system at the intended level will compromise whatever equity gains were expected.

Regional school taxing units do not, by themselves, cause tax increases. As implemented in Texas (particularly with increased program requirements and low levels of new state funding) taxes increased for five reasons. First, local taxpayers carried the burden of supporting enrollment growth, new programs, and general cost increases resulting from inflation. Second, in Texas prior to 1991, the 100 highest wealth school districts had the lowest average tax rates. When CEDs were instituted, their tax rates increased sharply because of the required CED share. Third, the required local share tax rate increased for all districts. Former high-wealth, low-tax districts could not opt out of the system. Fourth, under Senate Bill 7, most high-wealth districts made discretionary tax rate increases to keep per-student expenditures from plummeting. And fifth, the hold harmless provision in Texas law benefitted only those high-wealth districts with high tax rates, adding another incentive to increase local taxes.

Set tax rate and expenditure limits. Tax rate limits constrain school districts from raising taxes above the equalization level. Expenditure or revenue limits also serve to increase equity over time by constraining high-spending districts while permitting lower-spending districts to increase their expenditures. The CED legislation included a revenue limit that was intended to work in much the same way that an expenditure limit would work. The drawback to caps and limits is that, at least in a low-spending state like Texas, the limit may constrain school districts from raising revenue sufficient to fund a basic educational program.

Establish an equal and uniform property tax system. A regionalized and well-administered property tax system is a prerequisite for successfully implementing new taxing authorities. In Texas the regional structure was already in place and school boards were familiar with the appraisal office and the various options for tax collection. For taxpayers, the only administrative change was a new line on the tax bill for the amount due to the CED. Texas does not permit assessment ratios, and Texas law offers relatively few

exemptions. Exemptions offered by the CEDs were similar to the exemptions offered by school districts. If school districts are permitted to exempt large amounts of property (wholly or in part) or if they are permitted to abate taxes on certain classes of property, they may be able to circumvent the intent of the law in reducing the wealth of high-wealth districts.

Tinkering with the school finance formula will not resolve structural problems in a state's revenue system. School finance reform is no substitute for necessary tax restructuring within a state. Texas is a low-spending state with no income taxes, a high sales tax, relatively high property taxes, a lottery, and a business franchise tax. The only local revenue source for school districts is the property tax, and many school districts are reaching the statutory limit on that tax. When Senate Bill 7 is fully phased in, nearly all districts will be near the maximum tax rate and will have about $4,500 per pupil to spend -- a level well below the current national average. Within a few years, local revenue levels will not be able to increase. Texas will be able to spend more money for education only if the state's revenue system is restructured and enhanced.

Increasing the state share of school funding would improve equity faster. When local revenue plays a very significant part of the cost of a basic education, the property wealth disparities dominate the system. One way to alleviate this problem is to increase the state share for school funding, making local revenue a much smaller part of the whole. The alternative is to achieve equity by leveling down revenue for above-average property wealth districts, but such an approach may leave the system with inadequate resources. Either approach, using significant new state funds or leveling down, will work with regional school taxing units.

Implications of Regional School Taxing Units for New York

From time to time, New York policymakers have received recommendations from research groups and task forces urging consideration of regional school tax bases to promote equity. In 1981, the New York State Task Force on Equity and Excellence in Education considered an expanded tax base approach for all or part of local school taxation.[25] As recently as 1988, the New York State Temporary State Commission on the Distribution of State Aid to Local School Districts (The "Salerno" Commission) recommended a study of regionwide taxation systems as a long-term approach that might lead to improved distribution of state aid and school finance equity. The Commission also recommended that the state improve the quality of assessment practices, a prerequisite for accomplishing the equity goals that regional tax base systems promise.

Recommendations don't always lead to change. Sometimes states need a compelling reason to do things differently. In Texas, the threat of the Court to enjoin state funding for schools within a matter of a year or so was a significant spur to action. The legislature acted on time and school districts quickly complied.

On the basis of the Texas experience, it would appear that regionwide taxing systems could offer New York the opportunity to reduce the existing school district wealth disparities, with or without changing the governance of existing local school districts. Full value wealth per pupil ranges from about $79,400 for the lowest decile of districts in 1991-92 to about $1,100,000 per pupil in the highest decile. The new units could reduce this gap and the resulting revenue disparities significantly. Otherwise, it will be nearly impossible for state aid dollars to equalize revenues where disparities are this large and spending levels are already high.[26]

The advantages of regional school taxing units for New York are numerous. The state could include all school districts under one school finance plan. The state cost could be the same or even lower for the provision of current services so long as New York desires to keep the state share at around 38 percent. The regional taxing unit system, if it replaced the current school taxing unit system, might be fairer for taxpayers and easier for districts to administer than the present system. The regional school taxing unit system could be designed so as to preserve local school districts identities and local control and avoid consolidation options. However, because of the characteristics of the New York property tax system, a system like Texas's CEDs (layered over existing districts) probably would not work well.

The disadvantages in undertaking to create regional school tax bases in New York include the prerequisite need to reform the property tax system and the requirement to end the advantages enjoyed by districts with high full-value wealth. Eliminating hold harmless provisions and special exceptions is seldom easy. The state will also need to find a way for big districts to be part of the system. Big districts can work successfully to seek exclusions to laws that constrain revenue and spending. Short of exclusion, these districts are typically successful in seeking special exceptions for themselves. If school finance equity expectations require that all school districts be part of the revised system, extraordinary political will needs to be exercised to keep the big districts within the system. The state may also need to eliminate unequalized flat grants, depending on the level of equity the state expects to reach. Another factor to consider is that under regional school taxing units, some taxpayers are likely to experience sharp tax rate increases. The increases that are likely to occur will come in areas with historically high wealth and low tax rates. Even if cross-district taxpayer equity is promoted by increasing taxes for a few, tax increases are always a disadvantage.

A sound regional tax assessment and collection system that is fairly administrated is the key to the success of early implementation of regional taxing units and the key to promoting school finance equity generally. Without going into detail, it is clear from descriptions of the New York property tax system that when school districts are sliced into segments by several assessing units, the chances for equal and uniform valuation are reduced. Add to that patchwork configuration an inconsistent cycle for reappraisal, assessment ratios that erode the tax base, a cumbersome system for taxpayers to seek relief, a nonexistent system for taxing jurisdictions to appeal the property values within their

boundaries, an uneven pattern of exemptions, and a growing problem with tax arrearage, and you have a structure that may be too weak to support any effort to reduce school finance equities. The lack of equity in administration, the inequity of taxation within classes of property, inconsistent classification, and the erosion of the tax base is chronicled elsewhere.[27] Legislation passed in 1994 may strengthen the system somewhat by encouraging more efficient property assessment, but only if large numbers of existing assessment offices combine or contract to work together under the options the law provides.

Regional school tax bases would fit with the present New York funding system or with a system such as the proposed expense-based system. Regional units or bases will reduce differences in full value wealth and generate property tax revenues at the local level in a more equalized fashion. The most promising approach may be to combine major property tax reform and restructuring with creation of regional tax bases for schools. By linking these issues, powerful sets of political allies could be found to support the change through the legislative process.

NOTES

1. Article VII, Section 1. Texas Constitution

2. *Edgewood I.S.D. et al. v. William N. Kirby, et al.* Findings of Fact and Conclusions of Law. Cause No. 362,516 (August 27, 1987), p. 3.

3. *Edgewood I.S.D. et al. v. William N. Kirby et al.*, 777 S. W. 2d (Tex. 1989) at 397. *(Edgewood I)*

4. *Love v. City of Dallas,* 40 S.W. 2d 20 (Tex. 1931).

5. Chapter 17, Texas Education Code, Subchapters A and B.

6. Chapter 18, Texas Education Code.

7. *Edgewood I.S.D. et al. v. William N. Kirby, et al.*, 804 S.W. 2d (Tex.1991) at 497. *(Edgewood II)*

8. Memorandum to The Governor's Task Force on Public Education, February 8, 1990, from State Representative Gregory Luna.

9. *Love v. City of Dallas* at 120.

10. Memorandum to school districts, "Problems with County-Wide Taxing Units," December 29, 1989, from Ray, Wood & Fine, Attorneys at Law.

11. If a school district was assigned to a county other than the county in which the administrative office was located, the district could apply to the state commissioner of education for reassignment. The commissioner could grant such requests so long as they did not create a CED with property value per student greater than $280,000.

12. Texas Association of School Boards. (July 29, 1991). *The ABCs of CEDs* (Austin: Author) 3-5.

13. Clark, C. (1991). *Financial characteristics of county education districts in Texas* (Austin: Texas Center for Educational Research) 16-18.

14. The Texas property tax rate is expressed in dollars and cents per $100 of value. For example, property valued on the roll at $100,000 would yield $720 at a $.72 tax rate. Texas does not permit assessment ratios.

15. Clark, *Financial characteristics*, 19.

16. Ibid., 9.

17. Toenjes, L. (1991). Structural changes to Texas school finance formula, *Journal of Education Finance 17,* 224.

18. *Carrollton-Farmers Branch I. S. D. v. Edgewood I. S. D.*, 826 S.W. 2d 488 (Tex. 1992). *(Edgewood III)*

19. Texas Association of Taxpayers. (February 1992). *TAT Taxpayer News 1*_(Austin: Author) 1.

20. *Edgewood III* at 501.

21. Ibid., 504.

22. Ibid., 524.

23. Legislative Budget Board. (October 1994). *Foundation school program funding elements* (Austin: Author) 3.

24. Toenjes, *Structural changes.*

25. Lamitie, R. E.; Glasheen, R. J. & Bentley, F. (January 1981). *Report of the expanded tax base study* (Albany: New York State Department of Education).

26. This observation was made by Arvid Burke in his paper, "Development of public school finance in New York State," quoted in Margolis, E. & Moses, S. (1992). *The elusive quest. The struggle for equality of educational opportunity* (New York: Apex) 3-9.

27. Report of the Temporary Sate Commission on State and Local Finances. (1975). *Vol. 2. The real property tax* (Albany: Author).

Statewide Taxation of Nonresidential Property for Education: A Policy Proposal for New York State

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Statewide Taxation of Nonresidential Property for Education

A Policy Proposal for New York State

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The property tax is currently the principal source of local funding for school districts in New York State. As such, the property tax deserves primary attention in any policy discussion of local funding for schools. This policy brief focuses on the following policy question related to the property tax:

> Assuming the state chooses to continue relying heavily on the property tax to pay for schools, should it consider removing nonresidential property from the local property tax base for the purposes of education, taxing it at a statewide uniform rate, and returning the revenues to the local school districts in an equalizing manner?

This brief starts from the assumption that the state will continue to rely heavily on the property tax as a revenue source for education. Whether or not the state should continue to do so raises a broader set of issues that are beyond the scope of this paper.

The first section summarizes the conceptual arguments for statewide taxation of business property for education. The next two sections report our empirical analysis of this policy option for New York State. The final section summarizes the policy-relevant lessons that emerge from the analysis

The Case for Statewide Taxation of Nonresidential Property[1]

The most compelling argument for substantial local funding, as opposed to full state funding, of local schools is that it strengthens the link between the spending or benefit side of the budget and the tax or cost side. That is, with local funding, those who live in the geographic area receiving most of the public benefits also pay the costs and, through the local political process, make the decision about how much to spend. From this perspective, a local property tax on *residential* property receives high marks as a revenue source for K-12 education. The owners of the residential property benefit from additional education spending either directly by having children in the schools or, provided the typical buyer in the community values high-quality education services, indirectly through increases in the value of their home.

By this criterion of linking benefits and costs, the *nonresidential* component of the local property tax is less appropriate than the residential component as a revenue source for K-12 education. Firms clearly benefit from having an educated labor force. However, because firms typically draw on a labor pool for their employees that extends well beyond the school district in which they are located, the link between the education provided within a particular school district and the quality of the labor force available to a firm in that district need not be close. By this benefit logic, it may make sense to tax business property

1. This discussion draws heavily on Helen F. Ladd, "State-wide Taxation of Commercial and Industrial Property for Education," *National Tax Journal*, vol. XXIX (June 1976), pp. 143-153.

for the purposes of education at the regional or state level, rather than at the district level. Hence, the first argument for shifting to statewide taxation of business property for education purposes rests on a benefit rationale.

A second related argument for moving away from local taxation of business property toward state taxation emerges from the possibility that, under the current arrangement, school districts with large amounts of business property may overinvest in education relative to private goods. This outcome occurs because the price to local residents of expanding education is less than the full cost whenever a portion of the amount is paid by business firms. In effect, business firms subsidize the cost to local residents of providing more education and thereby induce them to overinvest. Taxing all business property at a statewide uniform tax rate for the purposes of K-12 education would eliminate this distorting price incentive.

A third argument is that local taxation of business property for education purposes may distort the location decisions of firms. Local taxes on firms for schools differ from local taxes on firms for nonschool public services, such as public safety and sanitation. While taxes for nonschool purposes may serve as a reasonable, albeit imperfect, proxy for the benefits received by firms or the costs they impose on the local community, and, hence, do not generate inappropriate location incentives, the same cannot be said for local school taxes. All other factors held constant, firms will have incentives to locate in areas where the education-related taxes are low, provided, of course, that they retain access to well-educated workers. Thus, statewide taxation of firms for education purposes would remove a major distorting influence on firm location decisions within the state and would allow firms to make location decisions on the basis of real resource costs rather than tax-related considerations.

A fourth potential argument for shifting to statewide taxation of business property for education is more speculative and requires empirical investigation. The argument is that taxing business property at a statewide uniform rate and channeling the money back to the districts for education purposes could generate a fairer pattern of education spending across the state than the current pattern. Whether or not that outcome will occur depends on a variety of issues, such as how nonresidential property is currently distributed among school districts, how decision makers in school districts respond to the changes in tax base and new aid, and the nature of the formula that would be used to distribute the revenue from business property back to the local school districts. At one extreme, if the business property were disproportionately located in areas where the average income were low and the distribution formula did a poor job of targeting aid to low-income areas, one would predict that the policy change would widen the variation in education spending and increase the link between education spending and the income or wealth of local residents. Low-income or low-wealth districts would reduce their spending as they lost substantial amounts of their taxable capacity and were not compensated with offsetting inflows of new state aid, while high income or high wealth districts might be able to expand their spending on education. At the other extreme, if the business property were disproportionately located in higher income areas and the distribution formula effectively targeted aid to low-income areas, the

policy change could improve educational equity both in the sense of reducing the variation in spending and by weakening the positive link between resident income or wealth and spending.

The next section of this policy brief summarizes the effects of the policy change on per pupil spending in New York school districts. The simulation and discussion are designed to determine whether the policy change would improve or worsen the distribution of per pupil spending across school districts in the state.

Impacts of the Policy Change on Per Pupil Spending

The simulation analysis summarized in this section provides rough estimates of the effects of the policy change on the distribution of per pupil spending using data for 1990-91. Should state officials wish to pursue this policy option further, they would need to refine the analysis and use more recent data. At a minimum, we would recommend the following two refinements. First, the state should adjust the per pupil spending levels in each district for the differential costs of educating students that are outside the immediate control of local officials. These costs vary across districts in part because some types of children, such as those with special needs, those with limited proficiency in English, or those from disadvantaged households, are more expensive to educate than others. In addition, they vary because school districts in areas where the cost of living is high must pay higher salaries to attract teachers than school districts in areas where the cost of living is lower. Second, if data were available, it would be desirable to adjust the income or wealth measures used in any formula for distributing state aid by the local cost of living. In the absence of such an adjustment, the income of residents in downstate areas relative to upstate areas overstates the difference in real income between the two areas. According to one set of estimates, the cost of living in the New York City area is 213 percent of the U.S. average, that in Nassau-Suffolk is 148 percent of the U.S. average, while that in the Albany-Schenectady -Troy metropolitan area is only about 106 percent of the national average.[2] If these estimates are correct, they imply that the purchasing power of a given level of household income in the Albany area is equivalent to about twice the purchasing power of that same level of income in the New York City area.

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2. Constructed by the American Chamber of Commerce Researchers Association, these cost-of-living estimates are for the third quarter of 1991 and refer to a mid-management standard of living. Exceptionally high housing costs account for the high New York City area figure. Other components vary across the three areas but by less than the composite index. For example, for grocery items alone, the indices are 145 for New York City, 122 for Nassau-Suffolk, and 108 for Albany-Schenectady-Troy. See U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1992* (Washington, D.C.: U.S. Government Printing Office), Table 745.

Table 1 reports the current distribution of property tax revenues, and hence of effective tax bases, for schools by category of property for seven types of school districts. Of most importance is the first row of the table which documents the wide variation across types of districts in the average share of the effective property tax base that is residential.[3] As shown, the proportion of the tax base that is residential in the typical district is 62 percent, but the average ranges from 23 percent in New York City to 70 percent in the downstate suburbs.

In addition, New York City receives a huge 62 percent of its revenue from commercial property in contrast to the average of 33 percent from that source in the Big Four cities (Buffalo, Rochester, Syracuse, and Yonkers). Not surprisingly, the rural districts have the largest proportion of agricultural property. Because of the presence of large power plants in some rural areas, the rural districts also derive the largest average share of revenue from the "other" category which includes public service property. This variation in the average mix of tax bases across the seven groups hides even greater variation among individual districts. Consequently, the proposed policy of removing nonresidential property from the local tax base for education purposes will clearly affect some districts more than others.

Our simulation analysis proceeds in three steps. First, we use data on all school districts in the state to estimate a statistical model to explain the variation in per pupil spending across school districts in 1991. Second, we use the estimated equation to simulate how much each district would have been likely to spend if it had been restricted to taxing only its residential property. Because the new tax base in each district implies that every dollar of local taxes is paid by residents, this initial simulation generates less spending in each district than the district actually spent. Third, we predict the level of spending in each district in the presence of the full policy package, that is, taking account of both the restricted tax base and the additional aid financed through the state taxation of nonresidential property. Because the aid can be distributed among districts in many alternative ways, this step could generate many different sets of results. As elaborated below, we simplify by specifying a few illustrative distribution formulas.

The determinants of per pupil expenditure include local income and wealth variables (specifically, New York State adjusted gross income of residents per weighted pupil and residential property tax wealth per weighted pupil); intergovernmental aid variables (Federal aid and state aid per pupil); the residential share of the property tax base; and, as a control for the characteristics of the students, the fraction of students eligible for subsidized lunches. As discussed in the appendix, two forms of the equation were estimated, a linear equation

3. The category of residential property excludes apartment buildings with five or more units.

Table 1

Distribution of Property Tax Revenue by Type of School District, 1991
(percent)

(# of Districts)	All Districts (683)	Down-state Cities (7)	Down-state Suburbs (162)	New York City (1)	Big 4 Cities (4)	Upstate Cities (50)	Upstate Suburbs (243)	Rural (216)
Residential	61.8	59.4	70.1	22.9	45.8	56.3	63.4	55.7
Commercial	12.2	26.8	15.2	62.1	32.6	20.9	11.5	7.7
Industrial	4.1	3.2	6.0	2.2	6.0	5.6	3.9	2.4
Agricultural	5.0	0.0	0.3	0.0	0.0	1.3	5.1	9.5
Other	16.9	10.6	8.4	12.8	15.6	15.9	16.1	24.7
Total	100	100	100	100	100	100	100	100

Source: State Division of Equalization and Assessment, Report of Effective Full Value and Tax Levy by Property Class for the 1991 Assessment Rolls.

and a logarithmic equation. All results described in the text are based on the linear model. Two variables in this equation are particularly important for the simulations: the residential share of the property tax base and state aid.

Table 2 presents simulation results for the districts grouped by district type. The first row reports the starting point to which the simulation results should be compared, namely the variation in average per pupil spending in 1990-91. Average spending varies from $7,441 in the upstate cities to $12,204 in the downstate cities. Per pupil spending in New York City is $7,463, substantially below the spending in the other downstate districts. As we noted above, it would be desirable to adjust these spending figures by the differential costs of educating students, where such differentials are caused by factors largely outside the control of local school officials. Making such an adjustment would have the following effects: Adjusted spending in the upstate and rural districts would rise somewhat, adjusted spending in the downstate cities and suburbs would fall by a larger amount, and, because of its large percentage of disadvantaged students and above-average salary requirements, New York City's adjusted spending would fall dramatically.[4] Hence, the variation in adjusted spending between downstate and upstate districts would be less than that indicated in the table, and New York City would emerge as an extremely low-spending district.

The second row shows the effect on per pupil spending of removing the nonresidential portion of the local tax base. In all districts, this part of the policy package puts downward pressure on per pupil spending through the following mechanism. Before the simulated policy change, local residents in each district faced a tax price of education equal to the share of the tax base that is residential. For example, if 60 percent of the tax

4. Average estimated cost indexes relative to the state average of 100 for each type of district are : downstate cities, 129; downstate suburbs, 116; New York City, 148; the Big 4 cities, 122; upstate cities, 97; upstate suburbs, 94; and rural,94. These cost differences were provided to us by William Duncombe of Syracuse University. They were derived from a cross section regression using data for all New York school districts of per pupil district expenditures on test scores as a measure of outcome, taste variables, and cost factors. The estimated coefficient of each cost factor indicates the average impact on costs of an increase in that factor. The cost factors included in the analysis are the percentage of the students at risk (children under 6, single moms, living in poverty), the percent of pupils with limited English proficiency, and an adjusted teacher salary index. Other forms of the equation, such as one that includes student enrollment as a cost factor, would yield even greater cost differentials across types of districts.

Table 2

Simulated Spending per Pupil, by District Type, 1990-91
(dollars per pupil)

	All Districts	Down-state Cities	Down-state Suburbs	New York City	Big 4 Cities	Upstate Cities	Upstate Suburbs	Rural
Actual Spending per Pupil	8,728	12,204	12,151	7,463	8,574	7,441	7,651	7,566
Predicted Spending No Aid	7,464	10,854	11,177	4,902	6,772	5,988	6,434	6,094
Predicted Spending Flat Grant per Pupil	9,167	12,557	12,870	6,605	8,474	7,691	8,137	7,796
Predicted Spending Equalizing Grant per Pupil	9,723	11,331	11,743	6,492	8,559	8,084	8,769	9,655

The equalizing grant per pupil is distributed to districts in inverse proportion to district income per weighted pupil. Grants are given only to the 75 percent of the districts with the lowest per pupil income.

base were residential, residents would pay directly only 60 cents for each dollar of local taxes raised for education.[5] To simulate the initial impacts of the policy proposal, the tax price term is set at 1.00 in each district to reflect the fact that, with nonresidential property removed from the tax base, residents would pay the full cost of each additional dollar that they chose to spend on education. Thus, for example, as a result of restricting the local tax base to the residential component, the tax price of a dollar of education services for a resident in a typical district would rise from 62 cents to $1.00 which would provide a strong incentive for the district to reduce its spending on education. The coefficient of the residential share variable in the spending equation provides an estimate of the magnitude of the response. On average, the response elasticity is estimated to be -0.23. This elasticity means that if the price rises by 50 percent, say from .66 to 1.00, the desired level of spending would fall by almost 12 percent.

As shown by the estimates in row 2, the predicted impact is the greatest in New York City and the least in the downstate suburbs, a pattern that reflects the high proportion of nonresidential property in New York City and the relatively low proportion in the downstate suburbs. These predictions should be interpreted as long run responses. The removal of business property from the local tax base would create a dramatic revenue shortfall in many districts, but in the short run taxpayer voters might not be willing to cut spending immediately to the level they would ultimately prefer given their new higher tax prices. The simulation ignores the timing of the response, and predicts the full long run adjustment.

The results for New York City should be interpreted cautiously. The analysis assumes that the property tax is the marginal revenue source in the sense that it is the source of revenue for any additional spending on education. To the extent that other taxes such as the income or the sales tax represent the marginal tax, the estimate in the table may overstate the impacts of removing the nonresidential component of the tax base in New York City. Moreover, given that New York City is not an independent school district, the policymaking procedure is more complex than in other areas and may not be accurately modeled. These qualifications apply as well to other districts that rely on broad-based local taxes other than the property tax and to the other Big Four city school districts that are fiscally dependent.

