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TO: District Superintendents
Superintendents of Schools
New York City Department of Education
School Board Members
New York State Educational Associations
Nonpublic School Administrators
Administrators of Charter Schools
Other Interested Persons

FROM: James A. Kadamus

SUBJECT: Regents Proposal on State Aid to School Districts for 2004-05

SUMMARY: The Regents State Aid proposal for 2004-05 implements a new, multi-year approach to State and local funding of public schools designed to close the student achievement gap. It proposes a Foundation Formula for the distribution of State Aid that assists school districts with the costs of general education instruction, to be phased in over a seven-year period.

This new approach to State Aid has four basic components:

District's State Aid = [Foundation Cost X Pupil Need Index X Regional Cost Index] - Expected Local Contribution

- **The Foundation Cost** is the cost of providing general education services in New York schools, measured by determining the instructional costs of districts that are performing well.
- **The Pupil Needs Index** recognizes the added costs of providing extra time and extra help for students to succeed in school. It is measured by the number of students eligible for free and reduced price lunch and students living in geographically sparse areas of the State.
- **The Regional Cost Index** is an adjustment that recognizes regional variations in purchasing power around the State. It is measured based on wages of non-school professionals in each region of the State.
- **The Expected Local Contribution** is an amount school districts are expected to spend as their fair share of the total cost of general education. It is measured by multiplying the district tax base by an expected tax rate adjusted by district income per child. The Expected Local Contribution is not a mandated tax rate, but a way of determining a local share in order to calculate State Aid.

Each of these components of the formula is described in more detail in Attachment A. That attachment also provides information on other components of the proposal including: expense-based aids (Building and Transportation), aid for pupils with disabilities, regional services aid for the Big 5 districts, aid for career and technical education and categorical aids are not included in the Foundation Formula approach (e.g., Universal Pre-K, BOCES Aid, Bilingual Grants/Limited English Proficient Student Aid, Textbook Aid, Library Materials Aid, and other programs).

In the first year of the seven-year period, Exhibit A shows that an \$880 million increase is proposed, with \$508 million of this increase for Foundation Aid. Exhibit B shows that when the proposal is fully implemented, it will provide \$14.35 billion in Foundation Aid, a \$5.98 billion increase over comparable funding in 2003-04. Over time, this flow of aid to high need districts will have a significant impact in closing the student achievement gap.

Exhibit C shows that in 2004-05, the first year of the Regents proposal, that 84 percent of the increase in school aid would go to high need school districts to close the achievement gap.

Exhibits D and E show the share of the overall increase in computerized aids for school districts grouped by Need-Resource Capacity category in the first year of the proposal and with full implementation.

Attachment B is a technical supplement in support of the Regents proposal (see page 15). This includes an analysis of the resource and achievement gap, a selected bibliography, definitions of school district need/resource capacity categories used to describe the need status of districts, a list of high need school districts, a list of aids and grants to be consolidated under the Regents proposal, formula components recommended in the Regents proposal, a description of the regional cost adjustment based on professional salaries, a description of the Regents cost study, a summary of aids and grants proposed, and an analysis of proposed aid changes.

Attachments

Exhibit A
2004-05 State Aid Proposal
New York State
(all figures in millions)

Program	2003-04 School Year	2004-05 Regents Proposal	Change from Base
Foundation Aid	<u>\$8,370</u>	<u>\$8,878</u>	<u>\$508</u>
Comprehensive Operating Aid	\$6,841	\$0	
Extraordinary Needs Aid	\$703	\$0	
All Other Programs	\$827	\$0	
Support for Pupils with Disabilities	<u>\$2,386</u>	<u>\$2,366</u>	<u>(\$20)</u>
Public Excess Cost Aid	\$2,199	\$2,162	(\$37)
Private Excess Cost Aid	\$187	\$204	\$17
BOCES\Career and Technical Education	<u>\$637</u>	<u>\$681</u>	<u>\$44</u>
BOCES Aid	\$505	\$520	\$15
Special Services - Career Education Aid	\$94	\$120	\$26
Special Services - Computer Admin. Aid	\$38	\$41	\$3
Instructional Materials Aids	<u>\$254</u>	<u>\$255</u>	<u>\$1</u>
Textbook Aid	\$189	\$189	\$0
Computer Software Aid	\$46	\$46	\$0
Library Materials Aid	\$19	\$20	\$1
Expense-Based Aids	<u>\$2,296</u>	<u>\$2,587</u>	<u>\$291</u>
Building Aid	\$1,206	\$1,348	\$142
Building Reorganization Incentive Aid	\$13	\$1	(\$12)
Transportation Aid	\$1,072	\$1,227	\$155
Summer Transportation Aid	\$5	\$11	\$6
Other Computerized Aids	<u>\$279</u>	<u>\$366</u>	<u>\$87</u>
Grants for Overcrowded Schools	\$0	\$31	\$31
All Other Aids	\$279	\$335	\$56
Computerized Aids Subtotal	<u>\$14,223</u>	<u>\$15,133</u>	<u>\$910</u>
All Other Aids	\$284	\$254	(\$30)
Total General Support for Public Schools	<u>\$14,507</u>	<u>\$15,387</u> *	<u>\$880</u>

* This total does not include a Department request for the Teachers for Tomorrow Program.

Exhibit B Regents Foundation Aid Proposal

New York State
(all figures in millions)

	Base Year Funding	Regents Foundation Aid	Change from Base
2003-04 School Year	\$8,370	—	—
2004-05 School Year	—	\$8,878	\$508
2010-11 School Year	—	\$14,350	\$5,980

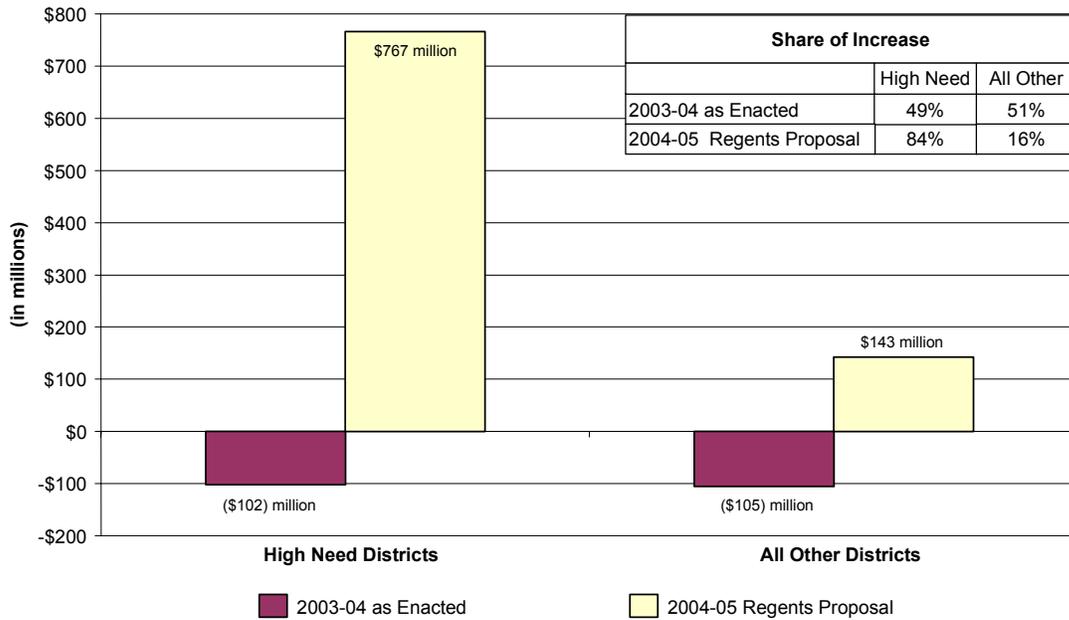


Exhibit D
2004-05 Regents State Aid Proposal
Share of Overall Increase in Computerized Aids

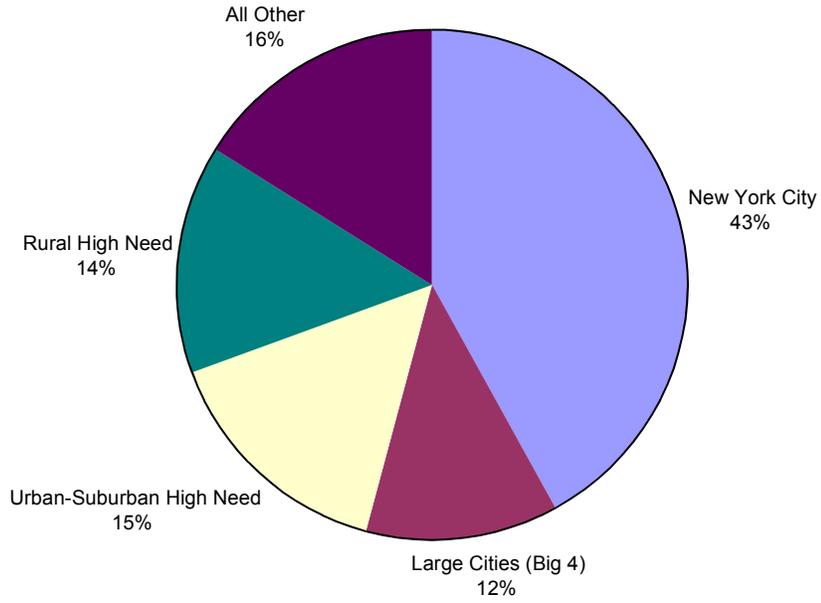
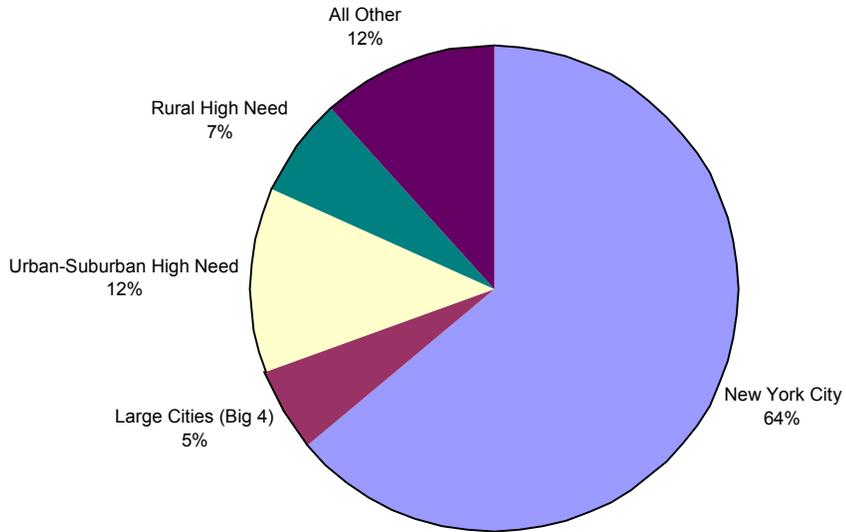


Exhibit E
Fully Implemented Regents State Aid Proposal
Share of Overall Increase in Computerized Aids



Regents School Aid Proposal for 2004-05

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Regents 2004-05 State Aid Proposal

Introduction

As the movement towards higher standards for all students evolves, many successes are apparent.

- *Elementary level.* The percent of fourth grade students meeting all standards since 1999 has increased 13 percentage points.
- *Middle level.* For the middle-level assessment in mathematics, 48 percent of eighth-graders met the standards in 2002, an increase of 10 percentage points since 1999.
- *Regents diplomas.* Since the implementation of higher graduation requirements in 1996, the percentage of public school graduates earning Regents diplomas increased from 42 to 55 percent.
- *Minority students* continued to make significant gains in elementary level English language arts; more than 48 percent of Black students met all standards in 2003 compared with 26 percent in 1999 and over 47 percent of Hispanic students did so, compared with 26 percent in 1999.
- *Students with disabilities* have shown improvement in elementary school English and middle school English and math.¹

These successes are happening all over the State, in poorer districts and wealthier districts, and with all groups of students.

Despite these many successes, a troubling resource and achievement gap persists. Students attending schools that have a high percentage of student poverty and limited local resources have a dual problem. First, they tend to have fewer resources. This is especially true in areas where high regional costs mean that a dollar for education buys fewer goods and services than in less costly areas of the State. Second, students attending such high need school districts consistently achieve at lower levels than students at schools with more affluent and less needy peers. These students are more likely to need extra instructional time, tutoring, and assistance from social service agencies, yet are less likely to receive those services. A review of data on school resources and student achievement will be included in a Technical Supplement to this proposal.

¹ New York State Board of Regents (June 2003). 2003 Chapter 655 Report: Annual Report to the Governor and the Legislature on the Educational Status of the State's Schools.

If the move to higher standards is to be successful, we must sustain the momentum of improvement exhibited around the State. We must facilitate success by all students regardless of the school they attend, family background, and educational needs. If we have the will to align our State resources to provide the financial support for all students to be successful, the entire State will reap the benefits in greater productivity and reduced costs for assistance. The State must maintain its focus on education and make sure enough resources go to the children who need them most.

Regents Goal

The State's system of funding for education should provide adequate resources through a State and local partnership so that all students have the opportunity to achieve the State's learning standards, including resources for extra time and help for students.

Enact a Foundation Formula to Target Aid to Educational Need

The Regents recommend a new multi-year approach to State Aid to school districts. It would replace a complex system of many formulas that are the result of years of statutory adjustments, and many of which in fact have not been used in State Aid distributions for the past three years. The Foundation Formula is much simpler. It calculates the cost of educating each student to the State's learning standards. Then this cost is divided between a State contribution and an expected local contribution.

The Foundation Formula is relatively simple:

District State Aid = [Foundation Cost x Pupil Need x Regional Cost Index] – Expected Local Contribution

Foundation Cost

The Foundation Cost is the cost of providing the average student with an education that meets State learning standards. It is measured by:

- Determining the instructional costs of districts that are performing well;
- Adjusting instructional costs so that all schools are comparable (*i.e.*, for regional cost and student poverty); and
- Adjusting for efficiency.

Pupil Need

A Pupil Need factor recognizes the added costs of providing extra time and help necessary for high-need students to succeed.

- Pupil Need is determined by combining two measures
 - The proportion of K-6 pupils eligible for free and reduced-price lunches, and
 - An adjustment to reflect students living in geographically sparse areas.

- The additional cost of providing extra time and help varies with the concentration of needy pupils within the district.
 - Districts with very low concentrations of needy pupils have relatively few additional demands upon them. These districts would get an additional 50 percent of the basic per-pupil cost for each needy pupil.
 - Districts with high concentrations of needy pupils must provide a broader array of additional services in order to enable their students to succeed. These districts have a greater need to implement schoolwide school improvement programs. This is recognized initially by providing an additional 100 percent of the basic per-pupil cost for each needy pupil. After this initial investment, the need for such start-up funding will decline and the 100 percent adjustment will be transitioned downward to 80 percent to reflect the reduced need for extra services.

The number of pupils served by the district determines the overall amount of services provided. Because districts must staff and plan to serve all children enrolled in the district, the Regents proposal employs a pupil count that is based on the number of pupils enrolled (Average Daily Membership), rather than the more traditional use of average daily attendance.

Regional Cost

Some school districts are in areas of the State where costs are higher. A regional cost adjustment provides comparable purchasing power around the State. The regional cost adjustment should reflect the actual, regional variations in the costs associated with providing an adequate education rather than the cost of additional services that districts elect to provide.

- This Regional Cost Index assesses the labor market for professions that require a bachelor's degree for entry-level employment.
- Teachers are not included to make the data independent of school districts' hiring preferences.
- The result is a measure of economic forces beyond the control of school boards which is used to adjust State Aid to recognize unavoidable, regional variations in the cost of education.

Expected Local Contribution

The expected local contribution is the amount school districts are expected to spend as their fair share of the cost of general education. On average, localities would pay slightly less than half of the overall cost of general education services. Lower wealth communities would pay much less. Higher wealth communities would pay more.

The expected local contribution is not mandatory. The Regents acknowledge that local effort in support of schools is a considerable challenge especially for city school districts which are fiscally dependent on their municipalities. Contributing to this

phenomenon are the many costs that cities incur to serve large percentages of their population who are economically disadvantaged. For example, New York City, as both a city and a county, must provide public assistance and Medicaid to its residents. Some districts may find they can provide the services needed to succeed at a lower cost to local taxpayers than is anticipated in this proposal.

The expected local contribution is based on two measures:

- **The district tax base** is the total taxable property of the district at full value, as determined by the Office of Real Property Services. In order to mitigate the impact of short-term real estate fluctuations, districts may select the more favorable of either the most recent full value assessment or a two-year average.
- **The expected local tax rate** is based on a statewide standard rate of \$15 per thousand. This standard rate is then adjusted to reflect local ability to pay, as measured by district income per child. The lower the income per child, the lower the expected tax rate. This establishes a reasonable level of taxation.
 - Most states use a relatively low tax rate.
 - The expected rate cannot be too low or expectations will be diminished in districts already above that rate.

Transition

The proposed Foundation Formula represents a funding system focused on student achievement. This is proposed following three years in which Operating Aid has been paid based primarily on estimated 2000-01 data. As in earlier years, equalization will occur based on district fiscal capacity and pupil need, but pupil need will be recognized to a greater extent than previously in order to ensure adequate support for programs and services that provide students with extra time and help to meet State learning standards. For these two reasons, changes in funding patterns are expected to occur between 2003-04 and 2004-05. In order to provide school districts with time to adjust to the new funding system, the Regents propose a transition adjustment that limits aid increases and losses for a reasonable, short-term period. Over time, this cap on increases should be eliminated and the Foundation Formula allowed to operate. An annual limit on loss is continued in order to allow districts time to accommodate reductions in State Aid.

Accountability

The Regents propose that accountability focus on school districts with schools that fail to meet adequate yearly progress goals. These schools are required to develop a plan that shows how the school is allocating resources to improve student achievement.

What's Included in the Foundation Formula?

The proposed Foundation Formula provides funding for the general instructional program. It replaces a number of aids and grants, as shown in Table 1.

**Table 1.
Aids and Grants Replaced by the
Proposed Regents Foundation Formula**

2003-04 Aids and Grants

Computerized Aids

- Comprehensive Operating Aid
- Operating Aid
- Tax Effort Aid
- Tax Equalization Aid
- Transition Adjustment/Adj. Factor
- Academic Support Aid
- Computer Hardware Aid
- Early Grade Class Size Reduction
- Educationally Related Support Services Aid
- Extraordinary Needs Aid
- Full Day Kindergarten Conversion Aid
- Gifted and Talented Aid
- Minor Maintenance and Repair Aid
- Operating Growth Aid
- Operating Standards Aid
- Operating Reorganization Incentive Aid
- Small City Aid
- Summer School Aid
- Tax Limitation Aid
- Teacher Support Aid

Other Aids and Grants

- Categorical Reading Programs
- CVEEB
- Fort Drum Aid
- Improving Pupil Performance Grants
- Learning Technology Grants
- Magnet Schools Aid
- Shared Services Savings Incentive
- Tuition Adjustment Aid
- Urban-Suburban Transfer Aid

Regents Proposal for 2004-05

Foundation

Grant

(Replaces all aids to the left)



Other Components

A number of other costs should be aided in the following manner.

Expense-Based Aids

State Support for School Construction

The recommendations concerning Building Aid and other State support for school construction will help overcome barriers to instructional improvement posed by inadequate

school facilities. Early grade class size reduction, pre-kindergarten programs and science laboratories are examples of instructional programs that are dependent on the availability and quality of school space. While capital improvements often take a period of years to implement, their funding can be spread across the useful life of buildings, and with favorable interest rates, can be affordable for districts and the State. The recommendations will help solve severe over-crowding and improve the capacity of school buildings to support educational programs that are key to closing the student achievement gap. Recommendations include:

- Allow school districts to use the Dormitory Authority of the State of New York to finance and manage school construction projects;
- Provide a supplemental cost allowance for school site acquisition and demolition in New York City;
- Provide *Grants for Overcrowded Schools* to relieve severe overcrowding in New York City and identify strategies for reducing school construction costs. Limit grants for building new space to relieve overcrowding in schools that currently provide less than 100 square feet per child.

In addition to the changes noted above, the Regents recommend reducing local costs for school construction through mandate relief. A provision of State Law, known as the Wicks Law, requires municipalities, including school districts, to employ four separate contractors for school construction projects of \$50,000 or more. For all but the largest of projects, a general contractor can effectively manage these separate functions.

The Regents recommend the State encourage the reduction of local costs by exempting school districts from the Wicks Law, thereby allowing a single general contractor for school construction projects in excess of \$50,000, rather than four separate contractors as currently required. Although estimates vary, this change is expected to result in considerable savings in building costs for school districts.

Transportation Aid

Consolidate Transportation Aid with Summer Transportation Aid and continue this as a separate aid.

Aid for Pupils with Disabilities

In its theoretical form, the Foundation Formula could be constructed to address spending for all instruction, both in general and special education. The Regents propose enacting the formula in its first year focused on general education only. This would provide time over the coming year for discussions with the public about raising achievement of students with disabilities in high need school districts and State Aid goals for special education funding. It would also provide time for needed reforms in general education to take hold. Analysis of data on the achievement of pupils with

disabilities shows a strong relationship between special and general education programs: students with disabilities achieve significantly better in schools whose general education students also perform well. Understanding the implications of the Foundation Formula for both general and special education may provide new opportunities for closing the achievement gap of students with disabilities. For 2004-05, changes are proposed to Public Excess Cost Aid to help districts with the excess costs of educating students with disabilities by focusing resources on districts with the greatest educational need. In the second year of the proposal, the Regents will consider incorporating aid for students with disabilities (regular Public Excess Cost Aid) in the Foundation Formula.

Categorical Aid Programs

The Regents recommend that categorical aid programs for Universal Pre-Kindergarten education and Limited English Proficient students, as well as Bilingual Education Grants, be maintained separately in the first year of the new funding system. In the future, when prekindergarten programs are universally available, the Regents will consider incorporating aid for pre-kindergarten students in the Foundation Formula.

Aid for Regional Shared Services

The State should continue to provide State Aid for regional shared services separately from the Foundation Formula through BOCES Aid and Special Services Aid for noncomponent school districts including the Big Five City School Districts. Programs funded include career and technical education, information technology and professional development. The Regents recommend that the State:

- Provide comparability between Special Services Aid for shared services for noncomponent school districts, including the Big Five City School Districts, and BOCES Aid for shared services among districts in the rest of the State.
- Allow access to BOCES services and provide aid for noncomponent districts that share services with at least one other district and pay an administrative surcharge to BOCES.
- Require districts to demonstrate maintenance of local effort and receive approval for each service requested by a BOCES District Superintendent appointed to coordinate such requests. The coordinating BOCES should be a BOCES with a Regional Information Center in a region adjacent to the city.

Programs Maintained Separately

A number of aid programs should be maintained separately. These are for programs that for a number of reasons are separate from the regular K-12 instructional program. These include the following aids:

Other Aids and Grants

BOCES Aid
Building Aid
Grants for Overcrowded Schools
Building Reorganization Incentive Aid
Limited English Proficiency Aid
Private Excess Cost Aid
Public Excess Cost Aid
Textbook Aid
Library Materials Aid
Computer Software Aid
Special Services – Career Education
Special Services – Computer Administration
Universal Pre-Kindergarten Aid
Bilingual Education Grants
BOCES Spec Act, <8, Contract Aid
Transportation Aid
Bus Driver Safety Training Grants
Chargebacks
Comptroller Audits
Division for Youth Transportation
Education of OMH/OMR
Education of Homeless Youth
Employment Preparation Education Aid
Incarcerated Youth
Native American Building Aid
Prior Year Adjustments
Roosevelt
Special Act Districts Aid
Teacher Centers
Teacher-Mentor Intern
Teachers of Tomorrow

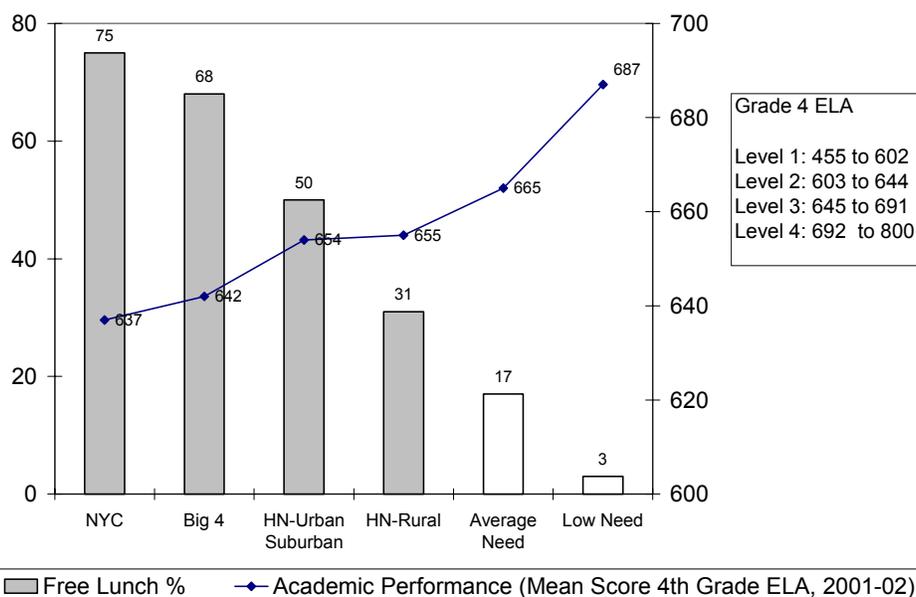
**Regents Proposal on State Aid to
School Districts for 2004-05
Technical Supplement**

1. The Resource and Achievement Gap
2. Selected Bibliography
3. Need/Resource Capacity Definitions
4. High Need School Districts 2004-05 School Year
5. Aids and Grants to Be Consolidated Under the Regents Proposal
6. Formula Components
7. Regional Cost Adjustment Based on Professional Salaries
8. Description of Regents Cost Study
9. Summary of Aids and Grants as Requested in the 2004-05 Regents Proposal on School Aid
10. Analysis of Aid Changes Under the 2004-05 Regents Proposal on School Aid

The Resource and Achievement Gap

The relationship between poverty and educational achievement is well established.² As student poverty in a school increases, academic performance tends to decline. This is illustrated in Figure 1 in which all New York State school districts are grouped by need-resource capacity category.³ The figure shows free lunch eligibility and grade 4 English

Figure 1: Mean Free Lunch Percent and 4th Grade ELA Mean Score by Need Resource Category, 2001-02



language arts performance for each category. New York City and the large cities (Rochester, Buffalo, Syracuse and Yonkers) have the highest concentrations of children in poverty and among the worst achievement levels. As poverty declines, achievement improves. For this reason, student poverty is considered a legitimate and stable substitute measure for educational need.

These relationships are further illustrated by examining contrasts in student performance, student need and school resources. Table 2 compares the public schools in New York City with those districts that have the highest level of local resources and the lowest levels of student need, known as the low need school districts. A detailed definition of need-resource capacity categories can be found in this Technical Supplement (following the bibliography).

² See the annual Chapter 655 reports (for example, New York State Board of Regents, July 2003), Arnot and Rowse, 1987, Evans, Oates and Schwab, 1992, Jencks and Phillips, 1998, and others.

³ Need-resource capacity categories group school districts into six categories based on their student poverty in relation to their ability to raise revenues locally. A detailed definition of need-resource capacity categories can be found in this Technical Supplement.