The third and fourth rows show the effects of the full policy package for two of the many possible distributions of the revenue from a statewide tax on nonresidential property, taking account of the fact that the local districts are free to choose whether to spend the

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5. This assertion assumes that landlords in small structures are able to shift fully the burden of the tax on residential rental property to renters so that renters in small structures as well as homeowners pay property taxes. In addition, it ignores the possibility that residents may bear part of the burden of the other 40 percent as a consequence of the ability of firms to shift the burden to them through higher prices of goods and services or lower wages for residents.

additional revenue or to use it to reduce local tax burdens. These simulations are simply illustrative. In all of our simulations, including eight others in the appendix, we assume no change in the distribution of existing state aid. In addition, we assume that the new aid is distributed by a formula which permits no special treatment of specific districts, such as New York City, or of categories of districts. Clearly the results would differ if special treatment were given, say, to New York City. According to the preferred estimate of the behavioral response to aid from the expenditure equation, an additional dollar of state aid leads on average to 78 cents in additional spending on education, with the rest allocated either to lower local school taxes or, in the case of fiscally dependent districts, possibly to higher spending on other publicly provided goods and services. In both policy simulations, the amount of revenue to be distributed is simply the total amount of revenue currently collected from nonresidential property for education purposes. In practice, this revenue would be generated by imposing a statewide uniform rate equal to the current average tax rate on all nonresidential property.[6]

In row 3, the revenue is distributed among school districts strictly on a per pupil basis; in row 4, it is distributed in a much more equalizing manner. In particular, in row 4, aid is given only to the poorest 75 percent of the districts and is distributed by formula among those districts inversely with respect to the income (as measured by New York State adjusted gross income of residents) per weighted pupil in the district. Comparing rows 3 and 4 shows that the distribution formula matters a lot, and that if narrowing disparities is a primary goal, that the more equalizing aid formula is preferred to the flat per pupil grant. With the targeted grant program, average per pupil spending would have a tendency to be reduced in the three district types that currently spend the most on education and to rise in the three types of districts that begin with the lowest spending per pupil, other than in New York City where the spending is predicted to fall from its already low level. We note, however, that the large predicted increases in the rural districts would probably be smaller if the formula for distributing the new aid were designed to take into account the lower cost of living in those districts.

Table 3 summarizes more fully the distributional effects of the policy change across all districts in the state. Once again the first row represents the baseline to which the policy change should be compared. It shows that average spending across all districts was over $8,700 and that, leaving out the bottom and the top 10 percent of the districts, that it ranged from $6,516 to $12,357. An alternative measure of variation is given by the standard deviation, which measures the typical difference between spending in a district and average spending. The larger is the standard deviation relative to the average, the larger is the dispersion around the average. The final three columns report the correlation across districts between per pupil spending and income, wealth, and the fraction of children receiving subsidized lunches. The correlations show that in 1990, per pupil spending was

6. This revenue amounted to $5.4 billion in 1991, which is about 26 percent of total spending on education in that year and about 60 percent of state aid for education.

Table 3

Summary of Expenditure Patterns for Various Policy Simulations
(all districts)

	Measures of Variation			Correlation of per Pupil Expenditure		
	Average Expenditure per Pupil ($)	Standard Deviation ÷ Average (x 100)	10th to 90th Percentile ($)	Income[a]	Residential Wealth[b]	Subsidized Lunch[c]
Actual Spending per Pupil	8,728	30.2	6,516-12,357	0.64	0.64	-0.36
Predicted Spending No Aid	7,463	36.8	5,119-11,284	0.66	0.66	-0.41
Predicted Spending Flat Grant per Pupil	9,167	29.9	6,821-12,987	0.66	0.66	-0.42
Predicted Spending Equalizing Grant per Pupil	9,723	23.1	7,551-12,598	0.28	0.52	-0.05

a. Income per weighted pupil.

b. Residential property tax wealth per weighted pupil.

c. Fraction of pupils eligible for free or reduced price lunch.

highly and positively correlated with income and wealth and negatively correlated with the proportion of poor students. In other words, districts that had higher average income or residential wealth or that had smaller proportions of poor students typically spent more per pupil than did poorer districts.

The policy proposal improves the pattern of spending to the extent that it reduces the variation across districts and weakens the correlation between spending and wealth. *Rows 2, 3, and 4 illustrate that only if the revenue from the statewide taxation of nonresidential property is distributed in a highly equalizing manner will the policy proposal make the distribution of education spending more equitable.*

Row 2 shows that the first part of the proposal, namely restricting the local tax base to residential property, has undesirable effects on the pattern of spending: in addition to putting significant downward pressure on spending, it increases the variation across districts and makes spending somewhat more highly correlated with wealth or income. Distributing the state aid on the basis of a flat grant per pupil does little to improve the situation. Relative to the current distribution, it increases average spending, has little impact on the variation, and slightly worsens the correlations. Only when the revenue from the statewide taxation of nonresidential property is distributed in a highly equalizing manner do the summary measures improve: in that case, the 10th-90th percentile range decreases somewhat, the standard deviation falls as a percent of the average, and the correlations all move toward 0. In other words, by these summary measures, the policy change makes the overall distribution of per pupil spending across districts somewhat more equitable.

Winners and Losers

Table 4 clarifies which types of districts win and lose from the policy change. Panel A reports results with the flat per pupil grant and Panel B with the equalizing grant. As shown in the first row of both panels, the downstate cities, the downstate suburbs, and New York City are net losers under both policy proposals in that the net change in revenue, including both the new state aid and the loss in revenue from nonresidential property, is negative. In other words, for districts in the losing categories, the additional aid is not large enough to offset the loss of revenue to the typical district from the removal of nonresidential property from the local tax base for education, regardless of whether the aid is provided on a flat per pupil basis or in an equalizing manner. The winners under both versions are the Big Four cities, the upstate cities, the upstate suburbs, and the rural districts. Those districts on average receive enough new aid to more than offset the revenue loss from not taxing nonresidential property.

The next two rows incorporate the estimated behavioral responses to the policy change to show what is likely to happen to per pupil spending and to locally generated tax revenues. Bear in mind that the locally generated revenues would come exclusively from residential property. With the flat grant distribution formula, per pupil spending is predicted

Table 4

Change in Educational Revenues and Spending by District Type
($ per pupil)

	Down-state Cities	Down-state Suburbs	New York City	Big 4 Cities	Upstate Cities	Upstate Suburbs	Rural
A -- Flat Grant							
et Change in External Revenue per Pupil[a]	-1,255	-692	-705	155	732	770	745
hange in Spending per Pupil[b]	353	729	-858	-99	250	486	230
hange in Locally-raised Revenue[c]	1,608	1,421	-153	-254	-482	-284	-515
B -- Equalizing Grant							
et Change in External Revenue per Pupil[a]	-2,818	-2,141	-849	263	1,234	1,562	3,113
hange in Spending per Pupil[b]	-874	-408	-971	-14	643	908	2,089
hange in Locally-raised Revenue[c]	1,944	1,733	-122	-277	-591	-654	-1,024

Defined as the difference between revenue lost due to removal of nonresidential property from the tax base and tate aid financed by the statewide taxation of nonresidential property.

As predicted by the linear form of the spending equation.

Calculated as the change in spending per pupil minus the net change in external revenue per pupil.

to rise in all district types except for New York City and the Big Four cities.[7] Only in the downstate cities and suburbs would local residential property tax burdens have to rise. In the upstate areas, the increase in spending is less than net increase in revenue which permits local property tax burdens to fall. Local tax burdens are also predicted to fall in New York City and in the Big Four cities, but at the cost of a decline in per pupil spending.

The differential effects are most striking when the aid is distributed in an equalizing manner as shown in Panel B. The effects can be summarized as follows:

> **Downstate cities and suburbs** are net losers of external revenue. Per pupil spending goes down, and local residential property tax burdens rise. Note that these districts currently have the highest per pupil spending, so a reduction in such spending tends to equalize education spending throughout the state.[8]
>
> **New York City** loses external revenue, per pupil spending goes down, and local residential property tax burdens go down. The large predicted fall in per pupil spending ($971) is an undesirable outcome of the policy change given that New York City currently spends well below the average, despite the fact that it faces more severe educational challenges than most other New York districts.
>
> **The Big Four cities** are net gainers of external revenue which allows them to reduce local residential property taxes. However, they are also predicted to reduce slightly per pupil spending.
>
> **Upstate cities and suburbs** gain substantial amounts of external revenue, some of which they use to increase per pupil spending, and some of which they use to reduce residential tax burdens. Residents, including pupils, in such districts are clear winners from the policy change. The increase in per pupil spending in such districts helps to equalize spending throughout the state.
>
> **Rural areas** gain large amounts of external revenue. The model predicts that they will increase per pupil spending by over $2000 per pupil and that they will reduce local property taxes by over $1000 per pupil. Although the overall equity of the

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7. The rise in average spending in the downstate cities and downstate suburbs in the simulation with the flat per pupil grant is somewhat surprising in light of the large average declines in external revenue in those types of districts. It simply reflects the fact that the downward responsiveness of spending to the change in the tax price is low relative to the upward responsiveness of spending to the new state aid.

8. We believe that this basic conclusion would still hold even if the analysis fully incorporated differences in the cost of education across districts, but that analysis remains to be done.

state's education system may be enhanced by the increased spending in the rural districts, the changes may be excessively large given the lower cost of living, and hence, cost of providing education, in such areas.

Discussion and Conclusion

The thrust of this policy brief is that New York state policymakers should take a closer look at the possibility of shifting to statewide taxation of nonresidential property for education. The change would improve local decision making by strengthening the link between those who make local decisions about education spending and those who pay, and would reduce incentives for firms to choose among local districts based on education-related tax rate differentials. To mitigate the effects of the large revenue shifts, the state would presumably want to phase in the change. In addition, state policy makers should consider the following lessons that emerge from the simulations:

1. The way in which the revenue from the state tax on nonresidential property is distributed to the local school districts is a crucial component of the policy proposal. A highly equalizing distribution formula such as the one described in the text is required if the goal is to reduce spending differences across districts. However, even that one is limited in two ways. First, it does not account for the fact that the purchasing power of income is greater in upstate districts than in downstate districts. Second, it inadequately accounts for differences in education costs that are outside the control of local officials, a limitation that works to the disadvantage of the large cities and downstate districts.

2. The policy proposal would lead to highly undesirable consequences for the school children in New York City unless specific policy actions were taken to reduce or eliminate those adverse effects. Refining the distribution formula to account for educational cost differences and cost-of-living differences would help, but probably would not solve the problem completely. Instead, state policymakers should consider moving New York City outside the aid formula and giving it special treatment.

3. The program would operate in a more equitable manner if the state were able to incorporate cost-of-living differences into the distribution formula. In the absence of an adjustment for cost-of-living differences, the rural areas of the state would be treated too generously.

4. To implement the program, state policymakers need to clarify the definition of residential property and, in particular, the treatment of large apartment buildings.

5. Finally, it would be worth simulating the effects of such a policy proposal at the regional level, rather than the state level. Provided the plan applied to all districts, voters in every district would still face a tax price of one dollar for each additional dollar of spending. Tax rates on nonresidential property could either be set at

regional averages or at a statewide uniform rate. If the latter were the case, the plan would be similar to a statewide plan in terms of the benefits it would generate from reducing distortions in business location decisions. The difference would be that the revenue from the nonresidential property would be distributed only among the districts within the region from which it came. In this way, the state could avoid the major revenue shifts from downstate to upstate districts implicit in the statewide plan.

This policy proposal for New York state differs in some important ways from the recently enacted school finance reform in Michigan, but also bears some similarities worth highlighting.[9] The major changes in Michigan were the increase in the state share of funding for local schools from under 35 percent to almost 80 percent and the virtual elimination of local control over spending levels. In contrast, local control would remain a central feature of school finance under the proposal discussed in this policy brief. Contrary to popular impression, Michigan did not completely eliminate the property tax as a source of funding for schools. In fact, property taxes still contribute more than 30 percent of the total state and local revenue for schools. After the reform, the state levies a property tax on all property at a statewide uniform rate of 6 mills, and, in effect, requires a tax rate of 18 mills on nonresidential property at the local level. Hence, from the benefit perspective which serves as a major rationale for our proposal for New York, in the aggregate, Michigan may have moved in the wrong direction in that it increased the tax burden on nonresidential property relative to that on residential property.

Despite the differences, two similarities are worth noting. First, Michigan now has the equivalent of a statewide uniform rate on nonresidential property, as is being proposed here for New York. Second, in the 37 high-spending local districts which have retained some discretion over spending levels, any additional spending over the foundation level will be financed out of local homestead property alone. Thus, the tax price to local residents of raising an additional dollar of revenue will be one dollar in those districts, as it would be with this proposal for New York. In summary, the proposal for statewide taxation of nonresidential property at a uniform rate in New york draws on two of the ideas implicit in the Michigan reform. However, the proposal for new York avoids the dramatic reduction in local control implicit in the Michigan program.

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9. This discussion of Michigan draws on descriptions of the reform in C. Philip Kearney, "Reducing Local School Property Taxes: Recent Experiences in Michigan," A Policy Brief for the New York State Education Department, December, 1994, and Paul N. Courant, Edward M. Gramlich, and Susanna Loeb, "A Report on School Finance and Educational Reform in Michigan," Proceedings of a Federal Reserve Bank of Chicago Conference on Midwest Approaches to School Reform, forthcoming.

APPENDIX

This appendix includes two tables. Table A-1 reports the regression equations which provide the basis for the spending simulations. The first equation is in linear form and is the basis of the simulations reported in the text. The second equation in logarithmic form. Neither equation suits our needs perfectly. The first equation provides the most reasonable, and easy to interpret, estimate of the effect of state aid on local spending, but imposes a linear specification of the price variable, the percent of the tax base that is residential. The logarithmic specification is preferred because it imposes a constant elasticity on the tax price term, but it less appropriate because it imposes a constant elasticity on the aid variables as well.

In both regressions, all the variables are weighted by district enrollment, a procedure that improves the precision of the estimates. New York City has been excluded from the regressions to avoid the concern that because of its large student enrollment, it would drive the results. In fact, including New York City in the regressions does not markedly change the estimated coefficients.

Table A-2 provides a richer set of simulation results than those reported in the text. Simulations are reported for both forms of the equation and for a variety of distribution formulas as described at the bottom of the table.

Table A-1

Regression Equations Used in Policy Simulations

	Dependent Variable: Expenditure per Pupil	
	Linear Model	Logarithmic Model
Residential Property Value per Weighted Pupil	0.007 (10.3)	0.48 (26.1)
% of Taxable Property Values that is Residential	-3,323 (7.0)	-0.45 (22.0)
Income per Weighted Pupil (NYS AGI)	0.034 (17.9)	0.15 (7.9)
% of Students Receiving Subsidized Lunches	-4,061 (7.4)	-0.04 (6.9)
State Revenue per Pupil	0.78 (11.5)	0.56 (24.0)
Federal Revenue per Pupil	2.5 (4.2)	0.05 (5.5)
Intercept	4,960 (13.0)	-3.12 (8.9)
R^2	0.59	0.77

Absolute values of t-statistics are in parentheses below the coefficient. Both of these equations are estimated using weighted least squares (weighted by the number of pupils) with New York City excluded.

Table A-2

Simulation Results Using Different Models Specifications and State Aid Formulas
($ per pupil)

	Down-state Cities	Down-state Suburbs	New York City	Big 4 Cities	Upstate Cities	Upstate Suburbs	Rural
Current Expenditures	12,204	12,151	7,463	8,574	7,441	7,651	7,566
Sim0	10,854	11,177	4,902	6,772	5,988	6,434	6,094
LSim0	9,551	10,265	3,828	6,009	5,663	6,169	5,728
Sim1	12,557	12,880	6,605	8,474	7,691	8,137	7,796
LSim1	13,231	15,198	5,121	7,648	7,229	8,153	7,299
Sim2	11,577	11,749	7,342	8,625	7,650	7,798	7,880
LSim2	10,825	11,604	5,607	7,487	7,119	7,536	7,143
Sim3	11,728	12,333	6,310	6,603	7,967	8,658	9,254
LSim3	11,114	13,226	4,917	7,523	7,387	8,416	8,290
Sim4	11,265	11,443	7,453	8,537	7,725	7,81'	7,919
LSim4	9,949	10,601	5,677	7,302	7,180	7,468	7,110
Sim5	11,331	11,743	6,492	8,559	8,084	8,759	9,655
LSim5	10,009	11,118	5,044	7,313	7,403	8,328	8,565

Model Definitions for Table A-2:

L before the model name means that the simulation model used a logarithmic, rather than linear, regression equation.

Sim0 removes nonresidential property with no accompanying state aid.

Sim1 distributes state aid as a flat per pupil grant to all districts.

Sim2 distributes state aid to all districts as a per pupil grant, inversely proportional to the per pupil residential value of district property.

Sim3 distributes state aid to all districts as a per pupil grant inversely proportional to district income per pupil.

Sim4 distributes state aid to the 75 percent of districts with the lowest residential wealth as a grant inversely proportional to per pupil residential wealth.

Sim5 distributes state aid to the 75 percent of districts with the lowest income as a grant inversely proportional to income per pupil.

Reducing Reliance on the School Property Tax: Rationales and First Results

Robert P. Strauss

Reducing New York's Reliance on the School Property Tax

A Policy Brief for the
New York State Education Department

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1 Introduction

The purpose of this Policy Brief is to summarize arguments for and against the replacement of the local school property tax by a local school income tax, and to explore the empirical effects of such policies for New York State. Section 2 discusses the conceptual questions and arguments in favor and against such a change in school finance; Section 3 provides some empirical information about current New York State school finance, and develops an enrollment-per capita income framework to summarize alternatives to current law.

Section 4 shows the results of two different property tax replacement strategies:

- replacing the 1992 local school property tax or local residential school property tax with a local option income tax of essentially unlimited rate while maintaining the current state school aid formula; and,
- replacing just the 1992 local residential school property tax with a 3 percent local income tax, and guaranteeing each student access to the median outlay per student in 1992 ($8,068) in lieu of the current state school aid formula; districts wishing to spend beyond the guaranteed amount would have the authority to enact an additional local option income tax of essentially unlimited rate.

Of interest is the finding that use of a local 3 percent income tax and a refashioning of 1992 state aid to local districts to a foundation level of $8,068 per pupil would not require substantial new state revenues, although it would leave some districts below their 1992 spending levels unless they were able to impose an elective local income tax beyond that necessary to achieve the guarantee of $8,068 per pupil.

Section 5 concludes and outlines remaining research and public policy questions.

2 Rationales for Replacing the Local School Property Tax with a Local Income Tax

2.1 Introduction

In New York, the state and local executive and legislative branches of government involved in public education, like their counterparts in other states, continue to face a combination of public and private pressures for more revenues to finance public education, and pressures for improved local school performance. In conjunction with these pressures on state public institutions, which finance and regulate local public education, there exists a tension between what is usually described as "local control" and the legal fact that school districts are constitutional creatures of state invention, and are ultimately responsible for delivering services pursuant to state law. "Local control" has been variously described as a mechanism through which the local democratic process (e.g., representatives of citizens through local volunteer school boards) ensure that monies are effectively spent, and that local values are instilled through

the educational process. It has been observed, however, that volunteers empowered to spend others' (state-raised) monies are less likely to be careful or insistent in their oversight of school administration. Also, advocates of the "local control" view often minimize the advantages which larger districts have in delivering a more diverse set of curricula. That is, economies of scale are sometimes viewed as less important than local control which is enhanced in smaller school districts.

Recent major fiscal actions in Oregon and Michigan[1] signal more activist and interventionist roles for state governments in public education than in the past. In Michigan, radical revamping of state and local roles will lead to the state paying 80 percent of total local school costs. Prior to the upheaval in school finance there, the state paid about 20 percent. Moreover, the state is insisting that, over time, a core curriculum be defined in conjunction with greater state financing. In Oregon, Act 5 is expected to result in 50 percent of every state dollar being spent on public education by the end of the century, with a growing state presence in terms of state oversight of the educational process.

Not only are Oregon and Michigan's state involvement in local public education increasing, but they are moving systematically away from the property tax as a source of school finance.

These changes in other states' systems of school finance are mentioned to indicate that major restructuring is occurring in other states. Below, I examine the implications of changing the local revenue source for public education in New York from the local school property tax to combinations of a local income tax and different patterns of state school aid. In so doing, I recognize that changing the nature of New York's local school finance could easily lead to a greater presence of state government in indicating what must be accomplished with relatively greater state dollars. This may be at variance with New York traditions of local control.

However, if access to a minimum standard of education is to be delivered throughout the state, the current great diversity in educational resources available to local school districts must be addressed, or at least averaged up through greater state funding of public education.

The focus in this study will be on schools' finances; however, it is this author's view that a greater state role coupled with greater state resources should be accompanied by greater accountability and increased scrutiny of the productivity of school resources. [2]

In reaching the conclusion that a local income tax is a sensible alternative local tax source for financing public education, no judgement is made about what level of revenues should be generated for public education at the state and local level. The observed levels of public education support (in 1992/3) are taken as a point of departure, and it is assumed that the general level of state support of public education will be maintained in the near term. Also, it is assumed that local school districts are interested in devoting the same level of local resources to public education as they do currently. At issue, then, is both the rationale and implications

[1] See Kearney(1995).

[2] For evidence on the conjecture that student competency and achievement can be improved through the selection of teachers who do better on the National Teacher Exam, see Strauss and Sawyer(1986), and Ferguson(1991). Also, see Hanushek(1994) for a survey of economic and management issues related to improving performance and controlling costs, and Odden(1995) for a discussion of the effects of improved school management and school organisation.

of changing the local source of revenues, and also adjusting state aid to local school districts.

While I endeavor below to work through systematically the implications of moving from the local school property tax to the local school income tax, and present a significant amount of empirical results, this effort should be viewed as a first analysis of such a far-reaching change to a complex financial system. Some empirical conclusions require replication, and a number of questions raised by the research require further consideration.

2.2 A Conceptual Framework for Financing State and Local Services

2.2.1 Financing Education, Health, and Public Welfare

Public support of education has been traditionally argued in the U.S. as the single most important way that children of any socioeconomic background can further themselves, and through their subsequent efforts in the world of work, further economic growth. Virtually every state constitution or state enabling legislation dealing with education obligates parents to send their children to public schools or an acceptable alternative. Not only are there likely to be economic benefits which will accrue to children of various backgrounds which can not be readily predicted, but a better educated public improves the overall quality of life for all. Thus, public education functions as a form of social insurance, and as a way to create future public benefits for society. We obligate ourselves through state and local taxation to support the costs of public education.

Since public education represents an important form of income redistribution, it follows that it should be financed out of broad, ability to pay taxes.[3] Under this theory of taxation, each of us should sacrifice according to our ability to pay to support such redistributive or "merit goods." Typically, a broad income or consumption tax is viewed as the appropriate instrument to effect ability to pay taxation.

It is quite apparent that, while income and/or broad consumption taxation is a rational source of school finance at the state level, and the local income tax is a rational source of school finance at the local level, local schools have been given access by state legislatures to only the local property tax as their major revenue source. The chief virtues of the local property tax are usually argued to be its stability of tax base, its ability to reach to business at the local level, and the fact that it already is in place.

Aside from the problems of ensuring equitable and timely assessment practices, the local property tax is not usually viewed as an ability to pay revenue source.[4]

[3]If the reader finds this unpersuasive, perhaps favoring the opposite, benefit taxes or charges on a voluntary basis to finance income redistributional services, indicates why the first argument is meritorious.

[4]See Ladd and Harris(1995) for an argument for statewide taxation of nonresidential property in the support of public education with empirical analysis for New York, and Ladd(1976) for an earlier analysis in the Massachusetts' context. See Clark(1995) for a discussion of the Texas experience in using *regional* property

For especially the elderly, the illiquidity of the tax base can cause significant difficulty in omplying with tax bills. It is oft-said that the local property tax extracts taxes from many /ho are paper-wealthy, and income poor. Also, because of lags in the assessment process, it is ft-said that the local property tax is not as elastic or growth oriented as broad-based income r sales taxes. As a result, millages must be more frequently increased with attending political isputes.

The financing of other redistributive activities such as welfare and health should follow the ame pattern as public education. In each instance, pricing the services (rather than financing hem through ability to pay taxes) results in defeating the very redistributional objective one eeks to achieve.

:.2.2 Financing Municipal Services

Other public services, which benefit with greater predictability or certainty, should be priced hrough user fees. For municipal services such as fire and police, which protect real property nd provide an insurance function of another sort, the local real property tax imposed at . single uniform tax rate, provides a strong link between taxes paid and benefits received. Aore valuable property entails higher taxes which presumably reflect the greater value of the rotection which they afford.

:.2.3 Sur.mary

While public education is financed in New York by state income and consumption taxes, nd in accord with the above principles, the local source of finance is almost entirely the local chool property tax. While perhaps a stable source of revenue, the local school property tax s, as noted earlier, hardly an ability to pay tax. Indeed, for some local school districts, the esidential property tax is the minor source of local revenue, while the tax on commercial nd industrial property is the major source of local school finance. The presence of major ıtilities or shopping centers confer tax windfalls to local residents and their children, in the ense that the local costs of public education are borne by the owners and customers of these acilities rather than the residents of the school district. As a a result, residents bear little of he costs of education, and can, with very low millages, provide very substantial resources to ublic education. Others in districts with more residential property or agricultural property, y contrast, must directly bear the burden of local school finance. Such circumstances raise uestions of fairness and horizontal equity.

axes to support local public education costs. Also, see Netzer(1966) for a general discussion of the advantages nd disadvantages of the property tax; see the Policy Brief by Netser, Berne, and Stiefel(1995) that details a ariety of problems with the current New York property tax, the Policy Brief by Lankford and Wyckoff(1995) or a discussion of distributional aspects of New York's property tax.

In other major industrial states, public utilities are not only state-assessed, as they are in part in New York, but are taxed at one statewide rate and the proceeds redistributed statewide to municipalities and school districts.

With the case for using a local income tax in lieu of a local property tax to support public education, we turn now to discuss the issues raised by such a tax substitution.

2.3 Issues of the Local Income Tax

If one accepts the notion that the local income tax should replace in some way the local school property tax, one must address several important design issues that have arisen in other states when such a tax substitution has been contemplated:

1. Should the local income tax rate be fixed (by state law), or variable at the discretion of the local school district?

2. Given that a local business income tax creates both economic dislocation and serious administrative problems (primarily involving the attribution of local profits from regional if not multistate or multinational economic activity), how does one avoid a massive shift in tax burden if not incidence from business to households as one moves from the local school property tax (on households and business) to a local household income tax?

3. Should the local income tax rate be allowed to be progressive in application within a district within an accounting period?

4. Should a local income tax be administered by the state, or by local taxing authorities? What are the details of administering a local income tax, especially in view of the mobility of our society?

Since the state role in public education contemplated below is for the state to guarantee to each student, throughout the state, a minimum standard of educational access/services, it follows that the state should require a minimum local income tax contribution by each household in support of this public education. The discrepancy between the guaranteed amount and what is locally available in local revenues is then financed by state formula aid assistance. Operationally, I treat this below as either a 2 percent or 3 percent local income tax which is used to offset in part the costs of reaching the guarantee.

To the extent that a school district's residents have below average income, the fiscal responsibility of the state will be greater in making up the guarantee amount per student. Conversely, where local income is above average, then less state aid will be needed. In this way, a local proportional income tax in tandem with state aid from a progressive state income tax, can result in financial redistribution in the financing of basic educational services.

With regard to the use of a progressive rate schedule by school district, it would appear that requiring a proportional local income tax would minimize the potential movement by high income families to rich areas to diminish their overall level of taxation.[5]

With regard to maintaining historical relations between nominal local business tax support of public education and household support,[6] several answers are possible. First, whether what we now observe is correct or desirable is unclear. Allowing households to pay relatively more than they do currently may encourage greater care and interest in the spending of local school monies.

Second, if we do wish to maintain the current balance between business and household taxation[7], one may classify the local property tax, and replace only the residential property tax with a local income tax, or we can provide some form of property tax exemption (usually called a homestead exemption) which will have the general effect of reducing household but not industrial or commercial property taxes.

Classification usually means that the assessment ratio applied to market value can vary by type of property or the property tax rate on assessed value can vary by type of property.[8]

Below, primarily because of data availability, we shall examine either eliminating overall the school property tax or classifying the local property tax and eliminating the residential portion of the school property tax. This is equivalent, of course, to retaining the property tax on all other types of real property: commercial, industrial, vacant, and agricultural lands.

It should be noted that business often finds offensive the differential classification of real property in terms of tax rates or stated assessment ratios. Their concern revolves around the possibility that business property will be more heavily taxed than before once it is isolated from residential. There are a number of techniques to forestall such subsequent fiscal shifts. One way is to provide through state law mandatory assessment ratios for different types of property, and provide for reasonable standards of evidence upon appeal. Alternatively, if 100

[5]It may also be the case that this sorting out has already occurred. See Nechyba(1994), for example.

[6]The issue of the proper balance raises the underlying question of the ultimate incidence of taxes on business. If business taxes are entirely passed on to consumers, then consumers would bear the final incidence of local property taxes; if business owners and/or employees bear the ultimate incidence through reduced incomes of local property taxes, then their incomes will be reduced by the property taxes. If business suppliers find their prices reduced by pressure from their buyers, then the property tax has a different incidence effect.

By analysing the type of public service and its appropriate revenue source, one abstracts from incidence arguments at the outset. What is certain is that households pay business taxes one way or another, either in their role as consumers, employees (and as actual or potential pension beneficiaries), and/or as owners of corporate interests.

[7]The issue of balance has been of legislative concern in other states. For example, Illinois has a constitutional provision that puts a maximum on the ratio of the state corporate net income tax rate to the personal income tax rate. In Pennsylvania, the issue of relationship between business and personal income taxes was part of the political agreement underlying a constitutional amendment permitting a state personal income tax in 1972.

[8]The Census Bureau(1994) reports as of 1991 that 14 states permit differential assessment ratios or equalisation categories–Alabama(3), Arizona(13), Colorado(3), Kansas(4), Louisiana(5), Michigan(6), Mississippi(5), Missouri(3+), Montana(9), North Dakota(4), South Carolina(7), Tennessee(3), Utah(2) and Wyoming(2). California has 2 standards for assessment that looks at date of ownership. Massachusetts and the District of Columbia permit different tax rates, while Minnesota applies "percentage adjustments" to market value data to achieve classification.

percent market value is the assessment standard, then state limitations on differential millages can be provided through law. To the extent that movement from the residential property tax to a local income tax is at the discretion of local school districts, then one can require that personal income tax receipts be offset, dollar for dollar, by local residential property tax reductions, and/or provide for a limited amount of revenue growth (inflation plus enrollment growth rates, for example).

Administration of a local income tax can be achieved in a variety of ways. Critical to any approach is the systematic improvement of residence information of the state income tax.[9] Once local taxpayers realize that their local income taxes go to finance local public education, they will have a greater incentive to report where they live. During the year, employers through the withholding of wages and salaries can improve the residence information with the help of public agencies such as the New York Department of Taxation and Finance, and private organizations such as the National Association of Payroll Officers.

The U.S. Bureau of the Census maintains a complete inventory of actual physical addresses to administer the decennial census. Moreover, the Bureau aggregates Census data from the Census to the local school district level. This geographic information can be used in conjunction with the administration of the state personal income tax to improve the information on school district of residence.[10]

Whether the state or local school district should administer a local income tax depends in part on which kind of tax, e.g., entirely fixed in local tax rate, entirely variable in local tax rate, or variable in local tax rate above a threshold rate, say of 2 or 3 percent. In Maryland, which has essentially county school districts, the local income tax is a surcharge on the state liability; county governments are given a range of allowable surcharge tax rates. Withholding is performed during the year with proceeds going to the state government, and reconciliation at the end of the year occurs in conjunction with the filing of the state personal income tax form. In this way, the tax on dividends, interest, and capital gains is levied. During the year, the state government makes payments to counties, and makes a final reconciliation after the close of the filing period.

Pennsylvania's 500 local school districts are enabled to impose up to a 1 percent local wage tax, and are entirely responsible for its collection. Home rule school districts are enabled to impose higher tax rates. In areas where municipalities elect to impose a local wage tax, the school district must share the tax rate. In Allegheny County, all school districts impose a 1/2 percent wage tax, and the underlying municipalities impose a 1/2 percent wage tax. Pennsylvania's General Assembly routinely has before it proposals to broaden the base of the local wage tax to the state personal income tax base, and passed such a proposal in 1988.

As long as the local income tax is a flat percentage of the base, or a surcharge on another

[9]Applying a local school income tax on residents, and thus foregoing a commuter school income tax, makes most sense for NY residents. Taxing non-residents at the local level through a school income tax may raise constitutional issues. Certainly, non-New York residents benefit less than residents in terms of the direct and indirect benefits of public education, and do not use the services.

[10]Since commuters can not use school services in their place of work, there is little justification for imposing a local school income tax on anyone other than residents to obtain the local contribution.

state-calculated figure, either state or local administration can be achieved. Of course, there will be initial difficulties in moving to such a new tax base; however, since a very high percentage of taxpayers are already in the withholding system of the state and federal income tax, employers, properly informed, can play a key role in making a smooth transition to a new form of local taxation.[11]

Whether or not the local income tax is fundamentally a "local" tax depends initially on the underlying fiscal philosophy that leads to its enactment. The above discussion about administration indicates that one can imagine local school districts being empowered to set the rate of the local income tax, and that either the state or the district itself would collect it. Concerns over the promptness and certainty of state provision of such funds back to school districts has often suggested that the districts collect the income tax themselves. On the other hand, this is likely to be inefficient.

If one believes that local districts should use a fixed rate of income tax, say 3 percent, and the state should provide the remainder of resources to get to a foundation level of spending, the 3 percent tax takes on the characteristic of a statewide tax remitted back to local school districts. As we shall see in the empirical sections below, however, elimination of the residential school property tax and replacement by a local school income tax to get to a foundation level of spending may not require, for heavily industrial districts, any income tax at all. In this circumstance, again, one can imagine either the state or local school district making this determination.

If one favors a foundation approach to school finance, and allowing districts the option to use the local income tax to finance education beyond the foundation amount, then the local income tax rate becomes variable, and subject to local legislative consideration. While this would readily be called a local income tax, one can again imagine it being administered either by the state, with remittance to local districts, or administered entirely by the local district.

Any major tax structure change in local taxation should have antiwindfall provisions so that movement from one base to another, or the use of new, discretionary taxing authority, does not lead to more than acceptable rates of change in the overall local school budgets.

[11]It is strongly recommended that if local administration is opted for, then a local tax form be used. Even though Pennsylvania only permits a local wage tax, there is much merit in providing a local wage tax package of forms at the time state and Federal forms are provided. When Pittsburgh went to such an administrative device, it was able to increase net collections by an additional $4.5 million/year. Base broadening language routinely before the Pennsylvania General Assembly often requires the City of Philadelphia to have a local income tax form. It currently relies entirely on employer withholding.

3 Empirical Aspects of Current Law

In order to perform consistent analysis of fiscal and socioeconomic data by school district, it was necessary to choose a base year for analysis. Data for most variables was available for school year 1992-3, and is accordingly the major point of focus. Appendix I lists the sources and detailed definitions of each variable analyzed in this Policy Brief. Throughout this brief, the data relate to a consistent set of 687 school districts whose fiscal and socioeconomic data could be uniquely merged.[12]

In the empirical analysis below, I utilize an enrollment count concept of students; this differs from actual daily membership counts or the New York concepts of Total Aidable Pupil Units (TAPU), which vary from 1.0 for full-day kindergarten to 1.50 for full-time pupils in grades 7-12 with special educational needs, or the Total Wealth Pupil Units (TWPU) concept under which handicapped students weights may be 2.7 times the full-day kindergarten. [13] Enrollments are a relatively simple measurement concept, and the data are readily available.

3.1 Some Key Aggregates in 1992-3

In 1992/3, there were 2.6 million students enrolled in New York State's public schools; the 687 school districts under study spent $22.3 billion, or $8,523 per pupil. To finance the $22.3 billion of public school spending, local school districts raised $12.3 billion from own sources (on average $4,671 per pupil), the State provided $8.8 billion in overall aid (on average $3,354 per pupil), and the Federal government provided $987 million in overall aid to local New York school districts. Overall, New York State provided about 39 percent of 1992 total local school spending, and the Federal government provided about 4 percent; thus, local school districts provided 57 percent overall of the funds to support the costs of public education.

Of the $12.2 billion of local (own-source) school revenues, $11.2 billion (or 91.8 percent of own source revenues) came from the local school property tax. The balance, about $1 billion, came from shared sales taxes and utility gross receipts taxes.

Using 1991 New York State Department of Equalization and Assessment data on property tax collections by type, we may estimate the 1992/3 residential portion of the local property tax (including condominiums) to be $5.9 billion (or 52.9 percent); this in turn implies that nonresidential property tax accounts for $5.3 billion in school property taxes (or 47 percent).[14]

Overall, the equalized full value property tax base in 1992 was $927.1 billion, while the overall adjusted gross income base of filers in these school districts was $257.6 billion.

[12]In the case of New York City, all activities measured in various boroughs and community districts were aggregated to a single, New York City record.

[13]See Henahan(1992), p. 394-5 for a more complete description.

[14]Including property tax collections on condominiums in the definition of residential only makes a material difference for New York City. There, 1991 property tax collections on single family houses and multiple units of less than six were 11.3 percent of the total; adding in property tax collections on condominiums raises the residential portion to 24.7 percent.

New data by school district from the New York State Department of Taxation and Finance permits the estimation of 1992 New York State taxable income of taxpayers in these school districts; it is found to be $178.9 billion.[15] Replacing all of the local school property tax would thus require a local income tax rate of 6.27 percent ($11.2 billion /$178.9 billion), while replacing just the residential portion of the local school property tax would require a local income tax rate of about 3.3 percent ($5.9 billion/$178.933 billion).

Table 1 displays these aggregates.

Table 1: Some Statewide Totals

Vname	Definition	State Wide Total	SDs
ENR92	1992: State Ed Dept Tot Enrollment	2,619,666	687
EXP92	1992: Total SD Spending	$22,323,367,900	687
STATE92	1992: Total State Aid to SDs	$8,784,055,667	687
FED92	1992: Federal Aid to SDs	$987,262,982	687
LOCAL92	1992: Total Local School Revenues	$12,233,953,540	687
PTAX92	1992: Total SD Property Taxes	$11,236,399,008	687
OTHER92	1992: Total Local Nonproperty Tax Revs	$997,554,532	687
RESPROP92	1992: Estimated Residential Prop Tax	$5,870,906,734	687
NONRESP92	1992: Estimated Nonresidential Prop Tax	$5,365,492,274	687
FVAL92	1992: Equalized Full Value	$927,076,211,452	687
AGI92	1992: NYS Adjusted Gross Income	$257,625,735,713	687
TAXINC92	1992: Estimated NYS Taxable Income	$178,933,032,684	687
RET92	1992: Personal Tax Returns Filed	7,219,176	687

It is useful to view these aggregates in relation to each other. Total school spending was about 2.4 percent of total 1992 equalized value (e.g., $22.3 billion/$927.1 billion); total school spending was about 8.7 percent of total 1992 adjusted gross income of individuals ((e.g. $22.3 billion/$257.6 billion); and total school spending was about 12.5 percent of estimated total 1992 New York State taxable income of individuals; total non-Federal school spending was 11.9 percent.[16]

[15]This was calculated by taking the 1991 ratio of taxable income to total adjusted income, provided to this study by the Department of Taxation and Finance, and applying it the 1992 total adjusted gross income.

[16]Total school spending reflects, of course, federal and state aid. State aid is financed from state income and consumption taxes. Overall, New Yorkers spent 12.5 percent of their taxable income on local public education; however, some of these were indirectly financed by taxes on business which pay local property taxes, and state income, sales and gross receipts taxes.

The 1992 local school property tax was 1.2 percent of 1992 equalized value ($11.3 billion/$927.1 billion), 4.4 percent of 1992 total adjusted gross income ($11.3 billion/$257.6 billion). The 1992 estimated residential local school property tax was .6 percent of the total 1992 equalized base (e.g., $5.9 billion/$927.1 billion), 2.3 percent of total 1992 adjusted gross income (e.g., $5.9 billion/$257.6 billion), and 3.3 percent of estimated 1992 taxable income (e.g., $5.9 billion/$178.9 billion).

These aggregate figures suggest that New York's public education, currently financed from local, state, and Federal sources, is equivalent to a 12.5 percent proportional tax on state-defined taxable income. Such state-wide averages do not indicate whether individual districts would be able, with their existing distribution of income, taxable property, and current spending levels to afford such a switch in tax bases. Below, we develop a classification of school districts by enrollment size and per capita income which permits a ready identification of the extent of variation in district finances, property and income tax bases, and spending levels.

3.2 An Enrollment-Per capita Income Matrix for Evaluation Purposes

With almost 700 school districts with which to examine policy options, the analyst is confronted with potentially too much information, or, in the case of the just-discussed aggregates, too little information. One approach to summarizing both current law and financing alternatives, is to examine representative districts, holding constant their size, and underlying income base.

Table 3 displays the distribution of New York school districts by enrollment size and per-return adjusted gross income in 1992. The per-return adjusted gross income measure is as close as we are able to measure median family economic income or per capita economic income. The enrollment and per-return adjusted gross income classes were chosen so that approximately the same number of districts would fall into each cell, and so that approximately the order of magnitude of school district enrollments would be represented by the row and column frequencies. Also, because the five dependent school districts in New York are both larger and fiscally different than the majority of other districts, they are tabulated separately.

Table 3 displays the cross-tabulation of size and per-return characteristics, and Table 4 displays the 1992 school district enrollments within this framework. The basic tabulation of districts in Table 3 shows that there are many very small districts in New York– 205 districts have fewer than 1100 students. Such small size raises questions about whether such districts are able to offer a reasonably complete curricula, especially at the secondary level. [17] Table 4 indicates the importance of isolating New York City from the rest of the State; with 971,690 students in 1992, the constituent schools in New York City accounted for better than 37 percent

[17]Consider the follow calculations: under the assumption that the age distribution is uniform in a district with 1200 students, there will be 100 students per grade. If we limit basic class size to 25, there will be four groups ("homerooms") of students in each age cohort per grade. At issue then may be the ability of districts to afford to offer specialised courses for such small numbers of groups of students. For the impact of specialised course offerings on the postsecondary educational ambitions of high school seniors, see Strauss(1993b).

of the State's total enrollment. Overall, the big five districts accounted for 1,074,893 students or 41 percent of the State's public enrollment in 1992.

Table 3: Counts of Districts by 1992 Enrollment and 1992 Per-return AGI

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332	Total
< 270	17	1	4	2	10	34
271- 442	19	9	3	1	2	34
443- 693	35	24	4	5	1	69
694- 1,047	21	18	9	11	10	68
1,048- 1,242	11	20	15	15	9	70
1,243- 1,522	13	19	17	10	8	67
1,523- 1,970	6	13	23	8	19	69
1,971- 2,517	7	17	11	17	16	68
2,518- 3,342	2	11	16	20	19	68
3,343- 4,985	2	4	18	21	23	68
4,986- 6,782	1	3	6	12	11	33
6,783- 9,707	2	4	5	8	8	27
9,708-14,723	0	0	1	5	1	7
Yonkers: 19,350	0	0	0	1	0	1
Syracuse: 22,550	0	1	0	0	0	1
Rochester: 34,369	0	1	0	0	0	1
Buffalo: 46,284	1	0	0	0	0	1
NYC: 971,690	0	0	0	1	0	1
Total	137	145	132	137	137	687

Table 4: Enrollment of Districts by 1992 Enrollment Size and 1992 Per capita AGI

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332	Total
< 270	2944	254	577	382	1397	5554
271- 442	6938	3368	1002	297	730	12335
443- 693	19675	13350	2497	3010	594	39126
694- 1,047	18283	14451	7804	9379	9522	59439
1,048- 1,242	12553	22910	17079	17202	10439	80183
1,243- 1,522	18219	25717	23361	13562	11039	91898
1,523- 1,970	9845	22264	39850	13595	33557	119111
1,971- 2,517	15627	37704	23850	37806	35756	150743
2,518- 3,342	5448	30983	45311	58525	55961	196228
3,343- 4,985	7210	15584	74772	88002	94577	280145
4,986- 6,782	5829	16280	34679	70449	59526	186763
6,783- 9,707	17396	32880	43249	65877	61983	221385
9,708-14,723	0	0	12325	60006	10002	82333
Yonkers: 19,350	0	0	0	19530	0	19530
Syracuse: 22,550	0	22550	0	0	0	22550
Rochester: 34,369	0	34369	0	0	0	34369
Buffalo: 46,284	46284	0	0	0	0	46284
NYC: 971,690	0	0	0	971690	0	971690
Total	186251	292664	326356	1429312	385083	2619666

3.3 Median District's Characteristics of Current Law by Enrollment and Per capita Adjusted Gross Income

We observed earlier that 1992 average per pupil spending, statewide, was $8,523. Of immediate interest is how such per pupil spending per district looks when we tabulate it by enrollment and per-return adjusted gross income. Table 5 shows the calculations for the median district within the classification matrix.

The cell entry is the *median* or 50'th percentile per pupil spending for the districts in the enrollment-size, per-return adjusted gross income cell. For example, the smallest districts with lowest per-return adjusted gross income are located in the upper left cell of Table 5. From Table 3 we know there were 17 such districts with enrollment under 270 students, and per-return income in the $19,204-23,710 range. The entry of 11458 in Table 5 means that after sorting the per-pupil spending of the 17 districts from low to high, the middle of the district the 9'th, spent $11,458 per pupil. Moving to the rightmost cell for the smallest district, we see that the middle of the distribution of 10 districts with highest income ($39,854-144,332) spent $21,403 per pupil or almost twice as much as the lowest income district.

It is evident from looking across income levels, holding enrollment size constant, that per

pupil spending generally rises, and that per-pupil spending falls somewhat as one moves from smaller to larger districts and then rises for the largest districts. Presumably the first effect reflects the greater local ability to pay of higher income districts, and the lower spending per pupil as size increases reflects the possibility that there exist economies of scale in the production of school services.[18]

Table 5: Current Law: Median District's 1992 Total Per Pupil Spending

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332	Total
< 270	$11,458	$9,725	$15,030	$11,675	$21,403	$14,370
271- 442	$8,324	$8,408	$9,124	$17,976	$22,716	$8,703
443- 693	$7,842	$7,920	$7,568	$13,487	$13,573	$7,936
694- 1,047	$7,331	$7,849	$7,518	$9,902	$11,761	$8,042
1,048- 1,242	$7,166	$7,070	$7,659	$8,542	$11,591	$7,844
1,243- 1,522	$7,140	$6,923	$7,020	$7,850	$12,742	$7,195
1,523- 1,970	$7,119	$7,189	$7,169	$7,648	$11,831	$7,326
1,971- 2,517	$7,813	$7,714	$7,422	$7,945	$13,284	$7,937
2,518- 3,342	$7,036	$7,591	$7,074	$8,277	$11,061	$7,973
3,343- 4,985	$6,910	$7,358	$8,179	$7,733	$9,959	$8,131
4,986- 6,782	$6,501	$8,550	$7,887	$8,641	$10,659	$8,901
6,783- 9,707	$8,383	$8,169	$8,547	$8,326	$10,923	$8,547
9,708-14,723	0	0	$9,912	$8,794	$7,761	$8,794
Yonkers: 19,350	0	0	0	$10,514	0	$10,514
Syracuse: 22,550	0	$8,301	0	0	0	$8,301
Rochester: 34,369	0	$9,358	0	0	0	$9,358
Buffalo: 46,284	$7,718	0	0	0	0	$7,718
NYC: 971,690	0	0	0	$7,911	0	$7,918
Total	$7,939	$7,556	$7,452	$8,132	$11,658	$8,068

[18]These differences in per-pupil spending may also reflect differences in costs of living.