Table 2 Contrasts in Student Performance, Need and Resources ⁴		
Measure	New York City School District	Low Need School Districts
Proficiency in elementary-level English language arts	46	86
Proficiency in middle-level mathematics	30	78
Percent of general education students entering ninth grade in 1998 meeting the English graduation requirement	79	98
Percent of students earning Regents diplomas	31	73
Percent of students eligible for free lunch	75	3
Percent of teachers lacking certification in mathematics	33	4

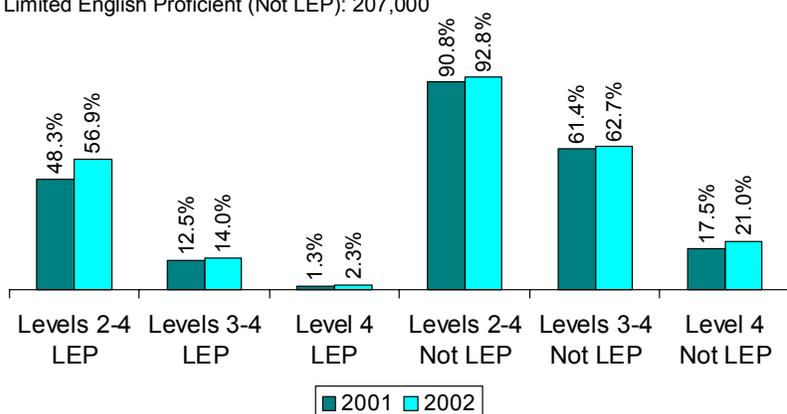
In many school districts poverty coexists with another educational need factor, the incidence of limited English proficient (LEP) students. More English proficient students than

Figure 2
Performance of LEP and Not LEP Students on the Elementary-Level English Language Arts Assessment 2001 and 2002

2002 Count of Tested Students:

Limited English Proficient (LEP): 5,500

Not Limited English Proficient (Not LEP): 207,000

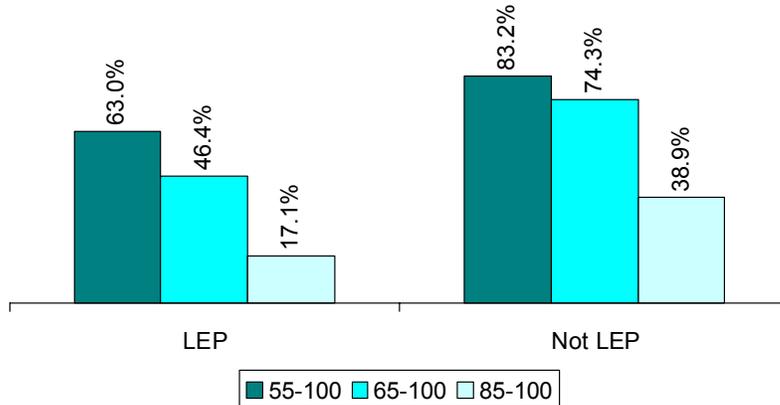


LEP students achieved the standards in elementary level English language arts by scoring at Level 3 or above (Figure 2). Examining achievement of LEP versus Not LEP students in Regents-level mathematics (Figure 3) shows that almost one-sixth of LEP students who met the standard in 2002 scored between 55 and 64.

⁴ New York State Board of Regents (June 2003). 2003 Chapter 655 Report: Annual Report to the Governor and the Legislature on the Educational Status of the State's Schools.

Figure 3
Performance of LEP and Not LEP Students in the 1998 Cohort on
the Regents Mathematics Assessment after Four Years

Count of Students in the 1998 Cohort:
 Limited English Proficient (LEP): 5,000
 Not Limited English Proficient (Not LEP): 152,500



Examining the number and percentage of limited English proficient students by location reveals an educational need that is particularly concentrated in urban areas (see Table 3). More than 70 percent of New York State's LEP students attend the New York City

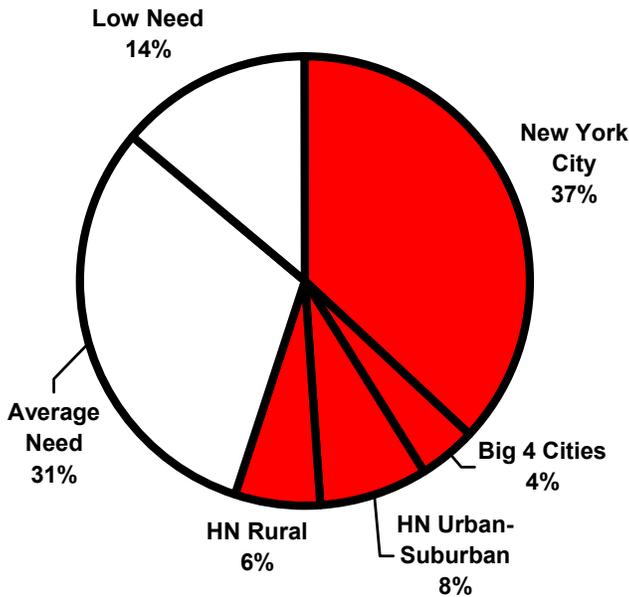
Table 3 Number and Percent of Public School Limited English Proficient Students by Location New York State (Fall 2001)		
Sector/Location	Students	
	Number	Percent
High N/RC Districts		
New York City	142,033	13.7%
Large City Districts	10,052	8.0
Urban-Suburban	14,913	6.9
Rural	1,286	0.7
Average N/RC Districts	16,511	1.9
Low N/RC Districts	8,810	2.3
Total Public	193,605	6.8%

Note: Includes students who score at or below the 40th percentile on an English language assessment instrument approved by the Commissioner of Education.

school district, where LEP students comprise 13.7 percent of the student body. In urban and suburban high need school districts and the Large City School Districts, LEP students make up approximately 7 and 8 percent of the student body, respectively.

The relationship between poverty and academic achievement is pervasive. It has been documented by numerous studies over four decades.⁵ This relationship is a critical policy concern because it affects large numbers of students. Figure 4 shows that a full 55 percent (approximately 1.6 million students) of the State's students are enrolled in high need districts.⁶ While not all of these students come from poverty backgrounds, many of them do, and numerous research

Figure 4. Where the Students Are
(Percentage of Students by Need-Resource Category)



The large number of students in high need school districts makes their education a state-wide policy concern.

studies have illustrated the negative impact of the concentration of student poverty on the achievement of all students, regardless of their individual poverty status.⁷

These numbers suggest that, in order to meet higher learning standards, New York State must be concerned about: what affects the achievement of students in schools with concentrations of student poverty; the resources that high need school districts require to support their educational program; and the effectiveness with which school districts use their resources. It suggests that the successful education of so large a group will have a significant impact on the economic vitality of the State by producing workers who can function in a competitive, international market and by reducing the costs of social services and criminal justice.

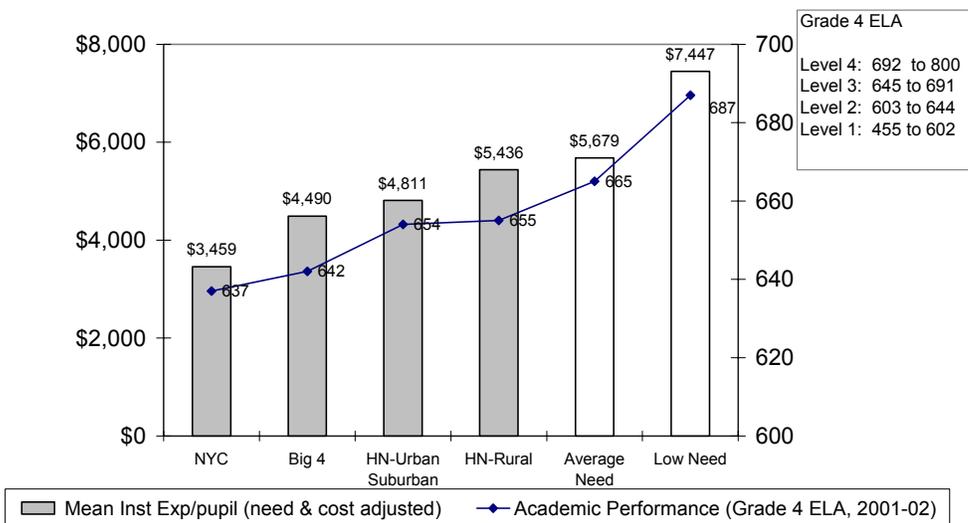
⁵ See annual reports of the Chapter 655 Report (for example, New York State Board of Regents, July 2003), Arnot and Rowse, 1987, Evans, Oates and Schwab, 1992, and Jencks and Phillips, 1998.

⁶ New York State Board of Regents, June 2003, p.88.

⁷ See Arnot and Rowse, 1987; Evans, Oates and Schwab, 1992; Henderson, Mieszkowski and Sauvageau, 1978; Link and Mulligan, 1991; Rumberger and Willms, 1992; Shavit and Williams, 1985; Summers and Wolfe, 1977; Willms, 1986.

That poverty affects student achievement is well known. What is less well known are the successes of schools in educating students from poverty backgrounds to high standards. While the debate on “does money matter?” still exists,⁸ it is now being recast by some as “*making* money matter” (emphasis added).⁹ Money matters and how it is used makes a difference as well. Using New York State school data, we examined the relationship between school district spending and student achievement as

Figure 5
After Adjusting for Need and Regional Cost, the Higher the School District Spending, the Greater the Pupil Achievement



measured by grade 4 English Language Arts test performance (see Figure 5). Spending data are adjusted in two ways. First, dollars spent are adjusted by the Regents Regional Cost Index to reflect comparable purchasing power from one region of the State to another. Second, spending per pupil is further adjusted by providing an additional weighting for pupils from poverty backgrounds to reflect the additional services that such pupils require. The resulting cost and need-adjusted

expenditures per pupil show a trend: the more the school district spends, the greater the pupil achievement.

Figure 5 shows that a distinct relationship exists between spending, student risk, and academic performance. That is, the emphasis on need and cost is supported by data from New York schools.¹⁰

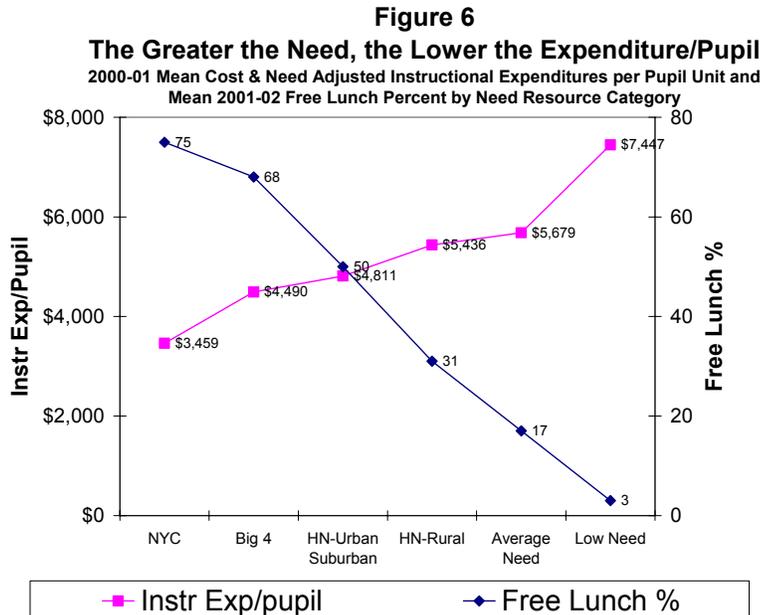
Examining the relationship between school spending and student poverty is also illuminating. Poverty is often used as a proxy or substitute measure for educational need. This is because of the high negative correlation between poverty and student achievement and because of the desire to use a measure that is not affected by the varying academic successes of school districts. As a result, poverty rather than achievement may be used as a proxy for educational need in aid formulas, because of the interest in providing incentives for school districts to improve student achievement.

⁸ See for example Hanushek, E. (1966), and Ladd, H. F. and J.S. Hansen (2002).

⁹ Ladd, H.F. and J.S. Hansen (2002).

¹⁰ See Glasheen, R. , 2002.

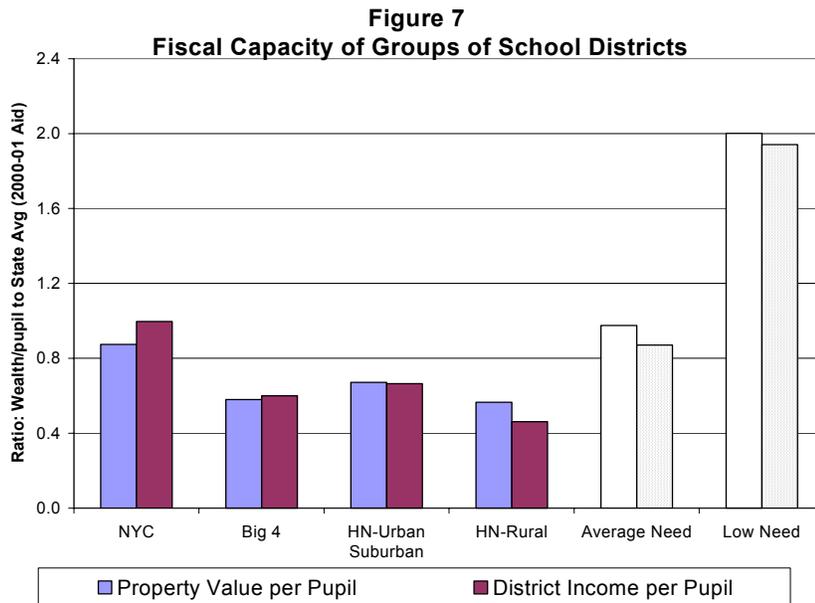
Figure 6 shows that as educational need decreases, need and cost adjusted instructional expenditures per pupil increase. Need and academic performance are virtual mirror images of each other.



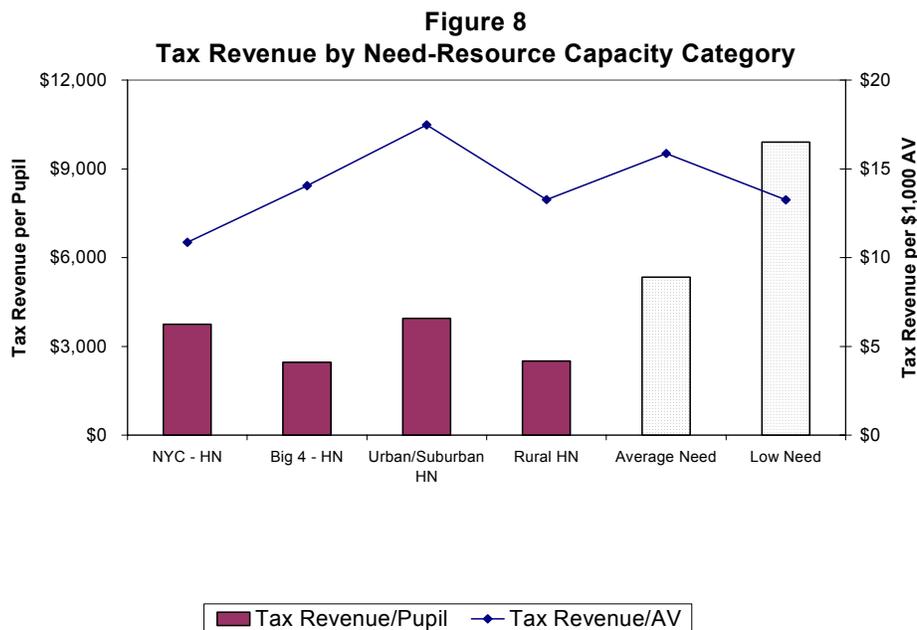
While the previous graphs looked at educational risk and the demand placed on school districts, the following charts examine school district fiscal capacity. Fiscal capacity refers to the ability of school districts to raise revenues locally. It is often assessed by a measure that represents an equal mix of property wealth per pupil and income per pupil in the district, known as the Combined Wealth Ratio.¹¹ The ability of school districts to pay for education varies considerably around the State. Since about half of school revenue comes from local sources, these capacity differences can amount to big differences in educational programs available to students. Figure 7 shows that the balance between fiscal capacity as assessed by property value per pupil versus income per pupil varies as well. Income wealth per pupil exceeds property wealth per pupil in the New York City School District while the opposite is true for high need rural school districts, and average and low need school districts.

We examined revenues raised and tax rates for different groups of school districts. Figure 8 shows the average dollars raised per pupil for each category of school district (tax revenue per pupil displayed by the bars) and tax revenue per \$1,000 of actual property value (expressed as tax rate and shown with the line). Low need districts collect more local revenue per pupil while taxing at a comparable rate to the Big Four districts. Overall, the rural high need districts have low tax rates and some of the lowest tax revenues per pupil.

¹¹ A measure of school district income and property, the State average Combined Wealth Ratio is 1.0. State averages for 2000-01 Operating Aid were \$98,300 income per pupil and \$244,900 actual value per pupil.

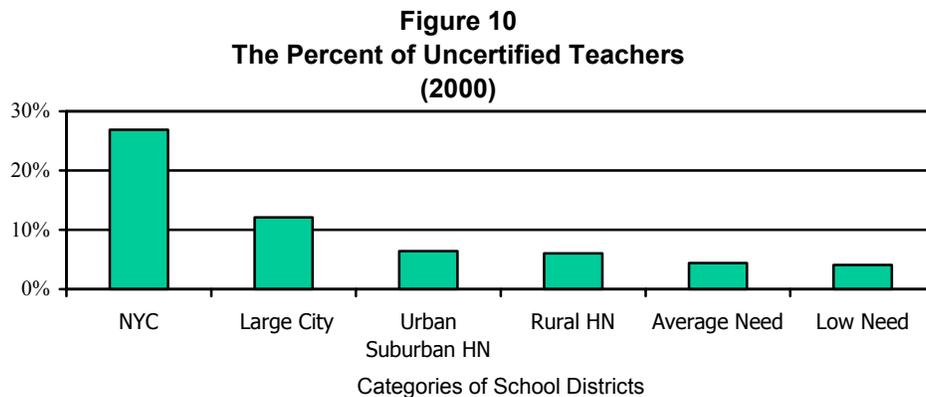
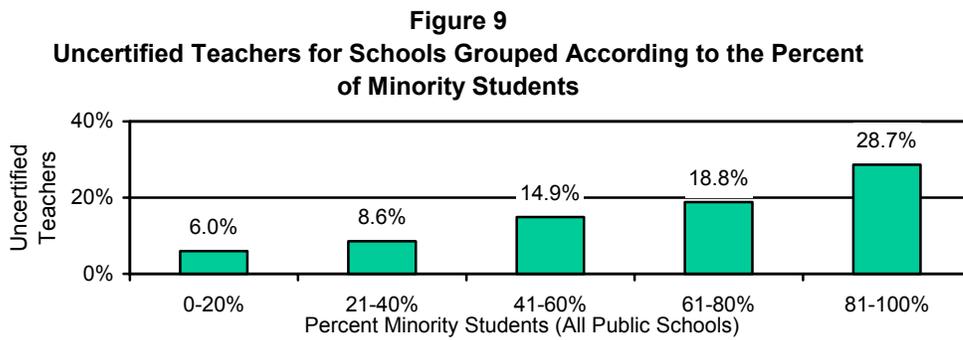


Further analysis of school district local effort shows that districts with higher student poverty and limited fiscal capacity are more likely to have a local effort problem.¹² Contributing to this phenomenon are the many costs that cities incur to serve large percentages of their population who are economically disadvantaged. For example, New York City, as both a city and a county, must provide public assistance and Medicaid to its residents. From those findings, the Regents acknowledge local effort as a significant element in closing the achievement gap.



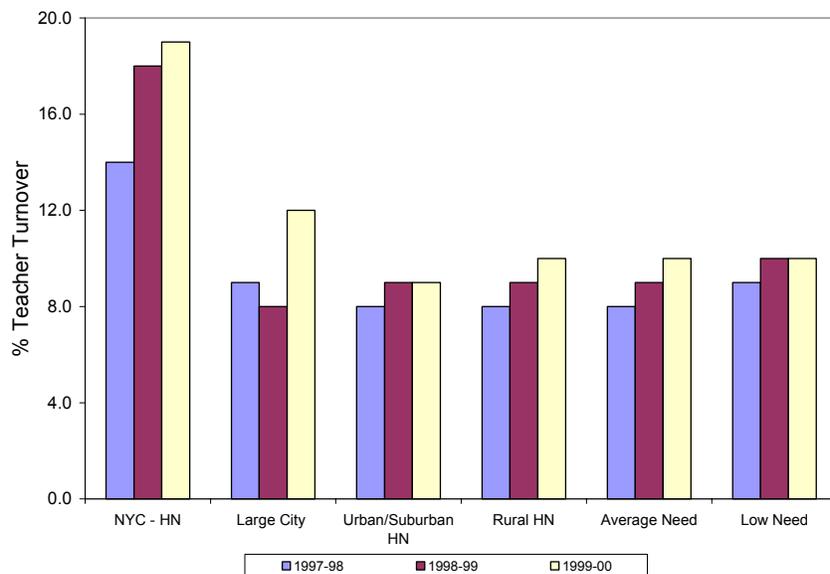
¹² See New York State Board of Regents (September 2002).

A major policy focus of the Regents is strengthening teaching. Recent research has documented the considerable impact of teachers on student achievement.¹³ In fact, the positive effect of having a quality teacher for three years in a row was equal to the decline in achievement students suffered from economic disadvantage. Examination of New York State data reveals the following. Schools with the largest percentage of minority students have the largest percentage of teachers without appropriate certification (Figure 9). Looking at the percent of uncertified teachers by need-resource capacity category shows that more than one in four teachers teach without appropriate certification in New York City (Figure 10). In school districts outside the Big Five, the rate is one in 25.



¹³ Rivkin, Hanushek and Kain (2000).

Figure 11
Teacher Turnover by Need Resource Capacity Category
of School Districts (SFY 1997-2000)



While having a certificate in the subject area one teaches may not explain why some teachers have a greater impact on student achievement than others, the lack of appropriate certification is found in districts where overall student achievement is among the lowest.

Figure 11 shows that teacher turnover¹⁴ has increased in all parts of the State, further contributing to the challenge of closing the achievement gap. This phenomenon can be attributed in large part to an aging teacher workforce. Teacher turnover is at the highest levels in New York City.

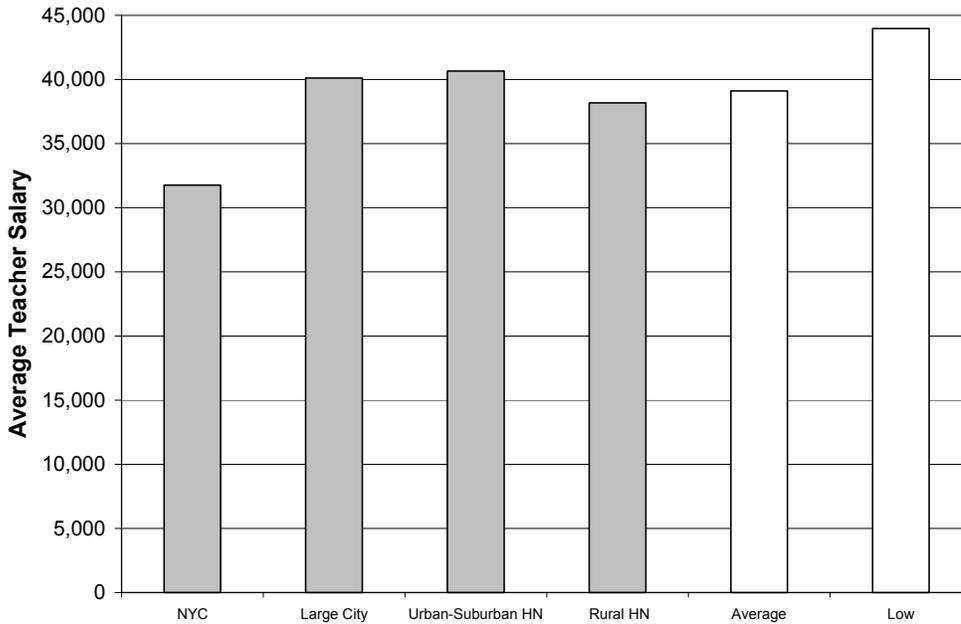
We examined teacher salaries by applying a cost index to make salaries comparable across regions of the State. Figure 12 shows that cost-adjusted teacher salaries are low in New York City compared to the rest of the State.

Quality career and technical education (CTE) programs provide students with practical, hands-on learning experiences leading to a high school diploma. Often such programs create an alternative way of developing high level reading and computational skills. Approved CTE programs maintain high academic standards, particularly in reading and computational skills, which hold promise for many students who were in the past lost in the traditional program.¹⁵

¹⁴ Teacher turnover is a measure of the teachers employed in a district in Year 1 who don't come back in Year 2. It is calculated as: the number of teachers employed by a district in year one but not in year two, divided by the number of teachers employed in year one. Note that if a district employed 75 teachers in year one, and everybody came back for year two, the district hired an additional 10 more teachers, the turnover rate would be zero for that district because everybody came back.

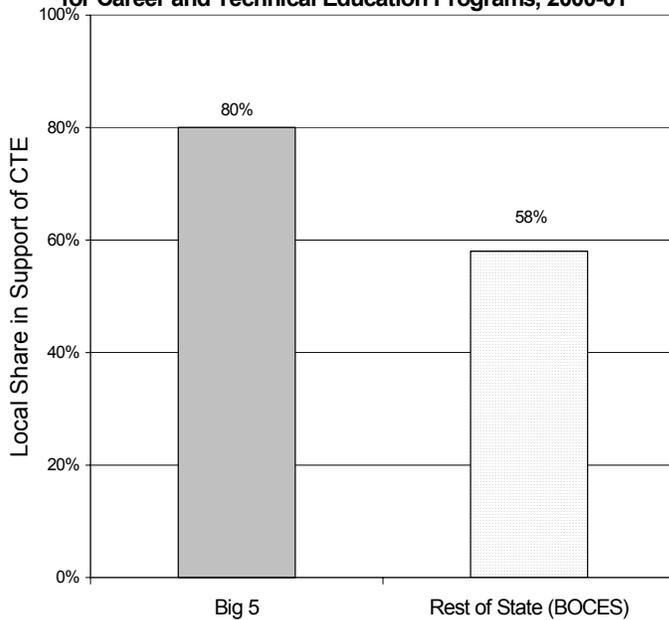
¹⁵ See for example Berryman, Flaxman and Inger, 1999; Grubb, David, Lurn, Plihal and Morgan, 1991; and Grubb and Stasz, 1991.

Figure 12. Cost Adjusted Teacher Salaries by Need-Resource Capacity Category of School Districts



Existing aid formulas result in a higher level of reimbursement to BOCES programs than to those operated by the Big Five city school districts. Conversely, the local share that the Big Five city school districts must exert to support CTE programs is greater (see Figure 13). With the considerable need for such programs in the Big Five, a similar level of reimbursement is important to provide a fiscal incentive for these programs.

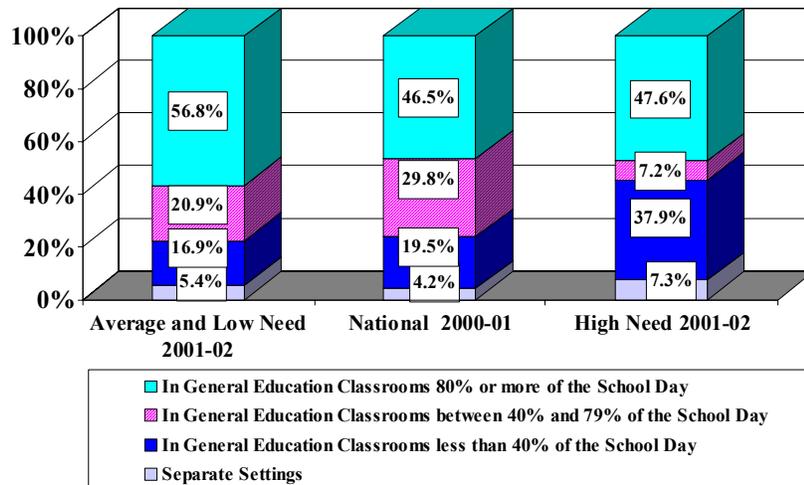
**Figure 13
Local Share as a Percent of Total Expenditures
for Career and Technical Education Programs, 2000-01**



In New York State, 43 percent of the pupils enrolled in special education are in the large city school districts where support services in general education are limited, greater numbers of teachers are uncertified, and the lack of resources makes it more difficult to provide quality instruction and early intervention. This means a greater likelihood that these students will have less access to a rigorous general education curriculum, which results in lower performance on State assessments and less

likelihood of meeting graduation requirements. As a result, their ability to access postsecondary education and employment may be affected. The use of special education classes that are separate from general education programs further limits the academic options for students with disabilities. Figure 14 shows that high need school districts use the special class model to educate students with disabilities considerably

Figure 14. High Need school districts use the “special class” model for greater percentages of students with disabilities.



more often than other districts.

Figure 15 shows the average age¹⁶ of school buildings by need-resource capacity category of school districts. The chart shows that the average age of school buildings in our largest cities is more than 55 years and in urban and suburban high need school districts it is about 48 years.