As noted earlier, State aid averaged $3,354 per pupil in 1992[19]. The aid formula is intended to be redistributive, and concentrate resources in poorer districts as measured by their per-pupil equalized wealth and per-pupil Adjusted Gross Income (AGI). Table 6 reports the per-pupil state aid for the median district in each enrollment-per capita AGI cell. The median entries in Table 6 generally display a reduction in state aid as the per-return adjusted gross income of districts rises. Note that median per pupil state aid was $4,732 for the lowest income districts, and falls to $1,613 for the highest income districts.

If we examine state aid across different sized districts, we find state aid is relatively flat, within district income groupings. Note that each of the dependent districts receives about, or somewhat more than the per-return AGI group's median state aid. [20]

Table 6: Current Law: Median District's 1992 Per Pupil State Aid

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332	Total
<270	$3,996	$6,675	$1,420	$2,379	$1,357	$2,193
271- 442	$4,472	$3,862	$2,886	$1,602	$3,725	$4,245
443- 693	$5,040	$4,845	$4,478	$1,463	$5,004	$4,885
694- 1,047	$4,910	$4,872	$3,341	$3,101	$1,190	$4,185
1,048- 1,242	$4,724	$4,522	$4,313	$3,496	$1,394	$4,240
1,243- 1,522	$4,625	$4,431	$4,271	$2,834	$872	$4,237
1,523- 1,970	$4,567	$4,206	$4,161	$2,895	$1,550	$3,698
1,971- 2,517	$4,578	$4,503	$4,126	$3,026	$1,397	$3,872
2,518- 3,342	$4,502	$4,186	$4,000	$3,178	$1,774	$3,424
3,343- 4,985	$5,258	$4,482	$3,588	$3,367	$2,086	$3,198
4,986- 6,782	$4,155	$4,298	$3,656	$2,764	$1,540	$2,979
6,783- 9,707	$4,448	$4,043	$3,209	$2,951	$2,633	$3,196
9,708-14,723	0	0	$4,557	$4,599	$1,976	$4,557
Yonkers: 19,350	0	0	0	$3,260	0	$3,260
Syracuse: 22,550	0	$5,144	0	0	0	$5,144
Rochester: 34,369	0	$4,800	0	0	0	$4,800
Buffalo: 46,284	$5,466	0	0	0	0	$5,466
NYC: 971,690	0	0	0	3118	0	$3,118
Total	$4,732	$4,543	$4,005	$3,178	$1,613	$3,784

[19]The median figure was somewhat higher at $3,784.

[20]The lower New York City aid figure probably reflects several factors: first, compared to most other districts, New York City's percapita income and property wealth are higher. Second, New York City's actual attendance is well below its enrollment, so the per-pupil calculation may understate state aid in the classroom.

Using the classification of residential property tax collections provided by the New York State Department of Equalization and Assessment, we estimated state wide that 53 percent of New York's 1992/3 property taxes were residential, and 47 percent non-residential. "Residential" is defined to be single family dwellings, or multiple units with fewer than six units overall, or condominiums. Of interest is how this percentage varies by size of district and by the per-return AGI of the district. Table 7 shows that for the independent schools districts, the percent residential property is constant across different size school districts. On the other hand, the relative importance of residential property generally rises with per-return AGI. The lowest per-return AGI group's median residential property percentage was 51.6 percent, while the highest districts' median residential property percentage was 73.1 percent in 1991.

Note that the major city school districts have relatively less residential property than the other school districts. The 24 percent residential figure for New York City must be viewed with caution, however, since so many of NYC's residents live in apartments. Also, it should be remembered that the estimate of the share of taxes attributable to residential property is based on *actual* collections by type of property. For the purposes of considering tax substitutions (local income taxes for residential property taxes), this is the correct figure to focus on. If residential property is systematically underassessed, and commercial and industrial property is systematically overassessed, then the percentages of taxes attributable to residential property owners will be lower than estimates based on the shares of equalized property values.

Table 7: Current Law: Median District's 1991 % Residential Property (Includes Condominiums)

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332	Total
<270	0.3848	0.4746	0.6602	0.5684	0.8340	0.6055
271- 442	0.5000	0.6094	0.6992	0.8320	0.3438	0.5723
443- 693	0.5156	0.5938	0.6445	0.6992	0.7969	0.5547
694- 1,047	0.5156	0.5859	0.6797	0.6836	0.7656	0.5898
1,048- 1,242	0.5625	0.5820	0.5938	0.6953	0.7422	0.6211
1,243- 1,522	0.5625	0.6055	0.6445	0.7109	0.8203	0.6250
1,523- 1,970	0.5703	0.5391	0.6523	0.7285	0.7422	0.6523
1,971- 2,517	0.6289	0.5977	0.6289	0.6992	0.6387	0.6309
2,518- 3,342	0.6016	0.6172	0.6797	0.7344	0.7734	0.7070
3,343- 4,985	0.5430	0.5762	0.5957	0.7109	0.7656	0.6797
4,986- 6,782	0.6289	0.5625	0.6016	0.6113	0.6875	0.6367
6,783- 9,707	0.4854	0.6035	0.5234	0.6836	0.7813	0.6680
9,708-14,723	0	0	0.9961	0.6367	0.8203	0.6914
Yonkers: 19,350	0	0	0	0.5898	0	0.5898
Syracuse: 22,550	0	0.4336	0	0	0	0.4336
Rochester: 34,369	0	0.3594	0	0	0	0.3594
Buffalo: 46,284	0.4570	0	0	0	0	0.4570
NYC: 971,690	0	0	0	0.2471	0	0.2471
Total	0.5156	0.5898	0.6465	0.6992	0.7305	0.6289

4 Replacing the School Property Tax

Earlier, it was noted that a flat local income tax rate of 6.3 percent imposed on New York taxable income ($178.1 billion) would allow the aggregate elimination of the local school property tax. We explore here two fundamental approaches to achieving this objective:

- provision of a local option income tax of essentially unlimited tax rate to replace the local school property tax that would support observed 1992/3 spending levels, and use of the existing (1992/3) percent equalization school aid formula; and
- replacement of the local residential school property tax with a mandated rate of local income taxation, and creation of a new state foundation school aid formula.

4.1 Replacing the School Property Tax: A Local Income Tax and Current Percent Equalizing State Aid Formula

Under this tax substitution approach, school districts would be given the authority to levy a local income tax at a rate necessary to eliminate the local school property tax. If we take the ratio of 1992 local school property taxes to estimated 1992 New York taxable income in each school district, we can examine how realistic it might be to simply replace the local school property tax by a local income tax.

Table 8 shows that for most ranges of districts, the necessary income tax rate to replace the local school property tax would be on the order of 6 to 7 percent. For the smallest, lowest income school district, however, the median rate is 21.44 percent. This would be, in my opinion, unworkable.[21]

Table 8: Replacing the School Property Tax:Median District's Property Tax as % of 1992 Estimated NY Taxable Income

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332
<270	0.2144	0.0585	0.1784	0.0463	0.0807
271- 442	0.0990	0.1209	0.0922	0.1288	0.1325
443- 693	0.0931	0.0725	0.0705	0.1121	0.0854
694- 1,047	0.0778	0.0690	0.0944	0.0981	0.0619
1,048- 1,242	0.0748	0.0594	0.0583	0.0665	0.0537
1,243- 1,522	0.0648	0.0567	0.0526	0.0656	0.0569
1,523- 1,970	0.0622	0.0615	0.0622	0.0581	0.0608
1,971- 2,517	0.0532	0.0535	0.0600	0.0653	0.0712
2,518- 3,342	0.0644	0.0552	0.0551	0.0627	0.0629
3,343- 4,985	0.0379	0.0530	0.0691	0.0626	0.0574
4,986- 6,782	0.0542	0.0591	0.0599	0.0702	0.0726
6,783- 9,707	0.0661	0.0614	0.0713	0.0639	0.0665
9,708-14,723	0	0	0.1147	0.0692	0.0451
Yonkers: 19,350	0	0	0	0.0689	0
Syracuse: 22,550	0	0.0633	0	0	0
Rochester: 34,369	0	0.0623	0	0	0
Buffalo: 46,284	0.0322	0	0	0	0
NYC: 971,690	0	0	0	0.0591	0

If instead one merely seeks to replace the residential portion of the school property tax, and continue, in effect, the levies on business and other nonresidential properties, the overall local income tax rate is 3.3 percent. Table 9 indicates that the range of replacement income tax rates would still be rather large. Now the smallest, lowest income districts would face a 7.3 percent local income tax rate rather than 21 percent noted earlier; however, it is likely that the range of variation in local income tax rates would still be too great to be widely acceptable. Note

[21]Examination of district by district data indicates that such high rates reflect the presence of very substantial amounts of nonresidential property (sometimes public utilities).

that the income tax rates for the five largest districts are now below those for other districts in their per-return AGI group; this reflects their greater amount of nonresidential property.

Table 9: Replacing the Residential School Property Tax: Median District's Residential Property Tax as % of 1992 Estimated NY Taxable Income

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332
<270	0.0734	0.0278	0.0926	0.0260	0.0742
271- 442	0.0518	0.0827	0.0612	0.1072	0.0296
443- 693	0.0436	0.0406	0.0442	0.0852	0.0681
694- 1,047	0.0375	0.0388	0.0701	0.0530	0.0470
1,048- 1,242	0.0379	0.0353	0.0339	0.0428	0.0391
1,243- 1,522	0.0377	0.0342	0.0336	0.0490	0.0471
1,523- 1,970	0.0321	0.0342	0.0388	0.0443	0.0450
1,971- 2,517	0.0271	0.0300	0.0362	0.0409	0.0421
2,518- 3,342	0.0385	0.0355	0.0325	0.0423	0.0407
3,343- 4,985	0.0208	0.0329	0.0402	0.0438	0.0395
4,986- 6,782	0.0343	0.0391	0.0351	0.0382	0.0438
6,783- 9,707	0.0315	0.0349	0.0356	0.0412	0.0512
9,708-14,723	0	0	0.1143	0.0366	0.0370
Yonkers: 19,350	0	0	0	0.0406	0
Syracuse: 22,550	0	0.0274	0	0	0
Rochester: 34,369	0	0.0224	0	0	0
Buffalo: 46,284	0.0147	0	0	0	0
NYC: 971,690	0	0	0	0.0146	0

The reader may find this pattern of local income tax rates to be quite high, and perhaps so high to argue against moving from the local property tax to the local income tax. Several points are relevant that suggest that the rates could be lower in practice: first, because state and local income taxes are deductible for Federal purposes, and a local income tax could be made deductible at the state level, these offsets could cushion the local impact of such a tax substitution.

Second, as noted above, New York taxable income is considerably narrower than New York adjusted gross income; various exemptions and deductions have narrowed the base from $257.6 billion to $178.9 billion. This resulted in a 30 percent reduction in the income base. If one favors a local personal gross income tax, levied on adjusted gross income, it follows that the local school property tax could be replaced by a 4.4 percent local AGI tax (contrasted with the 6.3 percent tax on New York taxable income).

Table 10 and 11 display the results of replacing the total school property tax and residential school property tax with a local personal gross income tax. As expected, the tax rates fall on the order of 30 percent for most enrollment size-per-return AGI groupings, and even more for

small, relatively low income districts. Compare the upper left portion of Table 10 to 8, and Table 11 to 9.

Table 10: Replacing Total School Property Tax: Median District's Property Taxes as % of 1992 Estimated NY Total AGI

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332
< 270	0.1366	0.0391	0.1197	0.0345	0.0638
271- 442	0.0602	0.0773	0.0632	0.0916	0.1086
443- 693	0.0584	0.0469	0.0483	0.0785	0.0629
694- 1,047	0.0473	0.0443	0.0640	0.0524	0.0511
1,048- 1,242	0.0473	0.0388	0.0409	0.0471	0.0444
1,243- 1,522	0.0415	0.0373	0.0353	0.0467	0.0462
1,523- 1,970	0.0378	0.0412	0.0430	0.0417	0.0476
1,971- 2,517	0.0321	0.0360	0.0414	0.0480	0.0545
2,518- 3,342	0.0408	0.0367	0.0383	0.0452	0.0477
3,343- 4,985	0.0239	0.0351	0.0488	0.0449	0.0438
4,986- 6,782	0.0345	0.0395	0.0412	0.0509	0.0543
6,783- 9,707	0.0411	0.0401	0.0476	0.0459	0.0503
9,708-14,723	0	0	0.0747	0.0497	0.0352
Yonkers: 19,350	0	0	0	0.0494	0
Syracuse: 22,550	0	0.0418	0	0	0
Rochester: 34,369	0	0.0416	0	0	0
Buffalo: 46,284	0.0206	0	0	0	0
NYC: 971,690	0	0	0	0.0375	0

Table 11: Replacing the Residential School Property Tax: Median District's Residential Property Tax as % 1992 Estimated NY Total AGI

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332
<270	0.0435	0.0185	0.0628	0.0194	0.0568
271- 442	0.0322	0.0532	0.0420	0.0762	0.0244
443- 693	0.0266	0.0258	0.0304	0.0601	0.0501
694- 1,047	0.0228	0.0256	0.0475	0.0377	0.0370
1,048- 1,242	0.0239	0.0228	0.0236	0.0308	0.0311
1,243- 1,522	0.0234	0.0224	0.0227	0.0361	0.0387
1,523- 1,970	0.0194	0.0223	0.0267	0.0320	0.0340
1,971- 2,517	0.0170	0.0200	0.0250	0.0291	0.0322
2,518- 3,342	0.0244	0.0236	0.0227	0.0316	0.0349
3,343- 4,985	0.0131	0.0218	0.0282	0.0314	0.0317
4,986- 6,782	0.0218	0.0259	0.0242	0.0277	0.0324
6,783- 9,707	0.0196	0.0236	0.0254	0.0297	0.0399
9,708-14,723	0	0	0.0744	0.0261	0.0288
Yonkers: 19,350	0	0	0	0.0291	0
Syracuse: 22,550	0	0.0181	0	0	0
Rochester: 34,369	0	0.0150	0	0	0
Buffalo: 46,284	0.0094	0	0	0	0
NYC: 971,690	0	0	0	0.0093	0

4.2 Replacing the School Property Tax: A Fixed Rate Local Income Tax and a Foundation School Aid Formula

Another way to substitute a local income tax for a local school property tax in New York is to require a local income tax of a fixed rate and to alter the nature of the state aid formula, from a percentage equalization approach to a foundation grant approach.

New York, like Connecticut, Kansas, Massachusetts, Pennsylvania, and Rhode Island, currently uses a percent equalization formula to distribute state aid.[22] Under the typical percentage equalization school aid formula, one calculates a matching rate or aid ratio, AR_i; the ratio defines the percentage of district expenses which will be reimbursed or matched by the state. AR_i is defined as 1- f(W_i/W_s), where W_i is the measure of local fiscal capacity of the i'th district, and W_s is a statewide measure set by the state, often a statewide average, and f is a scaling coefficient designed to indicate the local share of school expenses which will be be matched or reimbursed by the state.[23] Current state aid, A_i, is then AR_i times an already observed spending and wealth levels (i.e. t-1):

[22]See Henahan(1992) for a complete description of New York's program of assistance to local school districts.

[23]See Monk(1990), pp. 214-15, or Gold et al (1992), p. 23.

$$A_{it} = [1 - f * \frac{W_{it-1}}{W_{st-1}}] * Exp_{it-1} \quad (1)$$

Under the percentage equalization approach, a state can find itself in effect with an open-ended match, and as a result have a state funding liability in excess of appropriations. New York prevents this sort of build-in escalation in school aid by specifying that Exp_{it-1} is fixed at a standard amount legislatively; it currently is set at \$3,900; f is set at .64, and the measure of local fiscal capacity, W, is based half on equalized property wealth per district per weighted pupil, and half on adjusted gross income per weighted pupil, each compared to their statewide averages.

New York operating aid is the larger of the per pupil amount that comes out of equation (2) and a minimum per pupil grant of \$360:

$$A_i = [1 - .64 * \frac{W_i}{W_s}] * \$3,900 \quad (2)$$

or, rearranging (2):

$$A_i = [\$3,900 - \$2,496 * \frac{W_i}{W_s}] \quad (3)$$

For a district whose fiscal capacity is identical to the statewide average, equation (3) reduces to \$3,900 - \$2,496 or \$1,404 per pupil in state operating aid.[24]

Under a foundation grant program that uses local property taxes to provide the local, mandatory contribution, aid to the i'th district, A_i, is the difference between the number of students (often weighted) multiplied times the state-defined foundation amount, F, and a state-mandated (minimum) local contribution: $t * Base_i$:

$$A_i = [F * ENR_i] - [t * Base_i] \quad (4)$$

Typically $Base_i$ is defined in terms of equalized property wealth, and t is the state presumed local, equalized property tax rate.

Under both the New York variant of the percentage equalization formula and the foundation aid approach, state fiscal responsibility rises with student enrollment. An advantage of the foundation grant approach is that state financial responsibility occurs only if the foundation amount, F, set by the state, grows faster than the local tax base. A disadvantage of the foundation approach is that if the state does not adjust its foundation amount, redistribution to more fiscally needy districts will occur less frequently, thus setting the stage for school finance litigation.

Under a foundation grant program that uses a local income tax, $Base_i$ becomes local personal taxable income, and t becomes the local state mandated income tax rate.[25]

[24]In addition, there are various ceilings put into (2).

[25]See Strauss(1993a) for a simple example worked out for Illinois, and a more complete example, including dealing with the classification issue, for school districts in Allegheny County, Pennsylvania.

As of 1992, 38 states used some form of a foundation program; 23 had a mandatory local effort (a local minimum tax rate is set), while 15 did not require local effort.[26]

Under the foundation grant and local income tax approach, the crucial determination that needs to be made involves ascertaining what each district's per pupil spending needs are, the foundation amount, and then comparing this guaranteed level of spending with local resources to find a residual which the state makes up with current state resources.

Below, I have chosen the unweighted state-wide median 1992/3 spending of $8,068 per pupil as a first approximation of such a foundation amount, F.

It should be emphasized that this is an initial measure of central tendency, and not a scientific measure of the resources needed to educate a child in grades K-12 to achieve at an acceptable level of performance. Indeed, one can imagine that an actual foundation amount would vary across districts once hard data were developed on what is necessary to attract and retain quality teachers, desired minimum and maximum class sizes, the sorts of capital and other operating services necessary to obtain desired levels of outcomes, differential costs of living between upstate and downstate New York, as well as between urban and rural areas more generally, and the nature of the student body. That is, one can imagine determining F_i for each i'th district by taking into account the above considerations which affect the costs of providing educational services.

Under this illustrative foundation program of per pupil spending level of $8,068, we calculate the total amount of guaranteed monies needed to provide foundation services (the foundation grant per pupil times the number of pupils). From that we subtract various sources of local and Federal effort: revenues from the mandatory 3 percent local income tax ($.03 * TAXINC92$), proceeds from the nonresidential property tax ($NONRESP92_i$), other local funds ($OTHER92_i$), and Federal funds ($FED92_i$). State aid, denoted as $Grant1_i$, then makes up any difference between the guaranteed resources and those available from nonstate sources. Two versions are shown below that rely on a 3 percent or 2 percent local income tax:

$$Grant1_{1i} = [\$8,068 * ENR92_i] - [.03 * TAXINC92_i + NONRESP92_i + OTHER92_i + FED92_i] \quad (5)$$

$$Grant2_{2i} = [\$8,068 * ENR92_i] - [.02 * TAXINC92_i + NONRESP92_i + OTHER_i + FED92_i \quad (6)$$

$Grant1_1$ eliminates the local residential property tax and imposes a mandatory or statewide 3 percent local income tax; $Grant2_2$ is identical to $Grant1_i$ exect that it requires more state aid by virtue of using a lower local income tax rate of 2 percent.

Under the foundation approach, there are likely to be districts which have sufficient local and Federal revenue sources other than the income tax such that no local income tax is needed to achieve the guaranteed foundation spending level.[27] In this instance, no state aid is needed.

[26]See Gold *et al* (1992), Table 4, p. 18.

[27]In New York, school districts with substantial nonresidential property tax revenues can support the foundation level of spending without an income tax, and thus do not need state aid.

A second group of districts may be able to achieve foundation levels of spending with less than a 3 percent income tax; again, in this case, no state aid is needed. The third group of districts both would impose the mandatory local 3 percent income tax, and require state aid to make up revenue shortfalls to achieve foundation spending levels.

Another aspect of the foundation approach that requires consideration is the disparity that will necessarily exist between the guaranteed foundation level of spending, and that currently in place. By definition, half the districts will be spending, on a per-pupil basis, above the median used below ($8,068) to determine the initial foundation amount. The question that arises is what sort of local tax policies one might allow at the state level to permit local districts to provide additional or "extra" resources. We can divide the districts into two groups: those who spend less than the median of $8,068, and those who spend more than the median of $8,068. The first group will not need any additional taxing authority, and have been "averaged up" to the median level of spending.

Table 12 shows the distribution of school districts, under the $8,068 foundation program and 3 percent local income tax, by tax rate and whether they will need to have taxing authority beyond 3 percent. Note that 17 districts would need no local income tax to achieve $8,068 per pupil spending, and that all 17 spent in excess of that amount; 63 districts would need a local income tax rate less than 3 percent, and all of them spent in excess of the guarantee as well in 1992/3. None of these 80 districts would receive any state aid.

Of the remaining 607 districts which would both require a 3 percent local income tax rate, and also receive state aid, 263 spent beyond $8,068 per pupil, and would require further taxing authority.

Table 13 displays a similar analysis for the same foundation amount and a 2 percent local income tax. Note that 62 districts would not receive state aid under this foundation program.

Table 12: Distribution of Districts under $8,068 Foundation Program and 3% Local Income Tax

Per Pupil Spending > $8,068 ?	Income Tax Rate t=0	Income Tax Rate 0<t<.03	Income Tax Rate t=.03	Total
No	0	0	344	344
Yes	17	63	263	343
Total	17	63	607	687

Table 13: Distribution of Districts under $8,068 Foundation Program and 2% Local Income Tax

Per Pupil Spending > $8,068 ?	Income Tax Rate t=0	Income Tax Rate 0<t<.02	Income Tax Rate t=.02	Total
No	0	0	344	344
Yes	17	35	291	343
Total	17	35	635	687

For the second group, we explore in Section 4.3 below the implications of permitting them to impose an extra or secondary local income tax rate to maintain current overall spending levels.

Table 14 shows the total amounts of state aid needed to solve Equation 5 and Equation 6, and a second set of equations where the foundation amount is set at the 75'th percentile of total school spending per pupil of $10,167. Also, hold-harmless amounts are aggregated to show how much more monies would be needed to allow districts now spending more than the median or 75'th percentile to continue to do so.

Several things are immediately evident from Table 14:

- a foundation grant of $8,068 and a 3 percent local income tax would require slightly more state aid than was currently being spent in 1992. Compare $8.885 billion under the local income tax approach with $8.784 billion in 1992/3 actual state aid for schools;
- dropping the local income tax rate to 2 percent requires $1.644 billion or 19 percent more state aid than occurred in 1992;
- raising the per-pupil guarantee or foundation amount to the 75'th percentile (from $8,068 to $10,167) is extremely expensive with a 3 percent local income tax, and would cost an additional $5.26 billion at 1992/3 levels;
- the hold harmless amounts above $8,068 are also quite large, about $2 billion, while those above the third quartile of $10,167 are smaller for the districts, but much larger for the state: and.

- under the mandated local income tax of 3 percent and State foundation grant of $8,068/pupil, 607 out of the 687 districts under study would receive state funding.

Table 14: Aggregate State Aid Amounts and Hold Harmless Amounts

Var Name	Description of Aid Formula and Local Tax	Total St. Cost	SDs
G1	St Aid of$8,068/child - 3% Y Tax	$8,884,700,323	607
G1A	St Aid of$8,068/child - 2% Y Tax	$10,428,605,448	635
G2	St Aid of$10,167/child - 3% Y Tax	$14,144,158,450	646
G2A	St Aid of$10,167/child - 2% Y Tax	$15,804,120,740	660
HARM1	Extra$ to Reach EXP92 with 3% Tax +G1	$1,971,257,466	343
HARM1A	Extra$ to Reach EXP92 with 2% Tax +G1A	$1,971,257,466	343
HARM2	Extra$ to Reach EXP92 with 3% Tax +G2	$711,108,890	170
HARM2A	Extra$ to Reach EXP92 with 2% Tax +G2a	$711,108,890	170

Table 15 and Table 16 display the per-pupil state aid that would result under the $8,068 foundation programs with 3 percent and 2 percent local income taxes. Median district state aid under the foundation program with the 3 percent local income tax is in the $5,000-$4,000 range in the first four income categories, but then falls off in the highest income category: the ratio of median aid to the lowest income districts divided by the median aid to the highest income districts is 1.96.[28]

Median district state aid under the foundation program with the 2 percent local income tax shows a less progressive pattern across income categories: median aid in the lowest income districts is $5,775, and falls to a median of $3,247 for the highest income districts; the ratio here is 1.78.

It is somewhat surprising to see higher levels of state aid per pupil under the foundation program with a 3 percent local income tax than under current law when the aggregate amounts spent by the state are the same order of magnitude (about $8.8 billion). Compare the overall median of $4,973 with the historical median aid of $3,784 (see Table 6). However, this occurs because fewer districts benefit from the foundation program (607), than under the historical pattern of state aid (687).

[28]This is less redistributive than the current state aid formula (See Table 6 above); the ratio of median aid of the lowest income districts divided by the median aid to the highest income districts is 2.93.

Table 15: Median District's Per Pupil State Aid under Foundation Guarantee of $8,068 and 3% Local Income Tax

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332	Total
<270	$2,798	$4,312	$319	$2,891	$694	$2,057
271- 442	$5,266	$5,077	$4,084	$874	0	$5,155
443- 693	$5,465	$5,537	$5,468	$3,044	$3,054	$5,438
694- 1,047	$5,873	$5,687	$5,307	$4,571	$1,266	$5,310
1,048- 1,242	$5,907	$5,863	$5,353	$4,311	$2,910	$5,392
1,243- 1,522	$5,607	$5,791	$5,677	$4,931	$765	$5,670
1,523- 1,970	$5,739	$5,647	$5,135	$4,424	$2,614	$5,020
1,971- 2,517	$4,961	$5,586	$5,292	$4,161	$2,726	$4,859
2,518- 3 342	$5,748	$5,044	$5,222	$4,019	$2,924	$4,866
3,343- 4,985	$6,309	$5,300	$4,433	$4,185	$3,040	$4,096
4,986- 6,782	$5,881	$4,386	$4,148	$3,415	$2,410	$3,557
6,783- 9,707	$4,549	$4,740	$3,112	$4,317	$3,579	$4,109
9,708-14,723	0	0	$6,111	$4,659	$2,861	$4,659
Yonkers: 19,350	0	0	0	$1,669	0	$1,669
Syracuse: 22,550	0	$4,285	0	0	0	$4,285
Rochester: 34,369	0	$3,092	0	0	0	$3,092
Buffalo: 46,284	$5,155	0	0	0	0	$5,155
NYC: 971,690	0	0	0	$2,682	0	$2,682
Total	$5,507	$5,628	$5,136	$4,142	$2,814	$4,973

It is evident that the five largest districts fare worse under this combination of a $8,068 foundation guarantee and a 3 percent local income tax, in terms of state aid, when compared to the actual 1992 pattern of state aid. (Compare Table 15 to Table 6). Now their aid is well below the per-return AGI group's median in each case. It is likely that adjusting the initial foundation guarantee by district for particular needs would alter this result. More importantly, if one couples a $8,068 gurantee with a lower maximum local income tax rate, the situation is reversed for New York City and Buffalo. (See Table 16).

Table 16: Median District's Per Pupil State Aid under Foundation Guarantee of $8,068 and 2% Local Income Tax

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332	Total
<270	$3,384	$4,835	$1,269	$4,173	$1,198	$2,138
271- 442	$5,575	$5,431	$3,881	$2,092	0	$5,431
443- 693	$5,726	$5,847	$5,871	$3,722	$3,964	$5,738
694- 1,047	$6,133	$5,993	$5,687	$5,178	$2,289	$5,713
1,048- 1,242	$6,169	$6,177	$5,735	$4,914	$3,074	$5,735
1,243- 1,522	$5,909	$6,141	$6,055	$5,282	$688	$5,885
1,523- 1,970	$6,019	$5,958	$5,618	$5,041	$2,339	$5,458
1,971- 2,517	$5,448	$5,919	$5,799	$4,193	$3,375	$5,230
2,518- 3,342	$6,076	$5,514	$5,789	$4,865	$3,247	$5,324
3,343- 4,985	$6,511	$5,754	$4,854	$4,950	$3,948	$4,796
4,986- 6,782	$6,224	$4,918	$4,739	$4,325	$3,295	$4,244
6,783- 9,707	$4,930	$5,227	$3,772	$4,911	$3,973	$4,760
9,708-14,723	0	0	$6,492	$5,183	$3,991	$5,183
Yonkers: 19,350	0	0	0	$2,580	0	$2,580
Syracuse: 22,550	0	$4,676	0	0	0	$4,676
Rochester: 34,369	0	$3,507	0	0	0	$3,507
Buffalo: 46,284	$5,499	0	0	0	0	$5,499
NYC: 971,690	0	0	0	$3,299	0	$3,299
Total	$5,775	$5,952	$5,618	$4,847	$3,247	$5,351

4.3 Maintaining Local Outlays under a Foundation Program

As noted above, there will necessarily be a group of districts for whom the guaranteed foundation spending level will be less than they are currently achieving. Given that in 1992 New York's local school districts spent $1.971 billion more than the proposed foundation amount[29] in their districts, a question arises about how they might be allowed to raise these additional funds. Several approaches are available: allow the limited use of the local residential property tax[30], or allow the use of an additional local income tax beyond the mandatory 3 percent or that necessary to achieve $8,068 per pupil. We examine the implications of this second approach.[31]

[29]That is, actual per pupil spending in 1992/3 exceeded $8,068 per pupil by a total of $1.971 billion.

[30]Michigan has allowed districts a five year period during which they may levy up to an additional 6 mills on equalised value to maintain or enrich school spending levels.

[31]No state participation or financing of these amounts beyond the guarantee are provided because the determination of the guarantee amount is based on having already provided funds sufficient to provide a base education.

For the second group of districts, the extra income tax or marginal income tax rate is th difference between current spending levels and the guaranteed foundation spending divided b taxable income. Equation 7 defines the hold-harmless amount of funds, $HARM1$, needed t continue spending at 1992/3 levels beyond the guarantee amount of $8,068/pupil:

$$HARM1_i = EXP92_i - \$8,068 * ENR92_i \quad (7)$$

For districts whose actual spending exceeded the guaranteed amount, their marginal tax rate, $Margt_i$, or the tax rate needed to finance this portion of their spending is the ratio of these extra dollars divided by their taxable income:

$$Margt_i = \frac{HARM1_i}{TAXINC_i} \quad (8)$$

Finally, note that for this second group of districts, their total income tax rate is the sum of the mandatory local income tax rate, which can be anywhere between 0 and 3 percent plus the marginal tax rate needed to maintain current support for public education.

Based on 1992 data, there were 263 districts out of 687 which would need to be able to impose a local income tax rate beyond the initial rate of 3 percent; another 63 would have to be able to impose an additional local income tax on top of a base rate that was below 3 percent, and 17 which had need no initial local income tax to achieve $8,068, but would need authority to achieve their actual 1992/3 spending level. (See Table 13 above.)

Table 17 shows the distribution of districts needing some sort of additional taxing authority by enrollment size and per-return adjusted gross income level. It is evident that there are more (123) high income districts which would need to impose an additional local income tax than in any of the other per-return AGI categories.

Table 17: Analysis of Number of Districts with Needed Extra Income Taxes

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332	Total
<270	16	1	4	2	10	33
271- 442	11	7	3	1	2	24
443- 693	14	11	1	5	1	32
694- 1,047	8	6	3	7	10	34
1,048- 1,242	3	3	6	10	9	31
1,243- 1,522	2	0	3	4	8	17
1,523- 1,970	2	2	2	2	14	22
1,971- 2,517	3	6	0	8	16	33
2,518- 3,342	0	2	2	11	18	33
3,343- 4,985	0	0	10	8	18	36
4,986- 6,782	0	2	3	7	11	23
6,783- 9,707	2	2	4	4	6	18
9,708-14,723	0	0	1	3	0	4
Yonkers: 19,350	0	0	0	1	0	1
Syracuse: 22,550	0	1	0	0	0	1
Rochester: 34,369	0	1	0	0	0	1
Buffalo: 46,284	0	0	0	0	0	0
NYC: 971,690	0	0	0	0	0	0
Total	61	44	42	73	123	343

Table 18 shows the median district's incremental or required marginal tax rate needed to maintain 1992 spending levels without further state aid beyond the grant determined by a guarantee of $8,068 and 3 percent local income tax rate above. (See Equation 5). above. Once one moves to districts with reasonably sized enrollments, many of the incremental local income tax rates are in the 1-3 percent range. Whether or not the State should participate through some sort of matching scheme beyond the base 3 percent income tax remains an open question. Again, if a gross local income tax on AGI were used instead of New York taxable income, tax rates could be lowered, on average, by 30 percent.

Table 18: Analysis of Median District's Marginal Tax Rate with $8,068 Foundation Grant

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332
<270	0.0949	0.0317	0.0771	0.0195	0.0568
271- 442	0.0383	0.0099	0.0245	0.0813	0.1267
443- 693	0.0229	0.0321	0.019	0.0515	0.0605
694- 1,047	0.0203	0.0216	0.0131	0.0297	0.0201
1,048- 1,242	0.0061	0.0287	0.0194	0.0112	0.0218
1,243- 1,522	0.0536	0	0.0053	0.0166	0.0286
1,523- 1,970	0.0313	0.029	0.0282	0.019	0.0303
1,971- 2,517	0.0254	0.0243	0	0.0261	0.0285
2,518- 3,342	0	0.0503	0.0113	0.0326	0.0202
3,343- 4,985	0	0	0.0173	0.0315	0.0236
4,986- 6,782	0	0.0428	0.0123	0.0152	0.0263
6,783- 9,707	0.0081	0.0059	0.015	0.0314	0.0292
9,708-14,723	0	0	0.0485	0.0177	0
Yonkers: 19,350	0	0	0	0.0269	0
Syracuse: 22,550	0	0.006	0	0	0
Rochester: 34,369	0	0.0311	0	0	0
Buffalo: 46,284	0	0	0	0	0
NYC: 971,690	0	0	0	0	0

Finally, we examine in Table 19 the aggregate distribution of total local income tax rat (base rate of 3 percent or 2 percent+ any extra local income tax rate needed to maintain loc spending) by type of foundation program. As noted above, a foundation program of $8,068 an a local income tax rate of 3 percent would entail state aid of $8.885 billion. If we line up tl districts by their local income tax rate, from lowest to highest, we find that the local incon tax rate for the first 50 percent of the districts will be 3 percent. At the 75'th percentile, tl rate rises to 5.2 percent, and by the 90'th percentile, the total local income tax rate is 9 percent.

If the state sets a lower local income tax rate of 2 percent, then it must necessarily pick u a greater difference; note that the state aid cost rises to $10.429 billion. The pattern of loc income tax rates is accordingly lower, and the 75'th percentile local income tax rate becom 4.4 percent. Again, virtually all of the districts would use the 2 percent rate; note that tl 10'th percentile district in terms of its local income tax rate is at the 2 percent rate. This important to forestall possible migration.

Table 19: Distribution of Total Local Income Tax Rates by Foundation Program

Grant Type	Cost	10%	25%	50%	75%	90%
G1: $8,068 and 3% Tax	$8.885 Billion	0.03	0.03	0.03	0.052	0.097
G1a: $8,068 and 2% Tax	$10.429 Billion	0.02	0.02	0.02	0.044	0.089
G2: $10,167 and 3% Tax	$14.144 Billion	0.03	0.03	0.03	0.030	0.046
G2: $10,167 and 2% Tax	$15.804 Billion	0.02	0.02	0.02	0.020	0.054

4.4 Other Issues: The Growing Role of the Residential Property Tax

One explanation of the growing unhappiness with the local property tax involves the relative shift in valuations from commercial and industrial property to residential property. In this view, the economic collapse of much of the commercial property market in the late 1980's is now being captured by the assessment and appeals processes. The overbuilding of commercial properties in the early 1980's, and the collapse in demand as a result of the recession of 1989-91 and changes in the federal tax treatment of depreciation (especially the passive loss limitations in the Tax Reform Act of 1986), have been followed by declining or sluggish valuations. Also, the decline of heavy manufacturing industry in many industrial states has resulted in declining or sluggish valuations of manufacturing properties. By contrast, housing has not been overbuilt in the North East, and housing values may be growing more rapidly (or declining more slowly) than their commercial and industrial counterparts.

One way to examine this is to calculate the share of property taxes attributable to residential real property in 1991 and 1990, and compare the 1991 share to the 1990 share. Table 20 indicates that for many representative districts, the 1991 percentage shares of residential property were relatively 2 to 3 percent higher than in 1990.[32]

[32]The ratios reported in Table 20 exclude condominiums in the definition of residential property tax collections because such data are not available for 1990. Elsewhere in the study, residential property was estimated using property tax collections in 1991, including those on condominiums, divided by total property tax collections in 1991. 1992 residential property tax collections were estimated by multiplying the 1991 percentage times known 1992 total property tax collections.

Table 20: Median District's 1991 % Residential Property Divided by 1990 % Residential Property

1992 Enrollment Grouping	$19,204 -$23,710	$23,711 -$26,212	$26,213 -$30,696	$30,697 -$39,853	$39,854- $144,332	Total
<270	1.0161	1.0297	1.0300	1.0096	0.9798	1.0063
271- 442	1.0138	1.0274	1.0143	0.9770	1.0253	1.0156
443- 693	1.0176	1.0195	1.0193	1.0056	1.0625	1.0186
694- 1,047	1.0231	1.0173	1.0233	1.0120	1.0513	1.0232
1,048- 1,242	1.0162	1.0096	1.0108	1.0155	1.0400	1.0133
1,243- 1,522	1.0121	1.0154	1.0267	1.0075	0.9808	1.0126
1,523- 1,970	1.0383	1.0092	1.0059	1.0144	1.0162	1.0120
1,971- 2,517	1.0357	1.0066	1.0072	1.0055	1.0160	1.0090
2,518- 3,342	1.0028	1.0101	1.0000	1.0121	1.0070	1.0095
3,343- 4,985	0.9372	1.0069	1.0130	1.0054	0.9948	1.0058
4,986- 6,782	1.0255	1.0141	1.0220	0.9861	0.9871	1.0000
6,783- 9,707	0.9499	1.0278	1.0190	1.0050	0.9811	1.0000
9,708-14,723	0	0	1.3439	0.9811	1.0050	1.0000
Yonkers: 19,350	0	0	0	1.0165	0	1.0165
Syracuse: 22,550	0	1.0233	0	0	0	1.0233
Rochester: 34,369	0	1.0400	0	0	0	1.0400
Buffalo: 46,284	1.0044	0	0	0	0	1.0044
NYC: 971,690	0	0	0	1.1429	0	1.1429
Total	1.0189	1.0139	1.01265	1.0057	1.0048	1.0119

Next, we can inquire if there is any relationship between the greater prevalence of residential property compared to nonresidential property viz a viz total spending per pupil. Table 21 shows the results of examining within each BOCES district the correlation between the 1992 per pupil spending and the percentage of property taxes attributable to residential property.[33]

In the Albany area (BOCES id=1), there are 25 school districts; the correlation between 1992/3 spending and the percentage of 1991 property taxes which is residential, according to the NY State Department of Equalization and Assessment, is -.46431. The correlation using 1990 data was -.46565. The probability that the correlation was due to chance, rather than a systematic relationship was less than 2 percent. Of the 38 BOCES areas examined[34], 16 displayed a statistically significant inverse correlation between per pupil spending and the percentage of equalized value attributable to residential property. All but five showed an inverse relationship.

[33]Recall that a correlation coefficient can be between -1.0 and +1.0. If there is no association, then the coefficient will be small, e.g., -.04 or +.05. If there is a strong, nonrandom relationship, then the correlation coefficient will be large, e.g., -.6 or +.8).

[34]New York City has only 1 observation and so a correlation can not be performed.

This finding can be also interpreted as supporting the notion that as nonresidential property becomes more important in the composition of a school district's tax base, it becomes politically easier to impose higher millages.[35]

Table 21: Simple Correlation between 1992 Per Pupil Spending and 1990 and 1991 Percent Residential Property Taxes by BOCES

	ID	BOCES	1990 Corr Coeff.	1991 Corr Coeff.	Prob90	Prob91	N of SDs
*	1	Albany-Schen-Schoh	-0.46431	-0.46565	.0194	.0190	25
*	2	Broome-Delaware-Tioga	-0.50688	-0.52540	.0538	.0443	15
	3	Catt-Alleg-Erie-Wyoming	-0.11607	0.01992	.5806	.9247	25
	4	Cayuga-Onondaga	-0.11436	-0.17988	.7696	.6433	9
	5	Clnt-Essx-War-Wash	0.17199	0.19655	.5092	.4496	17
*	6	Del-Chen-Mad-Otsego	-0.87766	-0.88525	.0001	.0001	17
	7	Dutchess	-0.52604	-0.42856	.0648	.1440	13
	8	Erie 1	-0.33744	-0.37123	.1457	.1071	20
	9	Erie 2 - Catt - Chaut	-0.04665	-0.04730	.8136	.8111	28
*	10	Franklin-Essex-Hamilton	-0.69262	-0.70192	.0386	.0350	9
	26	Otsego-Del-Schoh-Greene	0.08758	0.10947	.7214	.6555	19
	12	Hamilton-Fulton-Mont	-0.32691	-0.30548	.2539	.2882	14
*	13	Herkimer-Ful-Hamltn-Ots	-0.79711	-0.78543	.0019	.0025	12
	14	Jef-Lew-Ham-Herk-Oneida	0.09691	0.05399	.7114	.8370	17
	15	Gen-Livingston-Steu-Wyoming	-0.21887	-0.25341	.3278	.2552	22
	16	Madison-Oneida	0.13255	0.16565	.7151	.6474	10
*	17	Monroe 1	-0.52564	-0.52337	.0968	.0985	11
*	18	Monroe 2-Orleans	-0.38559	-0.39269	.3054	.2955	9
	19	Nassau	-0.63909	-0.64510	.0001	.0001	53
	42	New York City	.	.	.	.	.
*	20	Oneida-Mad-Herk	-0.49803	-0.53170	.0994	.0752	12
*	21	Onondaga-Cortland-Madison	-0.53116	-0.46926	.0076	.0207	24
*	22	Ontar-Cay-Sen-Wyne-Yts	-0.44053	-0.45359	.0243	.0199	26
	23	Orange-Ulster	-0.23632	-0.28370	.3451	.2539	18
*	24	Orleans-Niagara	-0.63287	-0.60604	.0203	.0281	13
*	25	Oswego	-0.89745	-0.90460	.0010	.0008	9
	27	Putnam-Westchester	-0.29585	-0.23526	.2333	.3473	18
	28	Rensa-Columbia-Greene	0.12692	0.12793	.5735	.5705	22
	29	Rockland	-0.08965	-0.08989	.8328	.8324	8
	30	St Lawrence-Lewis	-0.25362	-0.25838	.3099	.3006	18
	32	Schuyler-Chemung-Tioga	-0.24476	-0.29858	.5968	.5154	7
	33	Steuben-Allegany	-0.38572	-0.38615	.1732	.1726	14
	34	Suffolk 1	0.22780	0.18875	.1154	.1940	49
	36	Suffolk 3	-0.31145	-0.21232	.2084	.3976	18
	37	Sullivan	-0.24254	-0.30999	.4996	.3834	10
*	38	Tompkins-Seneca-Tioga	-0.76359	-0.76135	.0275	.0282	8
*	39	Ulster	-0.71409	-0.69197	.0466	.0572	8
*	40	Wash-Sar-Warren-Hamltn-Essex	-0.68313	-0.72573	.0001	.0001	31
*	41	Westchester	-0.57239	-0.52751	.0015	.0039	28

* Denotes Odds of Correlation Due to Chance Alone less than 10%

[35]Ladd and Harris(1995) report statewide regression results for New York that display an inverse relationship between the percent of equalised residential property values and expenditure per pupil.

4.5 Other Issues: Stability of Income vs. Property Taxation

A major perceived advantage of the local property tax is its stability in revenues over time. From the point of view of the local school tax collector, it is usually presumed that monies from the property tax vary less than would tax revenues from a local income tax. Unfortunately, data on actual assessed values and actual millages per district per year are not available over a long enough time period to test this hypothesis. On the other hand, New York State does collect systematic data on adjusted gross income over time, property tax collections, and equalized full value.

Property tax collections reflect not only changes in the assessed tax base, but also behavioral responses by school boards to changing state and federal aid as well as local assessments. If these political decisions are made to smooth out gyrations in the assessed base, we would expect the variation in the growth rate of property tax collections to be relatively smaller than that in adjusted gross income.

We shall examine the issue of stability of the local income tax compared to the local school property tax by comparing the *relative* variability in the adjusted gross income base per school district compared to the variability of actual property tax collections.

The coefficient of variation, defined as the standard deviation of the growth rate in tax base divided by the mean growth rate in tax base is our measure of volatility. For three tax base measures, we have growth rates for the period 1983-1992. For each school district, we have 10 percentage changes in property taxes, 10 percentage changes in equalized value, and 10 percentage changes in AGI. For each school district, we may calculate a coefficient of variation in each set of 10 percentage changes. The entries in Table 22 correspond to sorting the 687 districts by each of the three coefficients of variation, and examining the median coefficient and other parts of the distribution.

Table 22 displays the distribution of these measures of relative volatility in growth rates by type of tax base. The median district's coefficient of variation of property tax collections growth rate was 67.0, while the comparable figure for full value growth rate was 78.0 (more volatile), while the comparable figure for adjusted gross income growth rate was 62.3 (less volatile). Thus, for the median district, the income tax base shows somewhat less volatility in growth rate than either measure of the property tax base.

The property tax base shows greater relative volatility for all points in the distribution, and the interquartile range compared to the adjusted gross income measure of relative variability: compare 53.8 to 41.6. On the other hand, the full value growth rate measure has the smallest interquartile range of variation of 27.7.

Table 22: Coefficients of Variation in Growth Rates of Different Tax Bases

Pct	CV Property Tax Growth Rate	CV Full Value Growth Rate	CV AGI Growth Rate
90%	149.6	118.9	140.8
75%	99.9	94.8	90.4
50%	67.0	78.0	62.3
25%	46.0	67.1	48.8
10%	34.7	52.3	39.4
q3-q1	53.8	27.7	41.6

Source: author's calculations.

4.6 Other Issues: Windfalls to Homeowners Due to Property Tax Elimination

Actual implementation of the complete or partial substitution of the local school property tax with a local income tax will alter the local financial landscape. For many homeowners, school property tax are often half of their local tax bill. A question arises whether the elimination of the school property tax will create a windfall. Two sorts of windfalls can be imagined:

- a major tax reduction for homeowners who are income-poor, say the elderly; this windfall entails a major tax reduction for them, and tax increases on those who have relatively higher income, and have relatively lower real estate wealth.
- for the class of all homeowners whose property taxes might go down by 30 or 40 percent, the value of their homes could be expected to rise by the capitalized value of the tax reduction. In this view, the local school property tax "destroys" the value of real estate, and a property tax reduction would create a once-and-for-all increase in the market value of residences.[36]

The first sort of "windfall" represents changes in tax burden that result from tax reform. That is, those with ability to pay at the local level would now be taxed to support the costs of public education. Forestalling this shift would be to engage in contradictory public policies.

With respect to the second issue of possible capitalization effects, several observations are in order. First, if the shift in revenue source is phased in over time, the windfall will be slight.