Legislative changes enacted in the late 1990’s provided a variety of incentives for school construction. These changes include the following:

- A regional cost index was enacted (1997) to meet the school construction needs in the cities;
- For projects approved by the voters on or after July 1, 1998, a 10 percent increase in the Building Aid formula was enacted (1998) on top of existing provisions which allowed a choice of the best aid ratio (State share) going back to 1981-82; and
- For projects approved by the voters on or after July 1, 2000, the protection afforded by the aid ratio choice was reduced (2000) by giving districts the choice of i) the current year Building Aid ratio, or ii) the best aid ratio from the 1981-82 through 1999-2000 aid years less 10 percent.

¹⁶ Age is calculated as a weighted average based on the construction date of different parts of the building. For example, a building first constructed in 1951 and renovated with a new wing of equal size in 2001 would have an average age of 25 years ((50 years + zero years) / 2 = 25 years average age).

Figure 15. Age of School Buildings (1999)

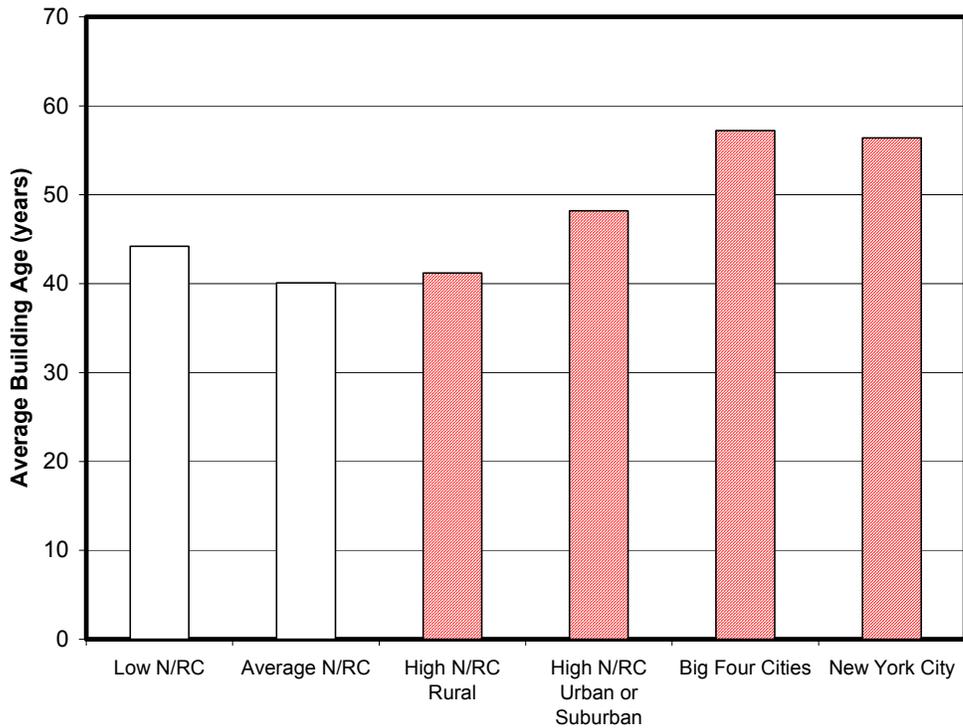


Figure 16. Capital Construction
Effect of State Aid Changes from 1998-2001

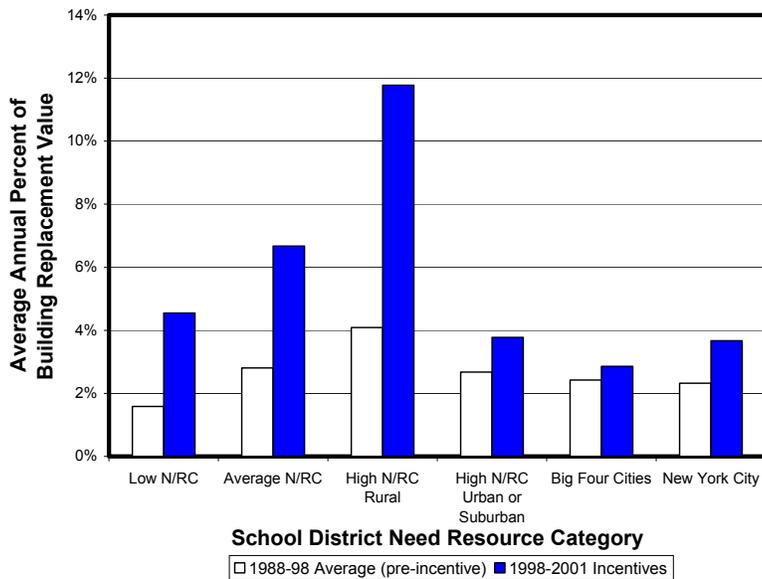


Figure 16 shows the impact of aid changes on school construction by school district need-resource capacity category during the period 1998 to 2001. School construction (as measured by the average annual percent of building replacement value) was greatest in the high need/resource capacity rural school districts, followed by construction in average and low need/resource capacity districts. These State Aid

incentives had the least impact on construction in the Big Five cities, and high need/resource capacity urban and suburban school districts. In the case of New York's five largest cities, school district fiscal dependence on their municipalities may have limited a positive response to these incentives.

Figure 16 also shows the leveraging effect of these State Aid incentives; that is, the additional capital construction that the same local effort purchases. This potential for increased construction with the same local effort was greatest for the high need-resource capacity rural districts, which responded with a high level of school construction. Despite relatively large increases in their ability to leverage local effort, the urban school districts did not respond with a level of school construction comparable to that of high need rural, average need or low need school districts.

The ability of school districts to meet student needs is affected by the cost of doing business in the region in which the district is located. Table 4 shows that costs are about 50 percent higher in the New York City-Long Island region than in the North Country. New York State legislative commissions and blue-ribbon panels have noted this phenomenon¹⁷ and recommended that State Aid be adjusted to compensate for these cost differences. The State Aid dollar should purchase the same amount of goods and services around the State.¹⁸

Labor Force Region	Index Value	Purchasing Power of \$1,000 by Region
Capital District	1.168	\$856
Southern Tier	1.061	\$942
Western New York	1.080	\$925
Hudson Valley	1.359	\$735
Long Island/NYC	1.496	\$668
Finger Lakes	1.181	\$847
Central New York	1.132	\$883
Mohawk Valley	1.016	\$984
North Country	1.000	\$1,000

In conclusion, the additional needs of schools educating concentrations of students from poverty backgrounds are well supported. Yet school districts with concentrated poverty tend to spend less. They have limited capacity to raise revenues locally, raise fewer local revenues per pupil, lack certified teachers, have greater teacher turnover, and, in the case of New York City, have lower cost-adjusted teacher salaries. Aid formulas are less beneficial for the State's largest cities in supporting career and technical education as an alternative path to a high school diploma and in not recognizing regional cost differences in aid provided for school operation.

¹⁷ See Fleischmann, 1972; Rubin, 1982; and Salerno, 1988.

¹⁸ Reference is made to the need to cost adjust operating aids, which constitute the largest share of the aid pie. Other aids already include cost adjustments, namely Building Aid, Transportation Aid, Excess Cost Aids, etc.

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NEED/RESOURCE CAPACITY CATEGORY DEFINITIONS

The need/resource capacity index, a measure of a district's ability to meet the needs of its students with local resources, is the ratio of the estimated poverty percentage¹⁹ (expressed in standard score form) to the Combined Wealth Ratio²⁰ (expressed in standard score form). A district with both estimated poverty and Combined Wealth Ratio equal to the State average would have a need/resource capacity index of 1.0. Need/Resource Capacity (N/RC) categories are determined from this index using the definitions in the table below.

Need/Resource Capacity Category	Definition
High N/RC Districts New York City Large City Districts Urban-Suburban Rural	New York City Buffalo, Rochester, Syracuse, Yonkers All districts at or above the 70th percentile (1.188) which meet one of the following conditions: 1) at least 100 students per square mile; or 2) have an enrollment greater than 2,500 and more than 50 students per square mile. All districts at or above the 70th percentile (1.188) which meet one of two conditions: 1) fewer than 50 students per square mile; or 2) fewer than 100 students per square mile and an enrollment of less than 2,500.
Average N/RC Districts	All districts between the 20th (0.7706) and 70th (1.188) percentile on the index.
Low N/RC Districts	All districts below the 20th percentile (0.7706) on the index.

¹⁹**Estimated Poverty Percentage:** A weighted average of the 2000-01 and 2001-02 kindergarten through grade 6 free-and-reduced-price-lunch percentage and the 2000 Census poverty percentage. (An average was used to mitigate errors in each measure.) The result is a measure that approximates the percentage of children eligible for free- or reduced-price lunches.

²⁰**Combined Wealth Ratio:** The ratio of district wealth per pupil to State average wealth per pupil, used for 2000-01 aid.

**High Need School Districts
Used to Assess the Impact of the
Regents 2004-05 Proposal on State Aid to School Districts**

Albany County

010100 ALBANY
010500 COHOES
011200 WATERVLIET

Allegany County

020601 ANDOVER
020702 GENESEE VALLEY
020801 BELFAST
021102 CANASERAGA
021601 FRIENDSHIP
022001 FILLMORE
022101 WHITESVILLE
022302 CUBA-RUSHFORD
022401 SCIO
022601 WELLSVILLE
022902 BOLIVAR-RICHBG

Broome County

030200 BINGHAMTON
030501 HARPURSVILLE
031301 DEPOSIT
031401 WHITNEY POINT
031502 JOHNSON CITY

Cattaraugus County

041101 FRANKLINVILLE
041401 HINSDALE
042302 CATTARAUGUS-LI
042400 OLEAN
042801 GOWANDA
043001 RANDOLPH
043200 SALAMANCA
043501 YORKSHIRE-PIONE

Chautauqua County

060401 CASSADAGA VALL
060601 PINE VALLEY
060701 CLYMER
060800 DUNKIRK
061501 SILVER CREEK
061503 FORESTVILLE
061700 JAMESTOWN
062301 BROCTON
062401 RIPLEY
062601 SHERMAN
062901 WESTFIELD

Chemung County

070600 ELMIRA

Chenango County	
080101	AFTON
080601	GREENE
081003	UNADILLA
081200	NORWICH
081401	GRGETWN-SO-OTS
081501	OXFORD
082001	SHERBURNE-EARL
Clinton County	
090201	AUSABLE VALLEY
090301	BEEKMANTOWN
090901	NORTHRN ADIRON
091200	PLATTSBURGH
Columbia County	
101300	HUDSON
Cortland County	
110101	CINCINNATUS
110200	CORTLAND
110304	MCGRAW
110901	MARATHON
Delaware County	
120401	CHARLOTTE VALL
120701	FRANKLIN
120906	HANCOCK
121401	MARGARETVILLE
121601	SIDNEY
121701	STAMFORD
121702	S. KORTRIGHT
121901	WALTON
Dutchess County	
130200	BEACON
131500	POUGHKEEPSIE
Erie County	
140600	BUFFALO
141800	LACKAWANNA
Essex County	
150203	CROWN POINT
150901	MORIAH
151501	TICONDEROGA
Franklin County	
160801	CHATEAUGAY
161201	SALMON RIVER
161501	MALONE
161601	BRUSHTON MOIRA
161801	ST REGIS FALLS

Fulton County	
170500	GLOVERSVILLE
170600	JOHNSTOWN
171001	OPPENHEIM EPHR
Genesee County	
180300	BATAVIA
Greene County	
190401	CATSKILL
Herkimer County	
210302	WEST CANADA VA
210501	ILION
210502	MOHAWK
210601	HERKIMER
210800	LITTLE FALLS
211003	DOLGEVILLE
211103	POLAND
211701	VAN HORNSVILLE
212001	BRIDGEWATER-W
Jefferson County	
220301	INDIAN RIVER
220909	BELLEVILLE-HEN
221301	LYME
221401	LA FARGEVILLE
222000	WATERTOWN
222201	CARTHAGE
Lewis County	
230201	COPENHAGEN
230901	LOWVILLE
231101	SOUTH LEWIS
Livingston County	
240901	MOUNT MORRIS
241101	DALTON-NUNDA
Madison County	
250109	BROOKFIELD
250301	DE RUYTER
250401	MORRISVILLE EA
251501	STOCKBRIDGE VA
Monroe County	
261600	ROCHESTER
Montgomery County	
270100	AMSTERDAM
270301	CANAJOHARIE
270701	FORT PLAIN
271102	ST JOHNSVILLE

Nassau County	
280201	HEMPSTEAD
280208	ROOSEVELT
280209	FREEPORT
280401	WESTBURY
New York City	
300000	NEW YORK CITY
Niagara County	
400800	NIAGARA FALLS
Oneida County	
410401	ADIRONDACK
410601	CAMDEN
411800	ROME
412300	UTICA
Onondaga County	
421800	SYRACUSE
Ontario County	
430700	GENEVA
Orange County	
441000	MIDDLETOWN
441202	KIRYAS JOEL
441600	NEWBURGH
441800	PORT JERVIS
Orleans County	
450101	ALBION
450801	MEDINA
Oswego County	
460102	ALTMAR PARISH
460500	FULTON
460701	HANNIBAL
461801	PULASKI
461901	SANDY CREEK
Otsego County	
470202	GLBTSVILLE-MT U
470501	EDMESTON
470801	LAURENS
470901	SCHENEVUS
471101	MILFORD
471201	MORRIS
471601	OTEGO-UNADILLA
472001	RICHFIELD SPRI
472202	CHERRY VLY-SPR
472506	WORCESTER

Rensselaer County

490601 LANSINGBURGH
491200 RENSSELAER
491700 TROY

Rockland County

500402 EAST RAMAPO

St. Lawrence County

510101 BRASHER FALLS
510401 CLIFTON FINE
511101 GOUVERNEUR
511201 HAMMOND
511301 HERMON DEKALB
511602 LISBON
511901 MADRID WADDING
512001 MASSENA
512101 MORRISTOWN
512201 NORWOOD NORFOL
512300 OGDENSBURG
512404 HEUVELTON
512501 PARISHVILLE
513102 EDWARDS-KNOX

Schenectady County

530600 SCHENECTADY

Schoharie County

540901 JEFFERSON
541001 MIDDLEBURGH
541401 SHARON SPRINGS

Schuyler County

550101 ODESSA MONTOUR

Seneca County

560501 SOUTH SENECA
561006 WATERLOO CENT

Steuben County

570101 ADDISON
570201 AVOCA
570302 BATH
570401 BRADFORD
570603 CAMPBELL-SAVON
570701 CANISTEO
571501 GREENWOOD
571800 HORNELL
572301 PRATTSBURG
572702 JASPER-TRPSBRG

Suffolk County

580105	COPIAGUE
580106	AMITYVILLE
580109	WYANDANCH
580232	WILLIAM FLOYD
580512	BRENTWOOD
580513	CENTRAL ISLIP

Sullivan County

590501	FALLSBURGH
590901	LIBERTY
591302	LIVINGSTON MAN
591401	MONTICELLO

Tioga County

600101	WAVERLY
600903	TIOGA

Tompkins County

610901	NEWFIELD
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Ulster County

620600	KINGSTON
622002	ELLENVILLE

Warren County

630918	GLENS FALLS CO
631201	WARRENSBURG

Washington County

640601	FORT EDWARD
640701	GRANVILLE
641301	HUDSON FALLS

Wayne County

650101	NEWARK
650301	CLYDE-SAVANNAH
650501	LYONS
651201	SODUS
651501	N. ROSE-WOLCOT
651503	RED CREEK

Westchester County

660900	MOUNT VERNON
661500	PEEKSKILL
661904	PORT CHESTER
662300	YONKERS

Yates County

680801	DUNDEE
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**Aids and Grants to be Consolidated Under the Regents Proposal
on State Aid to School Districts
for School Year 2004-05**

**Aids and Grants Replaced by the
Proposed Regents Foundation Formula**

2003-04 Aids and Grants

Computerized Aids

- Comprehensive Operating Aid
- Operating Aid
- Tax Effort Aid
- Tax Equalization Aid
- Transition Adjustment/Adj. Factor
- Academic Support Aid
- Computer Hardware Aid
- Early Grade Class Size Reduction
- Educationally Related Support Services Aid
- Extraordinary Needs Aid
- Full Day Kindergarten Conversion Aid
- Gifted and Talented Aid
- Minor Maintenance and Repair Aid
- Operating Growth Aid
- Operating Standards Aid
- Operating Reorganization Incentive Aid
- Small City Aid
- Summer School Aid
- Tax Limitation Aid
- Teacher Support Aid

Other Aids and Grants

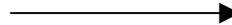
- Categorical Reading Programs
- CVEEB
- Fort Drum Aid
- Improving Pupil Performance Grants
- Learning Technology Grants
- Magnet Schools Aid
- Shared Services Savings Incentive
- Tuition Adjustment Aid
- Urban-Suburban Transfer Aid

Regents Proposal for 2004-05

Foundation

Grant

(Replaces all aids to
the left)



Other Aids

Other Aids and Grants

BOCES Aid
Building Aid
Grants for Overcrowded Schools
Building Reorganization Incentive Aid
Limited English Proficiency Aid
Private Excess Cost Aid
Public Excess Cost Aid
Textbook Aid
Library Materials Aid
Computer Software Aid
Special Services – Career Education
Special Services – Computer Administration
Universal Pre-Kindergarten Aid
Bilingual Education Grants
BOCES Spec Act, <8, Contract Aid
Transportation Aid
Bus Driver Safety Training Grants
Chargebacks
Comptroller Audits
Division for Youth Transportation
Education of OMH/OMR
Education of Homeless Youth
Employment Preparation Education Aid
Incarcerated Youth
Native American Building Aid
Prior Year Adjustments
Roosevelt
Special Act Districts Aid
Teacher Centers
Teacher-Mentor Intern
Teachers of Tomorrow

2004-05 Regents Proposal Formula Components

Foundation Aid

Foundation: Foundation Operating Aid is the greater of \$500 or Formula Foundation Aid multiplied by Selected Total Aidable Pupil Units (TAPU). The Foundation Aid is the product of \$4,504, the Regional Cost Index (see explanation following) and a Pupil Need Index, less the Expected Local Contribution. The Pupil Needs Index, which ranges from 1.0 to 2.0, is the sum of 1.0 plus the product of the Extraordinary Needs percent (changed to exclude a Limited English Proficiency count) multiplied by the concentration factor. The concentration factor (maximum of 1.0) is $0.5 + (0.5 \times [(EN \text{ percent} - 10 \text{ percent})/70 \text{ percent}])$. The Expected Local Contribution is the product of 0.015 multiplied by the Alternate Pupil Wealth Ratio multiplied by the Selected Actual Value (AV) per 2002-03 TWPU. Selected AV is the lesser of the 2001 AV or the average of 2000 AV and 2001 AV. Selected TAPU, Total Wealth Pupil Units (TWPU), and TAPU for Expense have been changed to be based on average daily membership (instead of average daily attendance), eliminate the 0.25 additional weightings for Pupils with Special Educational Needs and secondary pupils and continue the 0.12 weighting for summer school pupils (in TAPU). Aid for New York City is on a citywide basis.

The following aids and grants are eliminated, as are several grants and aids that do not appear on the computerized aid estimates, including aid for CVEEBs, Learning Technology Grants, the Shared Services Savings Incentive, Tuition Adjustment Aid and Urban-Suburban Transfer Aid:

- Comprehensive Operating
- Operating Aid
- Tax Effort
- Tax Equalization
- Tax Limitation
- Gifted & Talented
- Minor Maintenance and Repair
- Operating Standards
- Extraordinary Needs
- Summer School
- Early Grade Class Size Reduction
- Educationally Related Support Services
- Computer Hardware
- Operating Growth
- Operating Reorganization Incentive
- Full Day Kindergarten Conversion
- Teacher Support
- Academic Support
- Small Cities

Improving Pupil Performance
Categorical Reading
Magnet Schools
Fort Drum

Transition Adjustment: The base includes the 2003-04 aids listed above which appear in the computerized aid estimates. For those districts for whom the new formula is less beneficial, districts are guaranteed between 85 percent and 95 percent of the 2003-04 consolidated base aids. The save-harmless percent is: $0.85 + (0.10 \times [(Need/Resource\ Index - 0.002)/(1.500 - 0.002)])$. The Need/Resource Index is the district's Extraordinary Needs Ratio (i.e., district Extraordinary Needs percent divided by the State average of 50.4 percent) divided by its CWR. District Foundation Aid is capped at a need-adjusted 5 percent over 2003-04 aids. The cap is: $0.05 \times (Need/Resource\ Index, \text{ but not less than } 1.0)$ with a minimum of 0.05 and a maximum of 0.15.

Support for Students with Disabilities

Excess Cost - Public: A district's 2002-03 Approved Operating Expense/TAPU for Expense is limited to a \$2,000 to \$8,800 range. The aid equals the allowed expense times the Aid Ratio ($1 - (.51 \times CWR)$, with a .25 minimum). Pupils are aided by district of attendance. A 1.30 weighting (down from 1.65) is provided for pupils who require special services or programs for 60 percent or more of the school day consistent with an Individualized Education Program (IEP). High Cost expense must exceed the lesser of \$10,000 or four times district AOE/TAPU for Expense. Declassification Aid is included based on 50 percent of the basic Public Excess Cost Aid per pupil. No district receives less than 95 percent of its 2003-04 aid per pupil however this cannot exceed 150 percent of formula aid. Excess cost aid for students in integrated settings is the product of excess cost aid per pupil multiplied by 70 percent (up from 50 percent) of the attendance of pupils who receive special education services or programs by qualified personnel, consistent with an IEP, for 60 percent or more of the school day in a general education classroom with non-disabled students.

Excess Cost - Private: Aid is for public school students attending private schools for students with disabilities. Net tuition expense is multiplied by the Aid Ratio ($1 - (.15 \times CWR)$, with a .5 minimum).

BOCES/Career and Technical Education

BOCES: BOCES Aid is included for administrative, shared services, rental and capital expenses. Save-harmless is continued. Approved expense for BOCES Administrative and Shared Services Aids is based on a salary limit of \$30,000. Aid is based on approved 2003-04 administrative and service expenses and the higher of the millage ratio or the Current AV/2002-03 TWPU Aid Ratio: $(1 - (.51 \times Pupil\ Wealth\ Ratio))$ with a .36 minimum and .90 maximum. The millage ratio factor remains 8 mills. Rent and Capital

Aids are based on 2004-05 expenses multiplied by the Current AV/2002-03 TWPU Aid Ratio with a .00 minimum and a .90 maximum. Payable aid is the sum of these aids.

Special Services Computer Administration: Computer Administration Aid equals the Current AV/2002-03 TWPU Aid Ratio $(1 - (.51 * \text{Pupil Wealth Ratio}))$ with a .30 minimum multiplied by approved expenses not to exceed the maximum of \$62.30 multiplied by the Fall 2003 public school enrollment with half-day kindergarten weighted at 1.0.

Special Services Career Education: Career Education Aid equals the Current AV/2002-03 TWPU Aid Ratio $(1 - (.51 * \text{Pupil Wealth Ratio}))$ with a .36 minimum multiplied by \$3,720, multiplied by the 2003-04 Career Education pupils including the pupils in business and marketing sequences weighted at 0.16.

Instructional Materials Aids

Textbook: Aid is based on 2003-04 approved textbook expenses up to the product of \$57.30 multiplied by the 2003-04 resident public and nonpublic enrollment.

Computer Software: Aid is based on 2003-04 approved computer software expenses up to the product of \$14.98 multiplied by the 2003-04 public and nonpublic enrollment.

Library Materials: Aid is based on 2003-04 approved library materials expenses up to the product of \$6.00 multiplied by the 2003-04 public and nonpublic enrollment.

Expensed-Based Aids

Building: Aid is equal to the product of the estimated approved building expenses multiplied by the highest of the 1981-82 through the 2001-02 AV/RWADA Aid Ratios or the Current AV/TWPU Aid Ratio. For projects approved by voters on or after July 1, 2000, expenses are multiplied by the higher of the Building Aid Ratio used for 1999-00 aid less .10 or the Current AV/TWPU Aid Ratio. Up to 10 percent of additional building aid is provided for projects approved by voters on or after July 1, 1998. Building expenses include certain capital outlay expenses, lease expenses, and an assumed debt service payment based on the useful life of the project and an average interest rate. Aid is not estimated for those prospective and deferred projects that had not fully met all eligibility requirements as of the November 15th database.

Building Reorganization Incentive: Building Reorganization Incentive Aid on capital outlay, lease and debt service is subjected to the same requirements as regular Building Aid. Aid is provided for reorganization projects which have been approved by voters within five years of district consolidation and where the project is contained in the five year capital reorganization plan.

Transportation: Aid is based upon estimated approved transportation operating expense plus capital expenses as reported to the Commissioner by November 15, 2003 (except in cases of emergency) multiplied by the selected Transportation Aid Ratio with a .9

maximum and a .065 minimum. The selected Aid Ratio is the highest of 1.263 multiplied by the State Sharing Ratio or $1.01 - (.46 * \text{Pupil Wealth Ratio})$ or $1.01 - (.46 * \text{Enrollment Wealth Ratio})$, plus a sparsity adjustment. The sparsity adjustment is the positive result of 25 minus the district's 2002-03 enrollment per square mile, divided by 58. The State Sharing Ratio is the greater of: $1.33 - (1.085 * \text{Combined Wealth Ratio})$ or $.915 - (0.56 * \text{Combined Wealth Ratio})$ or $0.53 - (0.238 * \text{Combined Wealth Ratio})$, with a maximum of 1.00.

Summer School Transportation: Transportation Aid for summer school programs is based on estimated approved transportation operating expense plus capital expenses as reported to the Commissioner by November 15, 2003 (except in cases of emergency) multiplied by the selected Transportation Aid Ratio with a .9 maximum and a .065 minimum. Aid is no longer prorated to remain within a \$5.0 million appropriation. This proposal combines summer school and regular transportation aid. Aid is shown separately in a subsequent table for the purpose of comparison to the base year.

Other State Aids

Grants for Overcrowded Schools: A \$31 million grant is proposed for New York City.

Limited English Proficiency: Aid is based on the 2003-04 LEP pupils multiplied by Foundation Operating Aid per pupil multiplied by 0.131.

Universal Pre-Kindergarten: The grant per pupil for unserved four-year olds is based on \$260 plus the product of \$4,000 multiplied by an adjusted State Sharing Ratio. For those districts that applied for a grant in 2003-04, the grant per pupil is save-harmlessed to the 2000-01 level. New York City's unserved count is phased-in at 66 percent; rest of State pupils are phased-in at the product of the unserved four-year olds multiplied by the October 2002 free and reduced price lunch percent. If the resulting count is at least 19.0, it is multiplied by 0.6320 to prorate the State total to \$215 million.

Regional Cost Adjustment

Based on Professional Salaries

2004-05 Regents Proposal

A regional cost index was generated using an approach first developed by education finance researchers in the state of Oregon. Their method recognized that school districts are often the dominant purchasers of college-educated labor in a community. As such, they exercise unusual market influence over the price they pay for such services – a phenomenon that may distort the usual “free-market” model. For this reason, teacher salaries were specifically *excluded* from the construction of the index, and selected professional salaries used as a proxy for the purpose of determining regional cost differentials.

The index includes 63 titles for which employment at the entry level typically requires a bachelor’s degree, and excludes teachers and categories that tend to be restricted to federal and state government. The wage data are provided by the Bureau of Labor Statistics and are drawn from the 2001 Occupational Employment Statistics (OES) Survey. The OES survey is an *establishment* survey and according to U.S. Department of Labor analysts, “wages and earnings tend to be more accurately reported in establishment surveys as they are based upon administrative records rather than recall by respondents.”²¹ Additionally, the survey is administered on a three-year cycle where each year one third of the establishments are surveyed and wage data are aggregated using a technique known as wage updating. Thus, the approximations of wages become increasingly accurate and are most precise in the third year. The RCI calculations are based on the third and most accurate data-year in the cycle. The triennial nature of the data means that the RCI need only be updated in those years in which the most accurate data in the cycle are available.²²

Method of Calculation

The index was calculated as the weighted median annual wage for a given labor force region divided by the weighted median annual wage for New York State (\$65,189). The index was truncated to three decimal places then divided by the North Country value of .731. Index values range from 1.000 for the North Country to 1.496 for the Long Island/New York City Region. The accompanying table lists the counties included in each labor force region. The weighted median wage for New York State and for each labor force region was calculated as follows:

²¹ “Interarea Comparisons of Compensation and Prices,” *Report on the American Workforce, 1997*, p. 73.