Second, even if it is made in one year, the effects may be small. Consider the following calculations. According to the New York State Department of Equalization and Assessment, total residential school property taxes were \$5.870 billion in 1992/3, while the total equalized value of residential property was about \$491.363 billion. If the mortgage rate of interest is 9 percent, the most the capitalized value of the \$5.870 billion could be is \$65.2 (\$5.870/.09). If we compare this \$65.2 billion rise in value that might occur were the residential property

[36]A simple way to estimate the largest possible size of this effect is to divide the once and for all property tax reduction by the mortgage interest rate.

tax eliminated to the initial equalized base of $491.363 billion, this is at most a 13 percent "windfall." Changes in the mortgage rates in 1994 have been at least of this order of magnitude; compare 9 percent with 7 percent for example. From these calculations it would appear that this second "windfall," especially if the tax substitution were phased in over time, would be modest.

5 Conclusions

The purpose of this study has been to review the arguments for and against replacing the local school property tax with a local income tax. The essential argument in favor of such a major restructuring of New York's system of school finance is that a local income tax better reflects the ability to pay of a school district's residents than does the real property tax base or residential real property tax base in the district. For those who have modest incomes and are "paper-rich," such a tax reform will move their burdens to those with greater ability to pay. Given the current difficulties with New York's real property tax, such tax substitution is viewed as a workable alternative to trying to reform the assessment process statewide. The essential arguments against such a proposal involve new administrative complexities, and the practical argument for not disturbing a fiscal landscape which may be relatively settled.

While it is often said that the local property tax is a stable form of finance, a review of the relative volatility of adjusted gross income compared to property tax collections indicates that income was more stable. While actual collections can vary for a number of reasons besides volatility in the underlying assessed tax base, these empirical results at least raise a question about one of the major virtues of the local school property tax.

The 1992 local school property tax was 4.4 percent of 1992 total adjusted gross income ($11.3 billion/$257.6 billion), and 6.3 percent of estimated total 1992 New York State taxable income of individuals (e.g., $11.3 billion/$178.9 billion). The 1992 estimated residential local school property tax was 2.3 percent of total 1992 adjusted gross income (e.g. $5.9 billion/$257.6 billion), and 3.3 percent of estimated 1992 taxable income (e.g., $5.9 billion/$178.9 billion).

If one wishes to engage in this form of local tax reform, we find that it is possible, with a 'mandatory' local income tax rate on the order of 2 percent to 3 percent to eliminate the residential portion of the school property tax in conjunction with changing the New York school aid formula to a foundation program. I say 'mandatory' because some districts are sufficiently well endowed with nonresidential property that they would need income tax rates below 3 percent to maintain their current spending levels.

Eliminating a portion of the local property tax can raise complex questions of how to deal with nonresidential property taxation. Neither a homestead exemption or the classification of nonresidential property are simple; however, these mechanisms can be refined to reflect relative relationships among types of real property.

While a local income tax on the order of 2 or 3 percent will be sufficient to replace the local residential school property tax for most school districts in New York, there are a number of primarily small districts where this is not possible. Further research is also necessary to understand the particular economics of these areas, and whether special rules might be needed to make such a tax substitution acceptable. Further work is also necessary to understand the implications of such a tax substitution for renters in commercial apartment buildings. This will be especially important in urban areas, and New York City in particular.

This analysis has presumed that a statewide foundation amount of $8,068 is an appropriate

spending level. Further investigation of devising a more meaningful foundation standard is needed. This entails examining differential costs of living, transportation needs, capital costs, differing student needs and demographics, and differing salary levels necessary in different parts of New York to attract and retain qualified teachers. Districts currently make decisions in each of these school resource areas; at issue is what is necessary, for various parts of New York State, to provide educational services to students in order for the State to fulfill its obligation to them.

It is likely that legislative consideration of the substitution of a local income tax for the school property tax will entail providing the local income tax as an *additional* revenue source to local school districts, rather than the elimination of the school property tax. If so, care must be taken not to create revenue windfalls to local districts.

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7 Appendix 1: Data Sources and Definitions

ENR92 1992: State Ed Dept Tot Enrollment [NYSED]

EXP92 1992: Total SD Spending [NYSED]

STATE92 1992: Total State Aid to SDs [NYSED]

FED92 1992: Federal Aid to SDs [NYSED]

LOCAL92 1992: Total Local School Revenues [NYSED]

RESPROP92 1992: Estimated Residential Prop Taxes for 1992: (ratio of 1991 property taxes levied on residential property (attributable to single family dwellings, multiple units under six and condominiums) divided by 1990 property taxes levied on residential property (single family dwellings, multiple units under six and condominiums) times 1992 total local 1992 property tax collections. [NYSED and NYS Div of Equalization and Assessment]

PTAX92 1992: Total SD Property Taxes [NYSED]

OTHER92 1992: Total Local Non Property Tax Revs: derived as: LOCAL92-PTAX92

NONRESP92 1992: Estimated Non Residential Prop Tax: derived as: PTAX92-RESPROP92

FVAL92 1992: Equalized Full Value [NYS Div of Equalization and Assessment]

AGI92 1992: NYS Adjusted Gross Income [NYSED and NYD T and F]

TAXINC92 1992: Estimated NYS Taxable Income [NYD T and F]

RET92 1992 Personal Tax Returns Filed [NYSED and NYD T and F]

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Reducing Local School Property Taxes:

Recent Experiences in Michigan

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Reducing Local School Property Taxes: Recent Experiences in Michigan

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Introduction

In late July of 1993, in one fell swoop, the Michigan legislature eliminated the local property tax as a source of operating revenue for the public schools. As a result, two-thirds of the funding for K-12 education was wiped out with no immediate provision made for replacing the $6.5 billion in lost revenues. This action put Michigan on center stage nationally and served as a trigger in many states for renewed interest in local property tax limitation initiatives. Later actions by the Michigan legislature and the state's voters did replace most of the lost revenues by restoring a portion of the local property tax, establishing a state property tax for schools, and substantially increasing the state general sales tax with the new revenues earmarked for education.

As New York State policymakers continue to experience the increasing press for reductions in the local property tax and strive to fashion proposals to address this issue, it may be instructive to look to recent experiences in Michigan to inquire what, if any, lessons can be learned. To this end, the major purpose of this policy brief is to describe the Michigan experience and its immediate fiscal consequences for the state and the schools. I hope that it will be instructive. Whether or not it is, is a determination I will leave to New York State policymakers.

However, before I proceed it seems appropriate to first place the Michigan experience in the larger national context. I do this by briefly reviewing the consequences of the property tax limitation movement that began about fifteen years ago and which remains very much alive today.[1] I also include a brief look at actions the states have taken, or not taken, to dedicate or earmark state tax revenues for education and property tax reduction. I then turn to a description and discussion of the recent happenings in Michigan.

The Tax Limitation Movement

Mandated Property Tax Reductions

The tax limitation movement, and particularly the drive toward legislative and constitutional mandates to reduce if not eliminate local property taxation for school operating purposes, is a relatively recent phenomenon. As Gramlich and Woodard (1982) note, "Before 1976 no state had a statutory or constitutional limitation on aggregate tax or expenditure levels" (p. 452). New Jersey, in 1976, adopted the first statutory limitation, setting a cap on total expenditures. n the next two years, 11 states passed tax limits by referendum, with seven of these limits being constitutional. The movement really gained full momentum and great national visibility in the 1978 adoption by California's voters of Proposition 13. With the adoption of this measure, California limited the combined property taxes of local agencies (cities, counties, schools, community colleges, and special districts) to 1 percent of the property's full value. In the prior year, the property tax rate on a typical California home was 2.6 percent. Proposition 13 also placed a cap of 2 percent on annual

assessment increases, with a reassessment to full market value at the time the property changed hands. A third limit was the requirement of a two-thirds vote of the legislature for any general state tax increase. Proposition 13, along with the California Supreme Court's decision in *Serrano v. Priest* and the adoption of Proposition 98 and its minimum funding guarantee for education, resulted in a dramatic shift in funding responsibility (and control) away from the local level and to the state level. California became a "full-state funded system"--i.e., the state now assumes 85 percent of the cost of public education.

A good deal has been written about Proposition 13, its background, the reasons for its adoption, and the fiscal consequences for the state and the schools (see, for example, Speich and Weiner 1980; and Picus 1991). For our purposes it is sufficient to note that the major source of replacement revenues came not from new taxes or newly raised rates on existing taxes, but rather from what was, at least initially, a huge state surplus generated by a booming economy and California's graduated rate income tax. It also is worth noting that there are those who argue that, over the longer period, Proposition 13 has resulted in a general reduction in resource levels for California schools (Picus 1991).

The California action was followed by adoption in several states of a variety of tax and spending limitations. But the next outright tax cutting measure was Massachusetts' voters approval in 1980 of Proposition 2-1/2. The measure required cities and towns with high tax rates to reduce property taxes by at least 15 percent annually until the rate reached 2-1/2 percent of market value. At that point, property taxes could be raised but by no more than 2-1/2 percent annually. Ladd and Wilson (1985) note that "local school budgets were cut substantially during Proposition 2-1/2's first year" (p. 292). The legislature did not provide replacement revenues for the lost funds. However, later in the 1980's, with Massachusetts enjoying a surplus in state revenues, the legislature did increase aid to local communities to help offset the effects on Proposition 2-1/2. However, a downturn in state revenues followed shortly thereafter and, by 1991, the state's share had fallen to 25 percent (Gold, Smith, Lawton and Hyary 1992).

The third and final state level mandate to actually reduce rather than cap property taxes, prior to Michigan's recent action, came in 1990 in Oregon with the voters' approval of Measure 5. This measure amends the Oregon constitution to limit property tax rates for public schools to 15 mills in 1991-92 with a further phased reduction to 5 mills by 1995-96. Replacement revenues are to come from the state's general fund until 1996 (Gold, Smith, Lawton and Hyary 1992). A November 1994 ballot measure to maintain school funding at no less than the 1993-94 amounts failed by a large margin--with 65 percent voting no. Thus, the question of replacement revenues beyond 1996 is left up in the air, leading to considerable concern if not anxiety among the Oregon school community.

This is an anxiety probably shared by school supporters in California and Massachusetts which, along with Oregon, are the only other states which mandated actual reductions in local property taxes during the period 1978 through 1990. In no one of the three states were actions taken to replace lost revenues by enacting new taxes, raising rates

on current taxes, or earmarking revenue from existing taxes to offset the loss of local property tax dollars (Fabricius and Snell 1990). In fact, neither California nor Massachusetts earmark any state tax revenues either to offset property tax reductions or for education. Oregon does earmark for education 100 percent of the revenue from its timber severance tax, which produced some $27 million in 1988. Oregon also earmarks 100 percent of the revenue from its oil and gas severance tax, but this amounted only to $100,000 in 1988. However, both of these earmarks pre-date the passage of Measure 5.

Earmarking of State Tax Revenues

Along with Oregon, 28 other states earmark some portion of tax revenues for education and property tax relief (Fabricius and Snell 1990). The most common earmarks, in place in 10 states, are on the general sales tax which, along with the personal income tax, continues to be the major source of state tax revenues.[2] The earmarks in the 10 states vary from 100 percent of general sales tax revenues in South Carolina and Tennessee to as little as 1.3 percent in Mississippi.[3] Personal income tax revenues are earmarked for education in four states--New Jersey (100 percent), Alabama (97.1 percent), Montana (31.4 percent), and Kansas (14.7 percent). In addition to these two major taxes, four states earmark state property tax revenues for education. In Michigan, with its recent reforms, 100 percent of its new 6 mill state property tax is earmarked for K-12 education. In Washington, the earmark for K-12 education is 100 percent of net revenue from the state property tax.[4] Montana earmarks 78.4 percent of its state property tax revenue for K-12 education, and Alabama 46 percent. Several of the 29 states place earmarks on a broad array of relatively minor taxes including taxes on cigarettes, bingo, liquor, insurance, pari-mutuel betting, soft drinks, motor fuel, oil and gas severance and the like.

In the larger picture, it appears that earmarking state tax revenues for education and property tax relief is not a widespread practice. In 1988, nationwide, 23 percent of state tax revenues were earmarked--down from 51 percent in 1954 (Fabricius and Snell 1990). Forty states levy a general sales tax, but only 26 of these states earmark their sales tax and only 10 of these earmark the tax for education and property tax relief. Thirty-nine states levy a personal income tax, with 14 of these states earmarking revenues from the tax, but only 4 of these states earmarking the revenues for education.[5] The earmarks on other state taxes, perhaps with the exception of the four states in which revenues from state property taxes are earmarked for education, generally produce relatively small amounts. Finally, while not strictly a tax, twelve states earmark lottery revenues for education (Gold 1994).

Renewed Interest in Property Tax Limitation

As we approach 1995, the tax and revenue limitation movement appears not to have lost steam. If anything, it appears to have picked up renewed momentum perhaps, in part, because of the highly visible but little understood actions that took place in Michigan in 1993 and 1994, i.e., the enactment of Senate Bill 1 and the later voter approval of Proposal A.

The November 1994 general elections seem to attest to this momentum (Lindsay 1994). In at least 10 states, measures appeared on the ballots seeking voter approval for tax and revenue limitations, assessment caps, a mandate to plan for property tax reductions, establishment and continuation of lotteries, and related constitutional and statutory actions. The results were mixed--some measures passing and some measures failing. However, in no state was there a successful measure to impose mandated reductions in local property tax rates. The closest action came in a successful Rhode Island ballot measure which requires the legislature to develop a plan to reduce property taxes while increasing state aid for education. Still, coupled with the ascendancy of a number of Republicans to the governorships of their states--the nation now has 30 Republican governors including, of course, a new Republican governor in New York State--and the wide gains made by Republicans in state legislatures, the press for local property tax reduction and revenue growth limits seems not likely to abate but rather more likely to increase in the immediate months and years ahead. As one observer notes, " . . . property tax limits [in upcoming legislative sessions] may become a popular idea." (Harp 1994, p. 17.)

I turn next to a description and discussion of the happenings in Michigan.

The Recent Michigan Experience

The Initial Action of the Legislature --Elimination of the Property Tax

As we noted at the beginning of this brief, in late July of 1993, in a draconian move, the Michigan Legislature eliminated entirely the local property tax as a source of operating revenue for the public schools. The public school establishment awakened on the morning of July 22, 1993, to find, as a result of the legislature's adoption of Senate Bill 1, fully two-thirds of its operating revenues wiped out and no immediate prospects for how that revenue was to be replaced. The legislature not only had thrown out the local property tax as a source of school funding, it had done so without making any provision whatsoever for replacing the $6.5 billion lost as a consequence of its action. Michigan literally had departed from the fold, becoming the only state in the nation other than Hawaii that apparently would not be looking to the local property tax as a major source of school operating revenues. In mid-August, the Governor signed SB 1 into law, becoming Public Act 145 of 1993.

Act 145 reduced K-12 operating revenue by $6.018 billion for local districts and $508 million for intermediate districts. Additional revenue losses of $180 million accrued to other local governments which had relied on local school millage to fund economic development projects. Act 145's major impact would be first felt in the summer of 1994 when summer property tax collections would no longer provide any operating money for the schools. If replacement funds were not put in place prior to that time, chaos very likely would ensue. Efforts by the Michigan legislature to replace this revenue, however, were constrained by several constitutional provisions. Full replacement of the lost revenue by the state was prohibited by specific language in the Michigan Constitution, which establishes a limit on the

total amount of taxes that may be imposed on Michigan taxpayers by the legislature in any fiscal year. Specifically, the state is prohibited from collecting total tax revenues in excess of a fixed proportion of total state personal income.[6] According to Michigan Department of Treasury estimates, state revenues were approximately $4.2 billion below the state revenue limit in FY 1993-94. Thus, $2.3 billion of the needed $6.5 billion in replacement revenues would have to come from other sources. The state could exceed the limit if the governor and two-thirds of the legislature would declare an emergency, which was an unlikely event. A second and equally unlikely avenue for satisfying the revenue limit would be to expand the homestead tax credit on the state income tax, thus effectively reducing state revenues. Consequently, in the absence of seemingly acceptable alternatives, the governor and the legislature were limited to selecting a combination of state taxes allowable under the constitutional limit and a partial reinstatement of approximately $2.3 billion in local property taxes. Even then, in pursuing this alternative, the legislature would find itself with little or no revenue flexibility in future years. However, it would substantially relax a second constitutional constraint which requires the proportion of state spending paid to local governments not to fall below a certain percentage level.[7]

The Subsequent Action of the Legislature
--Replacement of Lost Revenues

Governor John Engler moved rapidly to capitalize on the opportunity presented by the adoption of Act 145. He delivered a special message to a joint session of the legislature in early October 1993, and followed this almost immediately with the release of a detailed three-part plan for (1) replacing the revenue lost by the elimination of the local property tax, (2) creating a new mechanism for allocating funds to the schools, and (3) setting in place the policies and actions seen as necessary to achieving meaningful education reform.[8] The linch-pin of the Governor's funding proposal was a 2 percentage point increase in the state general sales tax--from 4 percent to 6 percent. Under the Michigan Constitution, an increase in the general sales tax cannot be enacted statutorily, but rather must be approved by a vote of the people. Consequently, the Governor moved immediately to request the legislature to place the issue on the ballot for a vote in early 1994. A counter proposal, fashioned by a bipartisan team of legislators in the House, put forth a funding plan that, in effect, supported the Governor's plan but provided a statutory fallback that would automatically take effect if voters failed to approve the sales tax increase. The statutory fallback called for a 1.6 percent increase in the personal income tax as the major source of replacement revenues. Both plans called for a partial restoration of the property tax--a portion to be levied locally and a portion to be levied by the State. Table 1 displays the components of the two competing plans. Following a marathon session of the Legislature, agreement on the two-option package was reached on Christmas Eve 1993, with a statewide ballot, entitled Proposal A scheduled for mid-March 1994.[9]

TABLE 1
THE 12-24-93 AGREEMENT ON REVENUE REPLACEMENT

1993-94 Current	Ballot Proposal	Statutory Fallback	
Sales tax	4%	6%	4%
Income tax	4.6%	4.4%	6%
Property tax (Mills):			
Homestead	34 (average)	6	12
Second homes	34 (average)	24	24
Comm & Indus	34 (average)	24	24
Enhancement	N.A.	3	3
ISDs 3 (average)	3 (average)	3 (average)	
Assessment cap	N.A.	5% or CPI	No
Property transfer tax	.0011%	0.75%	0.75%
Single business tax	2.35%	2.35%	2.75%
Cigarette	25 cents	75 cents	40 cents
Out-of-state calls	4%	6%	4%
Personal income tax exemption	$2,100	$2,100	$3,000 ($3,900 > 65)

On March 15, 1994, the people of Michigan spoke resoundingly and--by a 69-31 margin--approved Proposal A, rejecting the income tax increase and casting their lot with the 2 percent increase in the general sales tax. *It is important to reiterate that, as a part of the package, a portion of the property tax was restored--a state levy of 6 mills on all property and a local levy (if authorized by the voters) of 18 mills on nonhomestead property.* Furthermore, high revenue districts (i.e., those exceeding $6,500 in per pupil revenue bases in 1993-94) are permitted to levy additional "hold harmless" millage; and up to 3 "enhancement" mills are available to all local districts with voter approval. The net result for the public schools is a total funding package for 1994-95 of some $10.5 billion, a 4 percent increase over 1993-94. The net result for Michigan education as a whole is a substantial shift in funding responsibility from the local level to the state level, as well as a shift away from the property tax as the major revenue source. The sizes of these shifts are depicted in Table 2.

TABLE 2
REVENUE SHIFTS

Total Revenues

Source	1993-94	1994-95	
Local	66%	21%	
State		33%	79%

Property Tax vs. Other Revenues

Source	1993-94	1994-95*
Property Tax	66%	32%
Other	33%	68%

*Includes Includes both state and local property tax revenues--state share of the total is 11%; the local share is 21%.

Property Taxes Under the New System

Despite considerable news reports to the contrary, there continue to be school property taxes in Michigan. In prior years, under a power equalizing program, local property taxes provided almost two-thirds of the revenue needed to fund the public schools. Furthermore, these taxes were levied only at the local level; the state did not levy property taxes for school purposes. Under the finance reform measures adopted by the legislature in December 1993, three important changes have come about.

First, while not eliminated, property taxes for school purposes have been lowered substantially. As shown in Table 2, beginning in 1994-95, property tax revenues will provide about one-third of K-12 operating funds as compared to almost two-thirds in 1993-94 and immediately prior years. As a consequence, taxpayers in most Michigan's school districts are witnessing considerable reductions in property tax millage rates for school operations.

Second, rather than millage rates being applied uniformly on all property, different rates are now applied to homestead and nonhomestead property.[10] Homestead property is taxed at 6 mills, nonhomestead property at 24 mills under the new foundation approach.[11]

Third, the revenue from the uniform state levy of 6 mills on all property--both homestead and nonhomestead--is deposited in the State School Aid Fund and used as a part of state aid under the new foundation approach. Local districts are expected to levy 18 mills, *with voter approval*, on all nonhomestead property.[12] These proceeds constitute the local district's contribution under the new foundation approach. For some districts there will be operational millage in excess of the state levy on all property and the local 18 mills on nonhomesteads. These levies include (a) mills levied as "hold harmless" mills, and (b) enhancement mills, both requiring voter approval.[13] The "hold harmless" mills apply to districts whose 1994-95 foundation allowance is greater than $6,500.[14] These mills are first assessed against homesteads up to the 18 mill level (or the 1993-94 level, if less than 18) and then, if necessary to meet the permissible revenue target, against all property. Voters also may approve a limited-term district levy of local "enhancement" mills, at a rate of up to three mills annually, until the 1997-98 school year.[15]

Revenue Limitations

There are several revenue limitations in the new school finance arrangements. First, the constitutional amendment approved by the voters contains a "super-majority" requirement (three-fourths vote by each house) to change any state law in effect on February 1, 1994, that sets a maximum amount of ad valorem property tax revenue for school operating purposes. Second, there is a statutory provision linked to the Ballot plan "freezing" intermediate school district millage rates for vocational and special education at current levels.[16] Another revenue limitation imbedded in the 1994-95 state aid appropriations law is the automatic reduction in state-aid payments to districts whose combined state-and-local revenue, beginning in a subsequent year, exceeds the ratio of the district's foundation allowance to the statewide basic allowance set in 1994-95. Fourth, the ballot plan has dollar-increase limitations on combined state-and-local revenue growth; the "hold harmless" millage rate would be reduced if local state equalized valuation growth resulted in excess per pupil revenue gain. Finally, the successful ballot issue places a cap on annual increases in the assessed value of real property. Beginning with the 1995 tax year, annual increases in the assessed values of individual parcels of property are limited to 5 percent or the rate of inflation, whichever is less. On resale, the property is reassessed at 50 percent of market value.

State Funds for the Schools

We have seen that the state, under the new school finance program, has increased substantially its contribution to the funding of the schools. In 1993-94 and

prior years, the state contributed about 30 percent of the needed revenue. In 1994-95 it is contributing about 80 percent--more than $8 billion of the $10.5 billion in total public school revenues. A portion of this $8 billion comes from the newly imposed 6 mill state tax on property. Let's turn next to the question of where the State is getting the additional dollars it uses--beyond the 6 mill property tax revenues--to fund its 80 percent share of the cost of public K-12 education.

The Michigan Constitution establishes a general fund plus several special funds as depositories for state revenues. One of the special funds is the School Aid Fund. It is this fund that the legislature draws on for the dollars it appropriates to support the annual operation of Michigan's public schools. The dollars in the School Aid Fund come from a number of sources but principally the state general sales tax. With the passage of Proposal A in March of 1994, the sales tax increased from 4 percent to 6 percent, with the increased revenue earmarked entirely for the School Aid Fund. By prior action, the State Constitution already required that 60 percent of the net revenue generated from the existing 4 percent sales tax rate be deposited in the School Aid Fund. Thus, 60 percent of the revenue generated from the first 4 percent tax on general sales, plus 100 percent of the revenue from the additional 2 percent tax on general sales, are constitutionally earmarked to the School Aid Fund.

Even though this is a sizable amount, it does not cover the entire sum needed by the legislature to fund the School Aid Act. Consequently, other state revenue sources--or portions of them--also are earmarked for the State School Aid Fund. These other sources include revenue from the newly imposed 6 mill state property tax, the personal income tax,[17] the tobacco tax, the liquor tax, the tax on commercial and industrial facilities, the lottery, and other miscellaneous taxes. A transfer from the general fund along with additional state revenues make up the remaining difference. In Table 3, you will find the estimated amounts and percentages of the different earmarked revenue sources for the School Aid Fund, plus other state funds, that go to make up the total state contribution to K-12 education for 1994-95.