²² For a detailed discussion of regional cost and the construction of the Regents Cost Index see, *Recognizing High Cost Factors in the Financing of Public Education: A Discussion Paper and Update Prepared for the New York State Board of Regents SA (D) 1.1* (Sept., 2000) and the technical supplement entitled *Recognizing High Cost Factors in the Financing of Public Education: The Calculation of a Regional Cost Index* (Nov., 2000). Copies can be obtained by contacting the Fiscal Analysis and Research Unit at (518) 474-5213 or visiting their web site at <http://www.oms.nysed.gov/faru/articles.html>.

Weighted Median Hourly Wage = The sum of: (Title Weight * Median Annual Wage) for all 63 titles making up the index.

1. Title Weight = the number of employees in a given title statewide divided by the number of employees in the 63 titles statewide. Applying title weights to each labor force region prevents the index from being skewed by variations in occupational mix across regions.
2. Median Annual Wage = median annual wage rate reported for each title in each labor force region and statewide.

A separate index was created for each labor force region based on a subset of 46 of the 63 titles. These 46 occupations represent those titles for which there were no missing data in any of the labor force regions. This index was then used to estimate the median annual wage of titles with missing data in any given labor force region. This was done by multiplying the statewide median annual wage for the title with missing data by the 46-title index for the specific labor force region for which the salary data was missing.

For the purpose of index construction, the New York City and Long Island labor force regions were treated as a single labor force region. The New York City/Long Island weighted median wage was calculated as follows:

NYC/LI Weighted Median Wage = The sum of (Title Weight * NYC/LI Median Annual Wage) for all 63 titles making up the index

1. Title Weight = same as above.
2. NYC/LI Median Annual Wage = for each title:

$$\frac{[(\# \text{ of emp LI} * \text{LI median annual wage}) + (\# \text{ of emp NYC} * \text{NYC median annual wage})]}{(\# \text{ of employees in LI} + \# \text{ of employees in NYC})}$$

Regional Cost Index Counties in Labor Force Regions

Capital District

Albany
Columbia
Greene
Rensselaer
Saratoga
Schenectady
Warren
Washington

Central New York

Cayuga
Cortland
Onondaga
Oswego

Finger Lakes

Genesee
Livingston
Monroe
Ontario
Orleans
Seneca
Wayne
Wyoming
Yates

Hudson Valley

Dutchess
Orange
Putnam
Rockland
Sullivan
Ulster
Westchester

Long Island/New York City

Nassau
New York City
Suffolk

Mohawk Valley

Fulton
Herkimer
Madison
Montgomery
Oneida
Schoharie

North Country

Clinton
Essex
Franklin
Hamilton
Jefferson
Lewis
St. Lawrence

Southern Tier

Broome
Chemung
Chenango
Delaware
Otsego
Schuyler
Steuben
Tioga
Tompkins

Western New York

Allegany
Cattaraugus
Chautauqua
Erie
Niagara

Estimating the Additional Cost of Providing an Adequate Education

One of the traditional principles in school finance which has guided Regents Proposal development in past years has been a wealth and need equalization principle. This principle was designed to drive greater amounts of aid per pupil to school districts with limited fiscal capacity and high concentrations of pupils in need. In recent years, however, the focus of school finance, particularly in New York State, has begun to shift from equity to the provision of an adequate education.²³ By the term adequate education is meant the greater equalization of academic outcomes (not resource inputs) so that all children are provided the opportunity to receive an education, which will subsequently allow them to lead meaningful and productive adult lives.

Purpose

The purpose of this report is to describe the methodology that was used to estimate the likely additional expenditures needed by districts with lower academic performance to achieve educational outcomes that demonstrate that an adequate education is being provided.

Methodology

Three General Approaches. The literature identifies three basic empirical methods for identifying the cost of providing an adequate education.²⁴ These methods include:

- 1) Econometric analyses that use sophisticated statistical techniques to estimate the resource costs associated with different levels of school district performance.

Other strategies are designed to determine the instructional and other costs associated with districts that have already achieved acceptable or adequate performance levels. These approaches are typically of two types:

- 2) Expenditure per pupil analyses use strategies based upon the gross instructional (and related) expenses of school districts whose achievement meets accepted levels of performance and
- 3) Professional judgement models employ strategies in which the key instructional components needed to achieve a desired achievement standard are identified by

²³ The shift from equity to adequacy in school finance is a shift that has been driven by an emerging consensus around high minimum outcomes as the orienting goal of both policy and finance. This has been well described by William H. Clune. *The Shift From Equity to Adequacy in School Finance*. June 1993. See also the Report on Funding Equity and Adequacy, The State Aid Work Group (July, 1999), SA (D) 1.1. and Attachment.

²⁴ An excellent discussion of these three approaches is provided by James W. Guthrie and Richard Rothstein, "Enabling 'Adequacy' to Achieve Reality," in Helen F. Ladd, Rosemary Chalk, and Janet S. Hansen (eds), 1999, Equity and Adequacy in Education Finance, National Academy Press.

panels of experts, and then costed out. This latter method relies heavily upon the use of professional judgment as to what practices or resources are needed in order to achieve a desired level of academic success and is often referred to as the professional judgement model.

The Econometric Approach: Econometric approaches designed to estimate the cost of achieving a specified academic performance standard are complex, and require the use of two-stage least squares estimation methods. Ultimately, researchers estimate the direct effects or impacts of district characteristics, enrollment characteristics, wealth characteristics, and desired performance requirements on cost per pupil.

Once researchers have estimated these effects statistically, it is possible to insert the actual values of these variables for a given district into a prediction equation – while setting the performance level variable at a desired value – in order to estimate overall cost per pupil. The bottom line is this: when one statistically controls for district-level size and wealth characteristics, the higher the performance expected in the model, the higher the projected costs.

Unfortunately, the results of these more complex correlational approaches lack transparency, being very difficult to explain to lay people. As Guthrie and Rothstein have noted, “...when courts demand or legislatures determine that an adequate education be funded, they will require a calculation of this adequacy that seems intuitively reasonable, that is understandable to reasonably well-educated policymakers, and that can be explained to constituents.”²⁵ The comments of both Guthrie and Rothstein make clear their view that such an “ease-of-understanding” standard is not likely to be met by some of these more complex statistical approaches. In addition, many of the variables incorporated in these regression models are not particularly intuitive and do not relate specifically to instructional cost components; consequently, the results are often viewed as a “black box”. That is, while total costs at the school district level can be estimated by such econometric studies, how these total costs should be distributed by the state to the district or within the district to its various school buildings is beyond the scope of such studies.

The Academic Success Approach: Empirical estimates of the cost of an adequate education typically begin by investigating districts that are already achieving a desired state of academic performance. The most straightforward application of the empirical method starts with an examination of the spending patterns among all such districts to determine the average expenditure per pupil of the successfully performing districts. Since districts that perform at high levels often enjoy a very substantial wealth base, and therefore also spend at very high per pupils levels, concerns about technical efficiency are characteristic of this method.

A traditional response to the efficiency concern is to constrain the selection of districts to be analyzed. For example, the districts for which the average expenditure per pupil

²⁵Guthrie and Rothstein, “Enabling ‘Adequacy’ to Achieve Reality,” pp. 223.

of successful school districts that would be established could be restricted to the lowest spending 50 percent of such adequately performing districts.

A common variation of this approach is to empirically identify the staffing patterns of academically successful school districts. For example, pupil-teacher ratios, class sizes, number of guidance counselors are some of the patterns that could be examined in a study of this type. Based upon the judgements of SED analysts, normatively appropriate staffing patterns could then be identified and their associated costs calculated. As with the expenditure per pupil approach, it is possible to introduce efficiency into the calculation of cost by limiting the districts analyzed to those who appear to achieve adequate levels of performance at modest cost.

The Professional Judgement Approach: An important variant or extension of the Academic Success Approach relies more heavily on the use of consensus methods and professional judgment to identify the key instructional components to be costed out. Professional judgement methods consist of developing a consensus among professionals as to the appropriate staffing patterns and instructional components needed to achieve academic success. These components are then costed out based upon empirical data in order to estimate overall district-level costs. While this approach benefits politically from significant “buy-in” of the various expert-groups, such a method can be very time-consuming and would require at least one to two years to implement.

Three Critical Methodological Questions

For this study, each of the approaches described above was evaluated. However, in developing an estimate of the expenditures needed to ensure that all districts can provide the opportunity for an adequate education to all students, it was believed that the approach most transparent to the general public would be one based upon demonstrated academic success. The associated expenditures per pupil identified in these successful districts could be modified to reflect regional cost and the educational need of pupils. In short, the study would estimate the expenditures per pupil needed to achieve a specified academic outcome based on the spending patterns of districts actually achieving the specified level of academic performance.

As the methodology was developed, researchers answered three questions involving very specific operational definitions of major concepts. The questions were:

1. How should academic performance be measured?
2. How should pupil need be addressed? and,
3. Should there be a regional cost adjustment?

Measurement of Academic Performance

A critical methodological issue addressed by the study concerned the measurement of academic performance. New York State is presently implementing a series of tests

designed to measure academic performance at various grade levels. Examples of such examinations include:

- English Language Arts and Mathematics (fourth grade)
- English Language Arts and Mathematics (eighth grade)
- High School Regents examinations (e.g., English, mathematics social studies) students are likely to take in order to graduate.

Fourth Grade Tests. Fourth grade test results can be grouped into four categories or performance levels. These performance categories are:

- Level 1---Does not meet the standards;
- Level 2--- Meets some of the standards but not all;
- Level 3---Meets all standards; and,
- Level 4---Demonstrates proficiency.

High School Regents Examinations. Several important issues had to be addressed in using the results of high school examinations as components in the operational definition of an adequate education. First, results on Regents exams are given as a numerical score only. Scores are not automatically translated into levels of performance. Based on a review of the School District Report Card and the Annual Report to the Governor and Legislature on the Educational Status of the State's Schools the classification system shown below for high school Regents exams was developed by this study. The researchers concluded that these classifications best approximated the four-level scoring system that exists for elementary and middle school students.

The classifications are:

- Level 1 = a score of 0 to 54
- Level 2= a score of 55 to 64
- Level 3= a score of 65 to 84
- Level 4= a score of 85 to 100

Data on Regents High School examinations were collected for five tests. The tests were:

- Mathematics A;
- Global History;
- U.S. History;
- English; and,
- Earth Science.

A potential problem with using single-year test results, of course, is that academic outcomes in any one-year may be atypical and more reflective of a one-time phenomena rather than a typical example of academic outcomes over a multi-year period. This traditional critique was addressed for this study by using a three-year average of test results. Test results used in the study were from the 1999-00, 2000-01 and 2001-02 school years.

Ultimately, to make a cost estimate, adequate education needs to be defined in quantitative terms. In establishing its definition, the study had two basic choices. It could use either test scores or the percent of test takers achieving a specified educational result. Use of either measure would be valid. However, since the Court of Appeals in the Campaign for Fiscal Equity court ruling indicated that every child should be provided with an adequate education, it would appear that a threshold measure which captures the percent of test takers achieving a specified standard would be the most appropriate measure to use.

Upon reaching this decision, the study addressed three questions:

1. What level of achievement should be reached?
2. What percent of students should attain the specified outcome? And,
3. What tests should be used?

If students in a district are receiving an adequate education, it would seem that the vast majority of its students should be capable of achieving the Regents standards. This means, on whatever tests one uses for defining academic outcomes, the vast preponderance of students should be scoring at the equivalent of level 3 or level 4. So for this study, it was believed that if a district had on average 80 percent of its students scoring at level 3 or higher on the specified tests, the district would be considered as providing an adequate education.

Finally, the study had to determine which specific examinations would be used in developing the cost estimate. It was decided:

- To use both fourth grade tests in the definition of an adequate education. This decision was made primarily because only the central high districts do not have a fourth grade. Only one district was lacking fourth grade data. Thus almost every district would have fourth grade data, which would be a strong indicator of whether students had or had not acquired a sufficiently strong educational foundation to insure that high school graduation requirements were likely to be met; and,
- To use the test results of the five high school examinations previously listed, since passing of these or similar tests is required for high school graduation.

Missing Data. An important issue from a methodological perspective was how to treat a district if it were missing data. Missing data could occur because of several factors. These factors include:

1. Grade configuration of a district. A K-6 district would not have eighth grade or high school results. Conversely, a central high school district would not have any fourth grade results. In a sense, the district wasn't missing data as much as the data were non-existent for the district. Grade configuration was a major factor in missing data. For example, of the five districts without any data for either the fourth grade tests, four were central high schools.
2. Data were truly missing. No test data exists for one district. Other data may be missing due to administrative error or because a particular test was not given in a district for one or more years.

Based on these circumstances, the following decisions were made:

- If absolutely no test data existed for a district on any of the tests used, it would not be included in the study. Kiryas Joel was the only district not included in the study for this reason.
- If a district had some test data, the determination concerning provision of an adequate education would be based on existing data.

Operational Definition of an Adequate Education

Based on all of the considerations described above, an adequate education was operationally defined as a district:

With a simple, unweighted average of 80 percent of its test takers scoring at Level 3 or above on seven examinations (Fourth Grade English Language Arts, Fourth Grade Mathematics, high school Mathematics A, Global History, U.S. History, English and Earth Science) in 1999-00, 2000-01 and 2001-02. The reader will note that, given this operational definition, a district could have less than 80 percent of its test takers with a score below Level 3 on one or more of the individual tests and could still be found as providing an adequate education.

Although this definition does not meet the Regents goal that all students achieve the standards, it does identify districts where the opportunity to achieve exists. Thus this operational definition can be viewed as a reasonable compromise.

Student Need

If student need is believed to be an important issue in understanding academic performance two methodological questions concerning the quantification of need must be addressed. The questions are:

- What type(s) of students best reflect student need?
- What is the appropriate additional weighting(s) to give students so as to quantify the additional educational services such students require if they are to succeed?

What Pupil Count Should be Used to Measure Need? An assortment of measures could be used to estimate student need. Each of the possible counts possess strengths and weaknesses. A common measure used to identify student need among the 50 states is the percent of students eligible for a free and reduced price lunch. Indeed, in New York State, the K-6 percent of students eligible for a free or reduced price lunch is one of the pupil counts used to allocate a supplement to Operating Aid to help districts meet the needs of at risk students, known as Extraordinary Needs Aid. For these reasons, the study concluded student need could best be measured by the percent of K-6 pupils eligible for a free and reduced price lunch.