We need to highlight two of the figures in Table 3. First, the earmarked revenues, i.e., those listed under "School Aid Fund" in Table 3, are not sufficient to completely cover the full $8.109 billion appropriated for K-12 education for Fiscal Year 1994-95. Consequently, the legislature makes a grant from the state's general fund, plus drawing on the health reserves in the Public School Employees Retirement System and other sources, to make up the difference. Second, for 1994-95 only, there is a sizable amount of dollars carried forward. This is a consequence of the new taxes taking effect but the full revenue yields not being needed in the 1993-94 school year. These dollars

are a one-time source of revenue, and are included in the entry "FY 93-94 SAF Carry Forward."

Improving the Balance in Major Tax Sources

The 1994 school finance reforms addressed another major fiscal problem that had long plagued Michigan. In 1993-94, and immediately prior years, there was a substantial imbalance among the three major sources of tax revenues. Property taxes in Michigan were 25 percent higher per capita in comparison to the 15 most populous states, and 33 percent higher per capita than the U.S. average. Sales taxes were 30 percent lower per capita than the 15 most populous states, as well as 30 percent lower per capita than the national average. Income taxes were 25 percent and 38 percent higher than the 15 most populous states and the U.S. average, respectively (Citizens Research Council 1990 and 1991). In short, the property tax was over utilized, the sales tax under utilized, and individual and corporate income taxes substantially higher on a per capita basis than the U.S. average.

TABLE 3
ESTIMATED STATE REVENUE SOURCES
FOR FY 94-95 FOR K-12
(millions of dollars)

	Amount	Percent
School Aid Fund:		
Sales and Use Tax	$3,886	47.9
6 Mill Property Tax	1,075	13.3
Income Tax Earmarking	864	10.7
Tobacco Tax	380	4.7
Real Estate Transfer Tax	109	1.3
Interstate Phone Use	18	0.2
Liquor Excise	23	0.3
Industrial & Commercial Facilities	125	1.5
Lottery	457	5.6
Adjustments (TIF Capture)	(84)	
Subtotal School Aid Fund	$6,855	84.5
Other State Funds:		
General Fund/General Purpose Grant	668	8.2
FY 93-94 SAF Carry forward	352	4.3
PSERS Health Reserve	140	1.7
Federal Aid	92	1.1
Other	2	<.1
Subtotal Other State Funds:	$1,254	15.5
Total State Revenues	**$8,109**	**100.0**

The 1994 school finance reforms were quite successful in addressing this imbalance. As we have seen, property taxes were substantially reduced, while the general sales tax was substantially increased. These changes brought about a much improved balance among the three major sources of tax revenues. Property taxes per capita are much more in line with the surrounding states and the nation. Michigan now falls very close to the averages for both groups. The same is true for the general sales tax And the general sales tax rate of 6 percent is more in line with the rates in surrounding states.

Increasing Concerns About the Stability of the Revenue Stream

For a school finance plan to be effective in the long term, it must have a stable source of revenues. How does Michigan's new plan rate on stability? The property tax, for all of its faults, does represent a stable and growing revenue source. The sales tax is less stable, being much more sensitive to changes in the business cycle. The cigarette and tobacco tax also is less stable, being sensitive in particular to the growing social unacceptability of smoking which has resulted in increasing downturns in revenue. Yet, as we noted earlier, the Michigan reforms call for a major shift away from the property tax and a significant increase in the sales tax plus, percentage-wise, a substantial increase in the cigarette and tobacco tax.

Thus, replacement revenues for the lost property tax dollars are coming in large part from these two sources, i.e., a two percentage point increase in the general sales tax, amounting to an increased yield of $1.930 billion, plus a substantial increase in the cigarette and tobacco tax, producing $0.349 billion in new revenues--for a total of $2.279 billion from taxes much less stable in their yields than the property tax. Coupled with existing earmarked revenues from the first four percentage points of the general sales tax--$1.974 billion--this amounts to a total of $4.253 billion generated from these two sources. Noting again that the state has increased substantially its share of K-12 revenue--moving from being a 30 percent contributor in 1993-94 to being responsible for providing 80 percent of the funding in 1994-95--translates into an increase, in round numbers, of better than 50 percent of the $8 billion state share coming from earmarked sales tax and cigarette and tobacco tax revenues.

Given these circumstances, a downturn in the business cycle likely would result in a corresponding downturn in state sales tax revenues and, in turn, raise serious questions about the state's ability to fund the schools at projected levels of revenue need. How likely is it that Michigan will experience a downturn in the business cycle, what with the country generally experiencing a healthy and growing economy? For Michigan, U.S. motor vehicle production is perhaps the best indicator of the relative state of the business cycle. For the 25-year period, 1961 to 1995, cycles of growth, generally not exceeding three years, have been followed by cycles of decline (see Table 4). For the last four years, automobile production has been in a growth cycle. If the pattern holds true, motor vehicle sales should turn down in 1996. Thus, Michigan appears due, if not overdue, for a decline in the business cycle and a consequent slowdown in economic and revenue growth.

Based on this premise, forecasters are predicting that the state will be facing substantial revenue shortfalls by 1996-97 (Kleine, 1994; Addonizio, Kearney & Prince, 1994). Kleine (1994), for example, projects a shortfall of $600 to $800 million dollars in 1996-97. If his projections are accurate, then the legislature soon will be faced with the question of whether to further cut state services, raise new revenue by adopting

additional tax measures (for example, extending the sales tax base to services), restore the ability of local school districts to raise additional property taxes, reduce aid to the schools, or some combination of these alternatives. A compounding factor, of course, is the likely decline in revenues from the cigarette and tobacco tax which, as part of the finance reform package, was increased substantially and, as we noted above, is projected to provide $349 million in new state aid revenues in 1994-95.

TABLE 4

U.S. MOTOR VEHICLE PRODUCTION

1961-95[18]

Year	Automobile Production (thousands)	Percentage Change*	Year	Automobile Production (thousands)	Percentage Change
1961	6,653		1979	11,479	
1962	8,197		1980	8,009	
1963	9,108		1981	7,942	
1964	9,308		1982	6,985	-15.9
1965	11,138	35.9	1983	9,513	
1966	10,396		1984	10,924	
1967	9,023	-19.0	1985	11,671	67.1
1968	10,820	19.9	1986	11,373	
1969	10,205		1987	10,795	-6.0
1970	8,282	-23.4	1988	11,262	2,6
1971	10,671		1989	11,125	
1972	11,310		1990	9,888	
1973	12,681	53,1	1991	8,884	-21.1
1974	10,072		1992	9,748	
1975	8,986	29,1	1993	10,856	
1976	11,497		1994	11,950	
1977	12,702		1995	12,200	37.3
1978	12,899	43.5			

* Percent change is from peak to trough or trough to peak.

Summary Comments

Based on this present review, what might be said in general about the tax limitation movement, and the press toward legislative and constitutional mandates to reduce if not eliminate local property taxation for school operating purposes? And what might be said in particular about Michigan's recent experiences?

The National Picture

It seems clear that the movement to reduce property taxes is still a very active one. While, to date, it has resulted in actual reductions in property taxes in only four states--California, Massachusetts, Oregon, and Michigan--there are a number of states in which limits on further growth and limits on expenditures have been adopted. Judging by the number of issues placed on the November 1994 general election ballots in several states, as well as the shift toward increased numbers of Republicans in the nation's governorships and legislatures, it seems that the push to limit if not reduce local property taxes will likely increase in the immediate years ahead.

Second, in the three states other than Michigan that have adopted mandated reductions in the local property tax, no corollary action was take by the legislature to replace lost revenues. Only in Michigan did the legislature and the voters take actions to replace virtually all of the lost revenue. In the other three states, no specific actions were taken by the legislatures either to enact new taxes, raise rates or extend bases on existing taxes, or further earmark existing taxes. Apparently existing revenue mechanisms were viewed as adequate to the task. Whether these have proved adequate to the task appears somewhat debatable.

Third, in all four states, there were substantial shifts in funding responsibility (and control?) away from the local level and to the state level, at least initially. In the case of Massachusetts, this shift did not hold--within 10 years the state's share had fallen to 25 percent. Still, in three of the four states--California, Oregon, and Michigan, local voter choice regarding school resource levels has been significantly constrained.

Fourth, it appears that earmarking state tax revenues for education and property tax relief is not a widespread practice. Forty states levy a general sales tax, but only 26 of these states earmark their sales tax, and only 10 of these earmark the tax for education and property tax relief. Thirty-nine states levy a personal income tax, with 14 of these states earmarking revenues from the tax, but only four of these states earmarking the revenues for education. The earmarks on other state taxes, perhaps with the exception of the four states in which revenues from state property taxes are earmarked for education, generally produce relatively small amounts. While not strictly a tax, 12 states do earmark lottery revenues for education.

The Michigan Picture

First, Michigan has been successful in substantially reducing the local property tax for school operations. In 1993-94, the average property tax rate for school operations was 34 mills statewide. In 1994-95, the tax rate on homestead property, in most instances, is 6 mills. The tax rate on nonhomestead property is 24 mills. These changes also brought about an improved balance among Michigan's three major sources of tax revenues, i.e., the property tax, the general sales tax, and the income tax.

Second, in its reform package Michigan adopted a set of tax and revenue limits that are somewhat permanent in character--i.e., several of the limits are now established in the constitution, thus making them quite inflexible and difficult to change. These limits also are cast in somewhat detailed language and take on the features of actual legislation. Some would argue that detailed language is best left to legislation rather than being embedded in state constitutions.

Third, the assessment cap which limits annual increases in the assessed values of individual parcels of property to 5 percent or the rate of inflation, with reassessment at 50 percent of market value on resale, is problematic. Some look upon this as putting a much needed constraint on rapid increases in assessed values. The taxpayer who holds on to his or her property for a number of years probably sees this as a plus, assuming that the cap will produce assessed values considerably below what 50 percent of market values would produce and thus hold in check rising tax bills. But the reassessment on sale of the property will lead over time to considerable disparities in assessed values among houses of comparable market value--resulting in significant differences in the property taxes paid by the owners of these houses. Yet both sets of owners will enjoy the same level of municipal and county services. One has to question how equitable an arrangement this is. This assessment-on-sale system, commonly referred to as "Welcome Stranger," also disrupts the property market (prospective buyers face a higher effective property tax than prospective sellers) and, some argue, creates the likelihood of a property record substructure of sales without recorded deeds as buyers seek to avoid assessment increases

Fourth, judging from the Michigan experience, the total elimination of the local property tax for school purposes may not be desirable or, for that matter, possible. In Michigan's case, a constitutional prohibition limiting state revenues to a certain percentage of state personal income necessitated a restoration of $2 billion in local property taxes for the schools. There is also the question of whether it is desirable public policy to totally exclude as a source of funds for K-12 education what has been a generally stable and growing revenue stream.

On this last point, the lesson, if there is a lesson, is that legislatively or voter adopted property tax reduction of any substantial consequence is a two-edged sword. At least it appears to be so in Michigan. One edge cuts the increasing burden, or at least what's perceived to be the increasing burden, of property taxation--to the delight of property owners and the exaltation of legislators (and governors) in the eyes of those property owners. The other edge cuts into what has been a generally stable and growing revenue stream and creates a set of difficult

revenue problems--and the possibility of again placing the public schools in a state of fiscal anxiety if not fiscal jeopardy. This gives rise, in turn, to anxieties among school supporters. First, there is the question of what the legislature will do--and the citizens will approve--to replace all or at least a substantial part of the revenues lost by mandated reductions in the local property tax for schools. Second, there is the question of the stability of the replacement revenue stream and the maintenance of school funding levels. Will a move away from the property tax and its generally more stable and growing revenue stream and to a revenue stream more sensitive to fluctuations in the economy create new fiscal problems for the state and its schools? There are, of course, no easy answers to these questions; and the answers undoubtedly will be different in different states.

Finally, I raise--but do not address--one of the more important questions, namely, what have been the consequences for pupil equity in those states, including Michigan, that have adopted constitutional or legislative mandates to reduce local property taxes for school operations? This brief focuses only on the revenue side of the coin. Equal attention should be addressed to the allocation side of the coin in any serious effort to modify a state's school finance arrangements. In Michigan, the allocation plan and its consequences for pupil equity are beginning to receive the attention of policy analysts and it may be instructive for New York State policymakers to familiarize themselves with this small body of work.[19]

Notes

[1.] I do not include in this review legislative actions to limit or reduce local property taxes taken as a result of court decisions, for example, *Seattle School District No. 1 v. Washington*.

[2.] Nationally, state per capita tax revenues in 1991 were $6.70 with $2.23, or 33.3%, coming from general sales taxes and $2.14, or 31.9%, coming from personal income taxes (Gold 1994).

[3.] The other states which earmark sales tax revenues for education are: Alabama (89%), Tennessee (65.1%), Michigan (60% of first 4 cents; 100% of remaining 2 cents), Indiana (40%), Virginia (33%), Illinois (25%), Missouri (22.4%), and North Carolina (2.5%).

[4.] This is a consequence of the legislature's response to the State Supreme Courts decision in *Seattle School District No. 1 v. Washington*, 90 Wash.2d 476, 585 P.2d 71 (1978).

[5.] In another sense, of course, the states do draw heavily on the general sales tax and the personal income tax to support education. That is, these two taxes generally provide the bulk of general fund/general purpose revenues for the states. And, in most states, general fund/general purpose dollars comprise a significant portion of the annual appropriations for school aid.

[6] Article IX, Section 26 reads, in part, as follows: "The revenue limit shall be equal to the product of the ratio of Total State Revenues in fiscal year 1978-79 divided by the Personal Income of Michigan in calendar year 1977 multiplied by the Personal Income of Michigan in either the prior calendar year or the average of Personal Income of Michigan in the previous three calendar years, whichever is greater." The applicable ratio is .0949 or 9.49 percent.

[7] Article IX, Section 30 reads as follows: "The proportion of total state spending paid to all units of Local Government, taken as a group, shall not be reduced below that proportion in effect in fiscal year 1978-79." With the increased percentage of state dollars going to support K-12 schools, this constraint which had been binding on the Michigan legislature during the 1980's would be eased considerably in 1994-95 and thereafter.

[8] Shortly after the passage of Senate Bill 1 in mid-July 1993, an in-house task force created by the Governor set to work to lay out a detailed plan of action. The point person on the task force was the State Treasurer, Douglas Roberts. Roberts had been appointed State Treasurer by Engler and had behind him a long record of state service, having filled several offices including Director of the Senate Fiscal Agency, Deputy Superintendent of Public Instruction, and Deputy State Budget Director. Three other key persons on the in-house task force were Nick Khouri, Deputy State Treasurer; Michael Addonizio, Assistant Superintendent for Research and Planning in the Department of Education; and Mark Hilpert, Michigan Tax Tribunal Member. Addonizio had served as Engler's Education Policy Adviser prior to his appointment as Assistant Superintendent.

[9] The allocation plan, which moved Michigan from a power equalizing program to a basic foundation allowance program, was adopted by the legislature earlier in December 1993. For a detailed description of the allocation plan, see Kearney (1994).

[10] For tax purposes, real property in Michigan is divided into six classes: agricultural, commercial, industrial, timber/cutover, residential, and developmental. Homestead property is a sub-class of residential and is limited to owner occupied primary residences. All else--second homes, rentals, and property in the other five classes--is non-homestead.

[11] The non-uniformity of millage rates, i.e., 18 mills locally only on non-homestead property and 6 mills by the State on all property, is made possible by passage of the March 15, 1994 statewide ballot issue which amends five provisions of the Michigan Constitution. One of those provisions permits school operating taxes to be levied on a non-uniform basis.

[12] If the district is unable to secure voter approval for the 18 mills on non-homestead property, or any part of the 18 mills, it loses only the local revenue that would have been generated from the 18 mills, but not the state contribution under the foundation allowance. For example, take the district in which the foundation allowance is $5,000 per pupil of which $1,000 is calculated as revenue from the local 18 mill tax on non-homestead property and $4,000 from

the state contribution. If that district fails to gain voter approval of the 18 mills, it will lose only the $1,000 per pupil calculated as local revenue and retain the $4,000 calculated as the state's contribution. In other words, there is no reduction in the state contribution.

[13]For those districts that already had voter authorization to levy 18 mills in 1994-95 (or 18 plus the needed additional mills if a "hold harmless" district), no millage election was necessary. For those districts whose authorizations ran out in whole or in part in 1994-95, it was necessary to go to the voters for approval of all or a part of the 18 mills on non-homestead property and, if a "hold harmless" district, the needed additional millage beyond 18. Two-hundred-seventy-two districts sought voter authorization in July 1994 to levy all or a part of the 18 mills in 1994-95; 258 were successful (the unsuccessful districts can seek voter approval in a later special election). Two districts sought approval in July 1994 for "hold harmless" millage; both were successful. Of the 68 districts which sought voter approval for "enhancement" millage, only 39 were successful in July 1994 special elections.

[14]The basic concept undergirding Michigan's new foundation program is that the state will guarantee each district a basic level of funding per pupil provided the district levies a local voter-approved property tax at a millage rate set by the legislature. In theory, for 1994-95 the basic level of funding per pupil, known as the *basic foundation allowance*, is set at $5,000. The millage rate required of the local district is 18 voter-approved mills on non-homestead property (as noted above, the state will levy an additional 6 mills on both non-homestead and homestead property). I say in theory, because all districts do not receive the *basic foundation allowance* of $5,000 per pupil in 1994-95 but rather an amount, called the *district's foundation allowance*, varying between $4,200 and $6,660. Furthermore, some district's receive more than $6,660 per pupil if their 1993-94 per pupil revenue was above $6,500 and their voters approve local millage in addition to the 18 required mills to provide this supplement. These variations in 1994-95 *district foundation allowances* are due to three decisions made by the legislature. First, rather than move all districts in which the 1993-94 per pupil revenues were under $5,000 up to $5,000 immediately, the legislature chose to move these districts up gradually. Districts below $4,200 per pupil in 1993-94 are raised to $4,200 per pupil in 1994-95, or by $250 per pupil, whichever is greater. Second, the Legislature chose not to bring all remaining districts up, or down, to a $5,000 per pupil starting point in 1994-95. Rather, it chose to use each individual district's 1993-94 revenue per pupil level as the starting point and increase that level on a sliding scale. The district in which the 1993-94 revenue per pupil level was closer to $4,200 receives a larger increase for 1994-95 than the district in which the 1993-94 per pupil level was closer to $6,500. Third, the Legislature chose not to Òlevel downÓ but rather to Òhold harmlessÓ those districts in which 1993-94 per pupil revenue levels exceeded $6,500, as long as voters in those districts are willing to tax themselves at a rate in addition to the required 18 mill rate. The $5,000 per pupil *basic foundation allowance* for 1994-95 is expected to increase annually as a consequence of growth in the earmarked revenues going into the School Aid Fund. Thus, in 1995-96 the *basic foundation allowance* should increase to a level somewhat above $5,000 per pupil, and further annual increases are to be expected in subsequent years. The actual dollar increase from year to year in the *basic foundation allowance* is determined by multiplying the prior yearÕs

basic foundation allowance by a factor called the *final index*. Put simply, the increases for 1995-96 and subsequent years are indexed to the annual percentage increases in the School Aid Fund, adjusted for changes in enrollment. For a detailed description of how the new foundation program works and its likely consequences, see Kearney (1994).

[15] At that time, voter approval within an intermediate school district (ISD) is required for an enhancement millage, and the revenue generated would be shared on a per-pupil basis among all districts within the ISD. The intent of this provision is to prevent the property-wealthiest districts from using that advantage to accelerate per pupil spending while neighboring districts are restrained.

[16] The House and Senate recently passed legislation to lift the freeze and create a ceiling for voter-approved millage above FY93-94 levels.

[17] The personal income tax earmark is 14 percent of net revenue and is an earmark adopted for the first time as a part of the 1994 finance reforms.

[18] Source: Kleine (1994).

[19] See, for example, Kearney (1994); Addonizio, Kearney and Prince (1994); and Senate Fiscal Agency (1994).

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Finding Resources by Changing Management and Organization

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Finding Resources by Changing Management and Organization[1]

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[1]Portions of this article are taken from Odden (1994).

In New York and most other states, the education system is governed through local school districts and their lay elected school boards. There is a vertical system of management and organization; boards ostensibly make policy, which then is implemented through the central office and a hierarchical system of control down from superintendents, to assistant superintendents, central office coordinators, principals, assistant principals, department heads, and teachers. Those at the top of the system make decisions and allocate resources and money; those at the bottom implement decisions. This system worked well in the past, but over the last 20-30 years, as achievement has remained flat, several have wondered whether the management and organization system needs to be changed in order in part to free up resources for more productive use. This policy brief argues that the needs of current education reforms in New York require a different education management and organization structure; the recommended management changes also imply changes in the school finance structure.

The Need for Decentralized, Site-Based Management

Current education reform hopes to have New York's education system produce much higher levels of student achievement. The goal literally is to have all students achieve at a level that only about 10 percent of students attain today -- to have all children achieve mastery over the complex subject matter of mathematics, science, writing, history, geography, and physics. Ten or 20 years ago this lofty goal might have been viewed as futile. But despite the belief by some that advanced cognitive expertise can only be attained by a small percentage of students, current knowledge implies that nearly all students can achieve at more advanced levels. A wide range of research, primarily but not completely drawing from advances in cognitive psychology, has shown that all students can learn advanced mathematics, science, writing, history, and reading comprehension, and demonstrations of successful efforts have been produced in dozens and dozens of classrooms across the country (Bruer, 1993). While low income or lower ability students might take somewhat longer to learn such sophisticated cognitive skills, and bring a different type of background knowledge to such tasks, such students nevertheless can perform as budding cognitive experts given curriculum exposure and appropriate instruction (Kennedy, 1991).

A systemic education reform strategy, largely embodied in the *A Compact for Learning*, has been developing over the last five years as a policy approach to support attainment of these ambitious goals. The key features of systemic reform include having the top of the education system create goals, set curriculum standards, and develop tough tests that indicate what students know as well as what they can do in core academic subjects, and then decentralize accomplishment of these objectives largely to school sites. The latter requires major changes in governance, management, and finance of the New York education system; such changes also could also require expansion of school choice as well as major deregulation of the education system (Odden, 1994). Restructuring the education system towards this strategy of direction -- setting at the top and implementation at the bottom -- entails rethinking the roles, functions, and structures at all levels of the current education

system (Odden & Odden, 1995).

With this policy strategy, the expectation is that schools will implement a curriculum designed to educate all students to high levels of thinking, problem solving, and communication. If experiences in other public and private sector organizations needing to provide similarly new high levels of performance can serve as a guide, decentralized, high involvement management -- in which teams of individuals actually providing services or making products are given decisionmaking authorities and held accountable for results -- appears to be the most high performance management and organization model in both public and private sectors of the economy (Barzelay, 1992; Katzenbach & Smith, 1993; Lawler, 1986, 1992; Wohlstetter, Smyer & Mohrman, 1994). Thus, school-based management has been proposed as a way to make schools more effective in producing high levels of student achievement. It is a way to restructure site-district relationships in a manner that provides much more power, authority, and accountability to the school-site level. It provides the conditions to restructure school and classroom organization. And as importantly, it allows school faculties to reallocate the money currently in the system, as well as target any new sources of funds into productive uses. Indeed, in the private sector this strategy usually is used to boost performance while cutting costs; the general objective is to allow those in the local team -- faculties in schools in the case of education -- to determine the best use of funds. Such a process usually entails changes in the staffing of the organization (the largest cost component), greater uses of computer technologies, and changes in how the service -- teaching -- is provided.

Substantively, an organization's management and organization strategy should be selected on the basis of the nature of the work conducted. The nature of work can be characterized along three key dimensions: its complexity, whether it is best done individually or in groups or teams, and the degree of uncertainty that is faced in doing the work. Simple, individual, and highly certain work lends itself to hierarchical organizations; the old AT & T and Ford Motor Companies, and even government bureaucracies and schools of the 1950s are good examples.

Complex, collegial, and uncertain work, however, lends itself more to decentralized, employee involvement strategies, most visibly reflected in many new high technology organizations, such as Apple Computer. In both public and private sectors, moreover, an increasing amount of work is complex, is best done in teams and exists in a rapidly changing environment (technically and otherwise) and, thus, is best organized through a high involvement management approach. Mohrman, Lawler and Mohrman (1992) argue that teaching is an intellectually complex task, is best done collegially and faces uncertainty in its day-to-day tasks and thus conclude that high involvement or decentralized management strategy is appropriate for schools. Thus, reorganizing for greater levels of school performance by implementing a high involvement, school-based management (SBM) structure has a strong substantive rationale.

Not everyone agrees that school-based management will work to improve school

performance. Malen, Ogawa, and Kranz (1990) and Wohlstetter and Odden (1992) showed that most school-based management programs prior to 1990 rarely decentralized significant portions of the budget, rarely provided substantive personnel authority, and as importantly, rarely improved student achievement. They also noted that few school-based management programs had been conceived in a comprehensive manner, and thus would have had great difficulty in making a major difference. Smylie (1994) showed that few SBM programs had engaged teachers in curriculum and instruction changes, thus further blunting their potential for improving performance. Summers and Johnson (1994) showed that too few of the post-1990 SBM programs even used student achievement to assess their effectiveness; further analysis of such programs would show that their designs reflected neither the key components from the economics of effective organizations literature nor the key components of the high involvement literature, discussed below.

But effective SBM entails more than creating school site councils and giving them power to make some decisions. Further, SBM as a governance and management change will only lead to curriculum and instructional change and improved student performance if it is used effectively to implement such changes. Thus, a school-based management structure must be designed comprehensively and then used to implement high quality curriculum standards designed to educate all students to high standards of thinking and problem solving, in order to boost school results. As is argued below, this restructuring also allows schools to reallocate current and new resources to many new purposes, including professional development and technology.

At its heart, decentralized, high involvement management has two major objectives: to improve both the productivity and efficiency of the organization, schools in the case of education. In the private sector, this usually means improving organizational performance while cutting costs. In education, it means at least dramatically improving results -- student achievement; the assumption is that this will require a different use of resources than is the case today.

Designing effective SBM: A high involvement, school-based management strategy decentralizes four key resources: power, knowledge, information, and rewards. *Power* is required in order for a well-informed, competent faculty to have the authority to make decisions about the optimal application of resources and optimal educational processes to use. Power includes decision-making authority over the budget and personnel. It means the school team is given a lump sum budget to spend any way it decides, subject only to a constraint on the total amount. Further, the school team also is given authority to recruit, select, develop, and evaluate personnel. The most effective school sites also create a variety of vertical (math, science, language arts, student discipline) and horizontal (subschool, grade level) teacher decision-making teams in order to involve all teachers in decision-making roles.

Knowledge and skills are required for employees to optimally enact their new roles in such a way as to achieve high performance and continually improve outcomes.

Knowledge and skills are needed in at least four areas: a) interpersonal or team skills for working together effectively in a group setting; b) technical knowledge and skills for providing the service, i.e., new curriculum and instruction expertise; c) breadth skills for engaging in multiple tasks especially tasks decentralized to the work team as a result of the flattened organizational structure, such as curriculum and staff development; and finally, d) business knowledge and skills for managing the fiscal aspects of the school. Developing these skills and competencies implies a large, ongoing investment in human resources development that could approach 2-4 percent of revenues. The literature is strident in underscoring the need to invest in ongoing training; without developing new skills and competencies, decentralized man agement is unlikely to improve organizational performance. Schools taking this aspect seriously seek to create school-wide capacity for change that promotes a sense of professional community, and a shared curriculum and instructional knowledge base among all the faculty.

Informati about organizational goals, objectives and levels of performance and about the key parameters of the work processes are required in order for the workforce to make good decisions that foster organizational goals and high performance. This would include information on district and site revenues, costs, cost structures, customer satisfaction, benchmarks with other schools, and data on the environment. The most effective schools create many vertical and horizontal communication channels, and actively seek to share information with everyone in the school community.

Rewards is the final resource that is decentralized. Rewards mean the employee compensation structure which must be redesigned to align the self-interest of the faculty with organizational objectives. High performance organizations shift from a seniority based-pay system to pay based on direct assessments of knowledge and skills. This way of compensating individuals does not necessarily require more money; it involves a shift in how the salary dollars are provided. A second new component of pay includes performance based pay allocated on a group or team but not an individual basis such as cost reduction gain sharing (which is self-funding from cost savings) and group based salary bonuses (Lawler, 1990). Mohrman, Mohrman and Odden (1994) developed a model of such a structure for education, although education has been slow to implement changes in teacher compensation as part of school-based management efforts.

These four factors help create effective decision-making processes at the school site level. The first three of these factors were found to be strongly associated with smoothly operating school-based management programs in a recent international study of a wide variety of school decentralization efforts (Mohrman & Wohlstetter, 1994; Odden & Odden, 1994; Odden & Wohlstetter, forthcoming; Wohlstetter, Smyer and Mohrman, 1994). In a second phase of this study, these factors also were found to be strongly related to changes in curriculum and instruction that included teaching for understanding, teaching problem solving to diverse students, and teaching an integrated and cross-disciplinary curriculum (Robertson, Wohlstetter & Mohrman, 1995, forthcoming). That is, the comprehensive decision-making processes were used to design and implement ambitious school

improvement initiatives.

In addition to these four factors of the high involvement model, two other factors have been found to be positively associated with effective school-based management programs (Odden & Wohlstetter, forthcoming; Robertson, Wohlstetter & Mohrman, 1995 forthcoming). One is the presence of an "instructional guidance" system, i.e., a statement about the school's teaching and learning goals and the means by which to achieve them. This includes both school vision statements as well as district or state student achievement goals and curriculum standards, such as those produced by the National Council of Teachers of Mathematics. The second is principal leadership; principals in actively restructuring schools were strong leaders, providing opportunities for teachers to engage in curriculum and instructional leadership, helping to create a culture of shared decision-making, and serving as a broker of information, knowledge, and resources, between the faculty and the broader community.

In sum, effective SBM strategies decentralize power, knowledge, information, and rewards, create an instructional guidance focus for change, and provide facilitative principal leadership. This creates the conditions for professionals in schools to reorganize the curriculum and instruction program, to redesign school and classroom organization, to restructure how resources are used, and hopefully to dramatically increase student achievement.

Implementation pitfalls: Designing and implementing effective SBM programs faces many challenges, that include at least the following:

- focusing only on decentralizing power to a school site council. Power, knowledge, information and rewards all need to be decentralized and many vertical and horizontal decision-making teams must be created in addition to a school site council.

- directing the efforts of an effective shared decision-making process to issues of curriculum, instruction, and student achievement. Too often SBM efforts create "Christmas Tree" programs with no coherent focus or direction.

- getting teachers out of just their classrooms and into a variety of schoolwide efforts that over time makes the school a high performance educational organization.

- finding time for teachers to engage in the added responsibilities and functions of effective school-based decision-making. This usually entails restructuring both the school organization and the job of a teacher, including how teacher time is spent.

- having a real accountability system, with real consequences -- sanctions and

rewards. This includes good measures of system performance, the major component being student achievement.

- staying with a decentralized decision-making plan, and neither just adding a new layer of regulations about how decisions should be made, nor overruling decisions that are made at the site, nor quickly moving back to a centralized decision-making system.

New Roles for Teachers, Principals and Community Members

An SBM management system that is characterized by shared decision-making at the site for the purpose of upgrading the curriculum program to education all students to high standards implies several new roles for teachers, principals, superintendents and central office staff, school boards, and community members.

Teachers need to become involved in schoolwide issues rather than just the specifics of their classrooms. This would mean participating as active members on one or more teacher decision-making teams, engaging in many professional development activities, working to change their curriculum and pedagogical repertoire, joining professional networks to talk about and work on new aspects of professional practice, working with their colleagues to develop a sense of professional community and a schoolwide set of effective teaching strategies, and taking responsibility for the student achievement results of their collective efforts.

Principals need to move out of a direct leadership role in many activities and develop a variety of mechanisms and strategies for others -- teachers -- to make decisions. As part of this process, principals need to: 1) become expert in budgeting as the site develops its own budget from a base zero; 2) involve teachers in the recruitment, selection, development, and evaluation of all school staff; 3) become brokers of information, professional knowledge, and programs that could help teachers accomplish school goals; 4) help find professional development and training opportunities; 5) become entrepreneurs for additional resources; 6) buffer teachers from distracting forces either at the site or from the central office or community; 7) help create school visions; 8) foster a culture that supports shared decision-making and collegial approaches to school actions; 9) develop an awards structure that provides meaningful intrinsic and extrinsic rewards for the new hard efforts of teachers; 10) become an effective manager of a complex change process as the school restructures its organization, curriculum, and instruction program, and teacher jobs; and 11) be a liaison between the school and the school's "customers" including parents, community members, the central office, and the school board.

Superintendents and central office roles will need change as districts move from centralized to decentralized management. Generally, central offices can be reduced substantially since many of their current functions will be performed by staff in schools. Further, in the private sector, savings from central staff reductions often become the funding

pool for the expansion of ongoing training. Central offices must switch from a decision-making role to a facilitating role, as key decisions become made at the school level. Following the high involvement model, central office staff and superintendents need to develop procedures to devolve budget and personnel decisions to the site, insure perhaps through a formal budget set aside (2-4 percent of a site's budget) that schools invest in ongoing professional development and training for faculty and staff, create a fiscal accounting system that provides revenue and expenditure information to sites through an interactive computer system as well as provide other data on student demographics and achievement, and begin developing an awards and compensation structure that rewards teachers individually for expanding their professional expertise and collectively for producing significant improvements in student performance particularly achievement.

School boards will need to be involved in setting goals and directions; engaging in strategic planning to implement them; stimulating curriculum development aligned with national, state, and professional curriculum standards and creating staff development structures to enable teachers to teach them; and designing mechanisms for restructuring education systems and changing school management. Boards will need to develop specific local education goals, consistent with state and Federal education goals; create policy coherence around local curriculum, categorical program requirements, student testing, and teacher professional development that are linked to the goals; design school-based management and organization structures consistent with the need to create high performance schools across the entire district; implement an assessment and indicator system to track school and district progress towards accomplishing the goals; develop a process for periodically reviewing each school's performance; and design a phased-in assistance/intervention program for schools where performance lags. Boards also need to mount strategies to keep abreast of the evolving education reform agenda. Indeed, even the National School Boards Association has urged school boards to consider the above issues for school boards that view themselves as making policy for a "local school system." Alternatively, NSBA has suggested that school boards could view themselves as responsible for a "system of high performance schools" and have their goals accomplished through an aggressive "contracting out" or Charter Schools strategy.

Community members would become involved in setting school policy by being members of a school site's council, would communicate community needs and expectations for student performance through the council membership, and could provide specific resources and help to schools that relate to the school's strategic directions and the ongoing needs for implementation.

New forms of collective bargaining. As part of implementing a decentralized, high involvement management system, boards together with central office administrators will need to negotiate different types of collective bargaining agreements with teacher unions. Both the scope of collective bargaining and the focus of the contract will need to change.

Agreements would specify that teachers should be centrally involved in all substantive

decision-making and identify the span of decisions that would be made at the school. These would include decisions on how to allocate and use money, staff the school, structure both student and teacher time, group students and set class size, organize the curriculum and instruction program, and structure the student assessment and reporting system.

The agreement would also need to specify district policies on professional development, including the fixed percentage of each site's budget that would be set aside for ongoing professional development and training.

The collective bargaining contract would need to identify both vertical and horizontal information sharing and communication channels, and specify the span of information that would be shared across all individuals in the school community.

Finally, the agreement would need to outline the nature of a knowledge and skill-based compensation structure, together with the generic types of group based performance awards that could be provided. A core set of knowledge and skills, related to the instructional guidance system, could be stipulated and sites could also add additional areas of professional expertise on which pay could be based, depending on the specific curriculum and instructional strategies decided upon at each school. The contract could also state that no *individual* merit and incentive awards would be allowed, but could outline the types of *group-* or *school-based* performance awards that could be included, including the percentage of the budget, if any, that would be devoted to such awards.

Accountability: A very clear and focused accountability system also would need to be created in order for decentralized, high involvement management to work -- to educate all students to new, high educational standards. Four elements are critical for such an accountability system.

The first is a clear and measurable set of educational goals for all schools in the system. The goals should center on student achievement in core curriculum content areas: language arts, mathematics, science, history, and social studies, and could also include foreign language, and the visual and performing arts. The goals should specify that the system expects *all* students to perform at high proficient levels in these content areas.

The second critical ingredient of an effective accountability system is a set of measures that indicate the current status of student performance with respect to the goals and changes over time. Without clear and specific measures, goals are relatively useless for an accountability system. The types of new student assessment in California, Kentucky, and Connecticut, and those being developed by the New Standards Project, represent the kinds of student achievement measures that are needed. They indicate both what a student knows and what a student can do with that knowledge, in terms of solving problems, analyzing issues or communicating effectively.

The third ingredient is a reporting system that periodically informs the public, the

school system, parents and students of school performance in accomplishing results. Although levels of and changes in student academic achievement, disaggregated by income, gender and student ability, should be the cornerstone of such a reporting system, other information should also be reported, including results of periodic surveys of parent and community satisfaction with the local school.

The fourth ingredient of an effective accountability system is a set of both rewards and sanctions, i.e., consequences tied to results. Indeed, a results driven system can only succeed if consequences are tied to changes in system performance over time. Awards and sanctions should be based on changes in schoolwide performance over time; the goal is to improve the system, not to reward or sanction it for either high or low starting conditions. As suggested above, group based performance awards could be part of teacher compensation; they also could be outside of compensation per se, and provide additional opportunities for teachers to engage in professional development activities (including travel and expenses to professional conferences) as well as grants to school improvement activities. Sanctions could include phase-in technical assistance and take over as a last resort.

School-Based Financing

This new approach to management and organization would require a new school finance system. As most states, New York has a district-driven finance system. Money is raised by districts and distributed by the state and the federal government to local districts. Schools receive resources -- teachers, books, transportation, etc. -- but they rarely receive money. This district emphasis needs to change to a school orientation if effective decentralized management is to be implemented. A shift to school-based financing also fits with charter school and public school choice programs, directions in which New York also might want to proceed. Further, the school effectiveness research, which is broader than just the effective schools research and evolved during the 1970s and 1980s, clearly identified the school as the key organizational unit, the unit where educational services are provided and student learning occurs (see for example, Wohlstetter & Smyer, 1994).

Decentralizing budget power to the school is the first substantive fiscal route for tying school and district finance to restructuring and high performance management; decision-making authority over how money is used is a key condition for effective restructuring. This shift would entail having New York budget most dollars in a lump sum directly to schools. This more radical approach already is happening in states with charter school and public school choice programs.

The less dramatic and more practical approach would be for New York to require that districts allocate 85-90 percent of all dollars -- both general and categorical -- to schools in a lump sum. This policy would insure that the bulk of dollars would be available for use at the school, and it would not disrupt the overall district or school finance structure within any state. Districts as well as countries (Victoria, Australia, and England) taking this

approach often continue to pay teachers at the district level, and "charge" each school only the average salary for each teacher. The most advanced approaches also allow sites to "trade in" teachers or other staff either for other types of staff or for funds to be used for other purposes, such as professional development, training, or microchip technologies.

The formula: If New York moved to a school-based funding system, as Hawaii could do, each school would receive an equal base level of dollars per pupil. Different per pupil amounts could be provided for elementary, middle and high school students, although an argument could be made to provide all with the same per pupil amount.

But New York has a district structure which is unlikely to change in the near future. Thus, there would be three components to a new school finance formula. First, the base spending amount should be set at a level that would allow nonmetropolitan districts (essentially upstate New York) to provide a high quality education program; following Clune (1994) that would be the expenditure of the district at the 90th percentile of spending for nonmetropolitan districts.

Second, for districts needing or wanting to spend above that level, which is the case for New York's down state districts, a Guaranteed Tax Base should be provided, set at the property wealth per pupil of the district at least at the 90th percentile. GTB aid should be available for total expenditures up to the district expenditure at the 90th percentile.

Although the above results could be approximated by a foundation level that was adjusted by regional or district price of education indices that reflected the varying the purchasing power of the educational dollar, New York as other states have been reluctant for several reasons to enact price adjustments. The above two-tiered finance structure essentially imbeds both a price adjustment and the desire to spend more in the second tier GTB.

The third component of the formula should be an adjustment for special needs pupils, since some schools have poor children who need additional services in order to learn the core curriculum. Thus the base allotment should be augmented by a substantial amount for every poor child. The dollar amount for this add-on should be sufficient for the school to raise the achievement of low income children to acceptable levels of proficiency on thinking and problem solving tasks. The amount should be at least $2000 for each poor student, the cost of implementing the Success for All program, which has been quite successful in producing substantial achievement gains (Madden, Slavin, Karweit, Dolan & Wasik, 1992).

Professional development: As stated above, effective decentralized management requires substantial ongoing training and professional development. A wide variety of new professional development activities, focusing on a wide range of skills and competencies, would need to be initiated, with the goal of providing the training to everyone in the school (Little, 1993). Further, training would need to be considered an ongoing, important activity (Odden & Wohlstetter, forthcoming). A straightforward way to finance such continuous,

ngoing training would be to require school sites to set aside 2-4 percent of their entire budget for training purposes. At a site expenditure per pupil of $6000, this would mean that $120 to $240 per pupil would be devoted to ambitious professional development, without which teachers will unlikely have either the skills to teach a thinking oriented curriculum successfully to all students or to engage effectively in the teacher decision-making processes that are a part of site-based management.

Teacher salary and reward strategies. Following the high involvement framework, the major implication here would be to shift from a salary structure based on years of experience and education units to one based on direct measures of what teachers know and can do, as well as group -- school -- based performance awards. Such a structure also could include a salary increase for Certification from the National Board for Professional Teaching Standards. New approaches to teacher compensation are of strong interest to the American Federation of Teachers and National Education Association, and to the National Board for Professional Teaching Standards (NBPTS), which are joining with the Finance Center of the Consortium for Policy Research in Education over the next two years to study alternative teacher compensation structures.

A skill-based pay system or pay-for-knowledge pay structure would need to specify the knowledge areas that would qualify for pay increments, and have a way for assessing whether teachers had the knowledge and skills for each skill block so identified. Skill blocks could be related to increasing depth of knowledge in a content area (or two especially for schools having a multi-disciplinary based curriculum program); "breadth" skills such as curriculum development, staff development and counseling students; and "management" skills for developing and monitoring school budgets, running decision-making teams, and monitoring a school's strategic plan with respect to an indicator system providing data on various measures of the school's performance. Odden and Conley (1992), Mohrman, Mohrman and Odden (1994, forthcoming) and Conley and Odden (1994) outline in considerable detail how such new compensation structures could be designed.

In addition, performance awards based on school wide *improvements* in student performance could be provided on top of a skill-based pay system. Performance awards could include bonuses for meeting or exceeding improvement targets; the awards could be fixed dollar amounts or percentage salary bonuses for all staff in a school. Alternatively, bonus funds could be restricted to just school improvement or professional development activities. Gainsharing programs also could be implemented, allowing the faculty or the school to keep as a bonus any dollars saved by restructuring the school, as long as student performance improvement targets were maintained.

Discretionary dollars and other school-controlled dollars. If a full-fledged school-based budgeting system were put into place, nearly all dollars would be discretionary dollars controlled at the school site level. This power at the site level would allow school staff to determine how money were spent. More importantly, as part of redesigning school services that would be part of site-based management, school staff would be able to redeploy

resources across a range of new issues -- e.g., added professional development, more instructional materials, differentiated staffing arrangements, different uses of time both during the day and over the course of the school year, and greater uses of computer technologies.

If only partial budget devolution occurred, then several issues related to school discretion over site budgeted dollars emerge. The first would be related to staff. Most school districts have formulas for allocating teaching, administrative, and support staff to schools. If such a system were retained, the spirit of school-based management would allow the school to "trade" staff either for other types of staff -- two administrators for three teachers, for example -- or for instructional technology or for any other preferred resource.

A second pertains to centrally budgeted items such as supplies, utilities, and substitute teachers. More effective strategies would create a base of funds -- probably on a per pupil basis -- for these functions for each school, and then allow the school to use the funds for other purposes if they reduced expenditures in any area. Such a strategy would both create incentives for schools to create new discretionary dollars from currently existing and budgeted dollars, as well as make some of school operations more efficiently run.

A third requirement would be for districts to allow schools to "carry over" any unspent funds from one year to the next. Again, this policy would both incent schools to make all operations more efficient and then reward them with additional discretionary dollars but at no cost to the overall district or school budget. General restrictions could be placed on carry over funds, such as not allowing them to be used to provide large "retirement" packages.

Accessing state and federal resources. There are two ways to approach the issue of accessing state and Federal resources. The first is from the perspective of the school or district given current fiscal arrangements. From this viewpoint, the proposal for budgeting all or most of current dollars to the school site in a lump sum puts the district in the role of a fiscal pass-through agent for state funds; whatever state and local funds are provided to the district, a fixed and high percentage would be passed through directly to the school site. Categorical dollars also would be passed through, based on student eligibility. Thus, a state mandate for districts to allocate a fixed percentage of dollars directly to the site would provide for school access to state as well as local dollars.

From the perspective of the state, two additional strategies are potentially available. The first is enactment of or expansion of Charter School programs. Under this type of program, New York would essentially fund the school directly, or indirectly through the agency that provides the school with a charter. The fundamental fiscal result of a charter school program is that all dollars flow directly to the school in a lump sum. The second, and much more controversial approach, would be a voucher program, but current Charter Programs, which are less controversial, accomplish the same fiscal goal and do not have the thorny problems that come with inclusion of private and sectarian schools. Other state experiences in designing charter school programs would need to be considered to avoid

litigation that could emerge, such as the Noah Webster Charter program that was a "holding" mechanism for over 100 students schooled at home.

In terms of Federal funds, the bulk of which are categorical in nature, the implication would be to allocate those funds in a lump sum to the school site, which to a substantial degree reflects current practice. A more direct procedure for accomplishing this objective, which would provide more federal funds to some schools, would be for New York to consider the school site as a "district" in determining the allocation of federal dollars. Depending on current practice at the state and local level, this could result in sites becoming eligible for larger amounts of federal dollars.

Accessing foundations and philanthropies. During the past decade and a half, there has been a substantial increase in the creation of foundations or other nonprofit entities that function as a conduit for raising funds for districts and school sites. Although the dollar amounts for a tiny few of these foundations are large, in the large majority of cases they represent small amounts of discretionary dollars on a per pupil basis, usually less than one percent of a school's budget. Rather than representing an antiequity element in the system, they usually represent the "last gasp" for parents sending their children to fiscally pressed, usually urban school systems. Further, the fund-raising events they sponsor often function as a commitment and culture building component necessary for creating a strong school community. Given this latter role, New York and districts could facilitate each site's creation of such entities; New York and districts could also limit the level of fundraising to a fixed percentage of the site budget, for example, not to exceed five percent.

Conclusion

It will not be easy for New York to make large increases in the performance of its education system unless many aspects of the current education structure are altered. *A Compact for Learning* already has focused on curriculum and instruction changes. Changes in management and organization also are needed. A more decentralized system, in which sites have much more power, authority, responsibility, and accountability, is the way most other public and private sector organizations have reorganized to produce new levels of high performance, often at reduced costs. New York would be wise to take directions from these successful attempts and implement a decentralized management system for its thousands of schools. As part of this strategy, school financing also needs to be decentralized more to school sites; sites need power over the bulk of the budget, sites need to decide how to reallocate current and new resources to more productive strategies, sites need to set aside 2-4 percent of their budget for ongoing professional development, and New York should consider new forms of skill-based pay as well as school-based performance awards. As part of its school-based focus, New York also could consider enacting a Charter School program, which also provides fiscal autonomy and accountability at the site level. These strategies generally work to dramatically improve results -- student achievement, the goal of education reform. Moreover, these strategies can work whether resources are rising, stable or

declining, which makes them potentially powerful strategies given the uncertainties for education finance in the future.

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