The count of K-6 students eligible for a free or reduced price lunch, however, may be subject to wide variation in some districts. For this reason, average counts reflecting three school years were used. Such an average would minimize the possibility of grossly misidentifying a district's poverty rate due to a unique circumstance. K-12 districts that did not provide a school lunch program in 1999-00, 2000-01 and 2001-02 were given a K-6 free and reduced percent of zero. Central high school districts were given the average count of their component school districts.

What Should Be the Additional Weighting for Need? To incorporate "need" into a student count requires the development of an additional weighting. In school finance, the term additional weighting is usually associated with the quantification of the extra costs associated with providing a specified service. These extra costs are then translated into an additional weighting. For example, secondary students (grades 7-12) in New York State are provided an additional weighting of 0.25. This means a secondary pupil in certain student counts used in state aid formulas has a calculated value of 1.25 ($1.0 + 0.25$).

The additional weighting selected is critical in determining the cost of an adequate education. This immediately raises the question of what is the appropriate additional weighting for need. In seeking guidance for a suitable need weighting, we have two sources - existing practice and the research literature.

The legislation of other states concerning the additional weighting of poverty or at-risk pupils is another source to consider in determining the appropriate additional weighting for such students. Carey described the practices of states as of the 2001-02 school

year⁴ and found that the funding level for poverty-based education aid varied widely among the states. In his view this was often more a reflection of available resources than of the actual costs of educating such students.

Since the 2001-02 school year, several states have taken legislative action concerning poverty or at-risk pupils. Maximum additional weightings enacted for poverty or at-risk pupils have ranged from 0.25 to 1.0. In New Hampshire and Wyoming the concept of a variable additional weighting for need based on the concentration of poverty pupils has been introduced.

Although a wide range exists in the research literature in terms of the appropriate additional weighting for student need, much of the literature suggests an additional weighting of at least 1.0. Indeed, in September 2003 the State Education Department released a study on educational need, expenditures per pupil and educational achievement in which student need was given an additional weighting of 1.0.

For these reasons it was decided that pupils would be given an additional weighting of 1.0 for poverty (based on 1999-00, 2000-01 and 2001-02 K-6 students eligible for free and reduced price lunch).

Cost Adjustment

In recent years, the Board of Regents in its State Aid proposal has also endorsed the concept of adjusting State Aid to reflect the variation in regional cost found to exist in New York State. It has done so due to the dramatically different costs associated with educating students in various geographic regions of the State.

To properly reflect these differing educational costs, it was decided to incorporate regional cost into the cost estimates. The cost indices used in calculating the estimate are the Regional Cost Indices (RCI)⁷ calculated for the 2004-05 State Aid Proposal of the Board of Regents. The RCIs were calculated based upon labor force regions as these have been defined by the New York State Department of Labor. The RCIs calculated for these labor force regions have been normed to a “North Country standard” and are described in Table 1 below:

Table 1: Regional Cost Indices for Labor Force regions in New York State:

North Country	1.000
Mohawk Valley	1.016
Southern Tier	1.061
Western NY	1.080
Central NY	1.132

⁴ Kevin Carey. State Poverty-Based Education Programs: A Survey of Current Programs and Options for Improvement. Center on Budget and Policy Priorities. 2002. <http://www.cbpp.org>

⁷ Based upon professional wage data provided by the Department of Labor.

Capital District	1.168
Finger Lakes	1.181
Hudson Valley	1.359
Long Island/New York City	1.496

Expenditures Per Need-Adjusted Pupil

The final approach was to develop an "expenditure per need adjusted pupil" model, which compared the expenditure pattern of districts with acceptable academic performance to districts with educational performance below the stated standard. Expenditures were defined as general education instructional expenditures⁸ (including an estimated amount for fringe benefits) as adjusted by the Regents Regional Cost Index calculated in 2003. The pupil count was the same count used for general education instruction as defined in statute for the Fiscal Supplement to the School Report Card.⁹ This count was then adjusted to reflect student need by weighting the free and reduced price lunch count at 1.0.

A graph of this prototype is shown in Figure 1. Under this approach, the first step was to identify districts providing an adequate education. As noted earlier, such districts were defined as districts in which an average of 80 percent of the students taking the seven previously identified examinations had a score that was at Level 3 or above. Districts in which on average 80 percent of the students tested did not score at levels 3 or 4 were identified as districts which may need to increase instructional expenditures in order to improve academic performance.

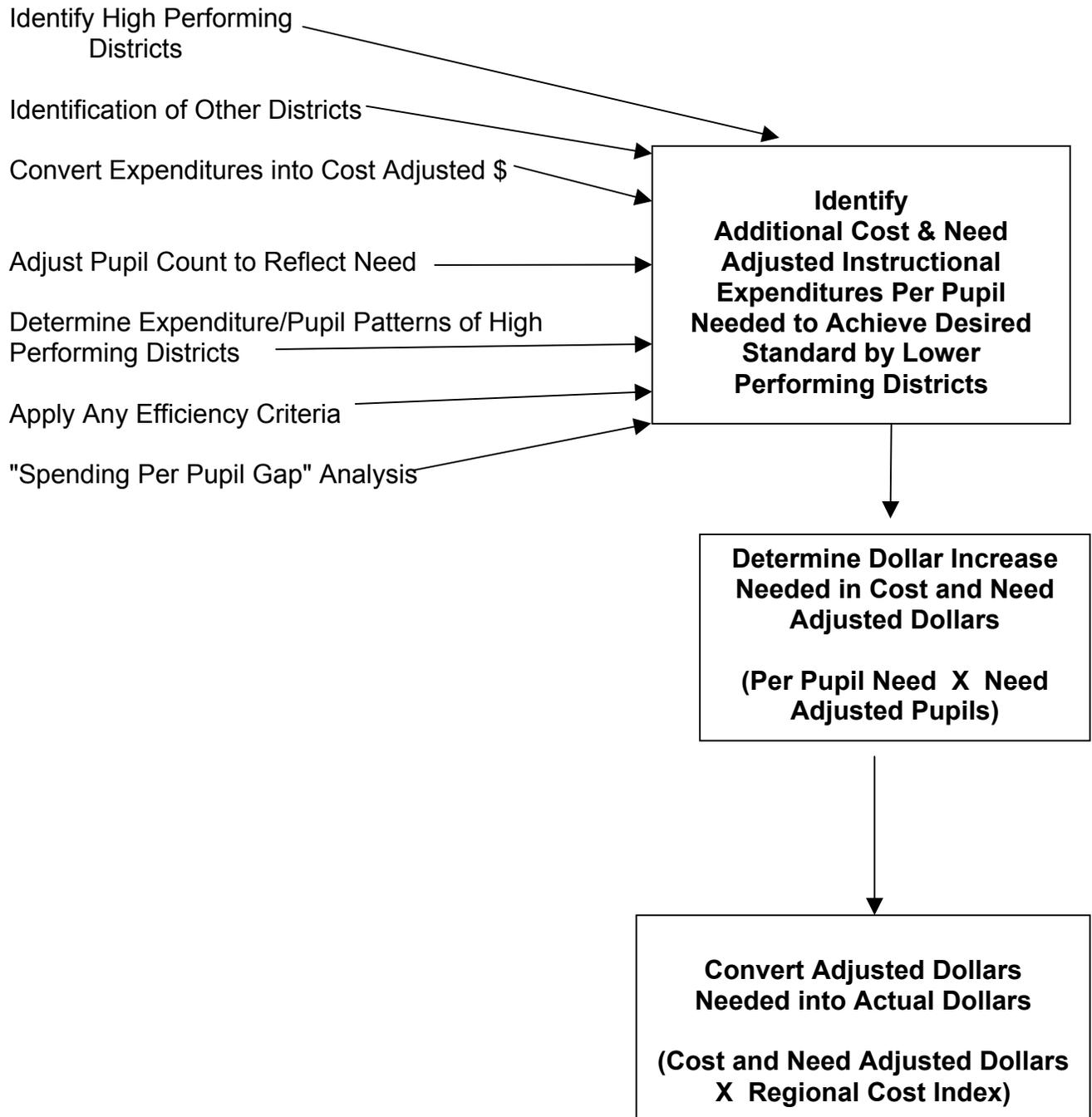
The next step in the methodology was to calculate the mean need and cost-adjusted instructional expenditure per pupil for all districts classified as providing an adequate education. These districts were then ranked from high to low on need and cost-adjusted instructional expenditures per pupil. At this point an efficiency measure was introduced. The mean expenditure per pupil was calculated for the lower half of these districts, based on per-pupil expenditures.

Thus, the procedures followed by the study to estimate the amount of additional instructional expenditures required to achieve adequacy can be figuratively expressed as shown in Figure 1.

⁸ Instructional expenditures include teacher salaries, other instructional salaries, BOCES, tuition, equipment and other expenditures.

⁹ Average daily membership plus resident students attending other districts plus resident students attending charter schools plus incarcerated youth, as applicable.

Figure 1: Estimating the Increase in Instructional Expenditures Needed So That the Opportunity for an adequate Education is Provided by All Districts



**SUMMARY OF AIDS AND GRANTS AS REQUESTED IN
THE 2004-05 REGENTS PROPOSAL ON SCHOOL AID**

Aid Category	2003-04 School Year	2004-05 School Year	Change Amount	Percent
	(-----Amounts in Millions----- -----)			
I. Foundation Aid				
Operating Aid/Foundation Aid	\$6,840.63	\$13,209.50	\$6,368.87	93.10
Gifted & Talented	0.00	0.00	0.00	NA
Operating Standards	0.00	0.00	0.00	NA
Academic Support	0.00	0.00	0.00	NA
Tax Effort	0.00	0.00	0.00	NA
Tax Equalization	0.00	0.00	0.00	NA
Tax Limitation	29.93	0.00	-29.93	-100.00
Extraordinary Needs	703.12	0.00	-703.12	-100.00
Summer School	36.18	0.00	-36.18	-100.00
Early Grade Class Size Reduction	138.31	0.00	-138.31	-100.00
Minor Maintenance & Repair	49.97	0.00	-49.97	-100.00
Educationally Related Support Services	71.08	0.00	-71.08	-100.00
Computer Hardware	28.10	0.00	-28.10	-100.00
Operating Growth	29.93	0.00	-29.93	-100.00
Operating Reorganization Incentive	17.53	0.00	-17.53	-100.00
Full Day Kindergarten Conversion	7.57	0.00	-7.57	-100.00
Teacher Support	67.48	0.00	-67.48	-100.00
Small Cities	81.88	0.00	-81.88	-100.00
Improving Pupil Performance (IPP)	66.35	0.00	-66.35	-100.00
Categorical Reading	63.95	0.00	-63.95	-100.00
Magnet Schools	135.80	0.00	-135.80	-100.00
Fort Drum	2.63	0.00	-2.63	-100.00
Plus: Cap on Losses	0.00	382.74	382.74	NA
Less: Cap on Increases	0.00	-4,714.42	-4,714.42	NA
Sum	8,370.43	8,877.82	507.39	6.06
II. Support for Students with Disabilities				
Public Excess Cost Aid	2,198.81	2,162.49	-36.31	-1.65
Private Excess Cost Aid	187.42	204.49	17.07	9.11
Sum	2,386.22	2,366.98	-19.24	-0.81
III. BOCES/Career and Technical Education Aid				
BOCES	505.05	519.87	14.83	2.94
Special Services Computer Administration	38.35	41.12	2.77	7.23
Special Services Career Education	94.02	119.78	25.76	27.40
Sum	637.42	680.78	43.36	6.80
IV. Instructional Materials Aid				
Computer Software	45.88	46.40	0.51	1.12
Library Materials	19.26	19.58	0.32	1.67
Textbook	189.01	188.65	-0.36	-0.19
Sum	254.16	254.63	0.47	0.19

V. Expense-Based Aids

Building Aid	1,194.60	1,348.45	153.85	12.88
Building Reorganization Incentive	12.73	0.94	-11.80	-92.65
Capital Outlay/Transition Grant Adjustment	11.44	0.00	-11.44	-100.00
Transportation	1,071.94	1,227.21	155.26	14.48
Summer Transportation	5.00	10.81	5.81	116.22
Sum	2,295.71	2,587.40	291.69	12.71

VI. Other State Aids

Overcrowded Schools	0.00	31.00	31.00	NA
Limited English Proficiency	77.41	119.84	42.43	54.81
Universal Prekindergarten	201.94	214.97	13.03	6.45
Sum	279.35	365.81	86.46	30.95
Calculated Aids Subtotal	14,223.29	15,133.42	910.13	6.40

VII. All Other Aids

Bilingual Education	11.20	11.20	0.00	0.00
Education of OMH/OMR Pupils	25.00	26.00	1.00	4.00
Homeless	5.38	5.68	0.30	5.58
DFY Transportation	0.23	0.23	0.00	0.00
Employment Preparation Edn. (EPE)	84.00	84.00	0.00	0.00
Incarcerated Youth	14.00	14.50	0.50	3.57
BOCES Spec Act, <8, contract	0.68	0.68	0.00	0.00
Bus Driver Safety Training Grants	0.40	0.40	0.00	0.00
Less: Local Contribution due for certain students	-18.00	-18.00	0.00	0.00
Comptroller Audits	0.25	0.25	0.00	0.00
Native American Building	2.00	2.00	0.00	0.00
Roosevelt	6.00	6.00	0.00	0.00
Special Act Districts	2.20	2.20	0.00	0.00
Mentor Teacher	4.00	4.00	0.00	0.00
Teacher Centers	30.00	30.00	0.00	0.00
Teachers for Tomorrow	20.00	20.00	0.00	0.00
County Vocational Ed. Extension Boards (CVEEB)	0.92	0.00	-0.92	-100.00
Learning Technology Grants	3.29	0.00	-3.29	-100.00
Shared Services Savings Incentive	0.20	0.00	-0.20	-100.00
Tuition Adjustment Aid	1.18	0.00	-1.18	-100.00
Urban-Suburban Transfer	1.13	0.00	-1.13	-100.00
Prior Year Adjustments	90.00	65.00	-25.00	-27.78
Sum	284.04	254.13	-29.91	-10.53
Combined Total	\$14,507.33	\$15,387.54	\$880.22	6.07

ANALYSIS OF AID CHANGES UNDER THE 2004-05 REGENTS PROPOSAL

TOTAL COMPUTERIZED AIDS

A. BY NEED/RESOURCE INDEX DECILES WITHOUT BIG 5

Decile	Need/Resource Index		2003-04 Enrollment	2004-05 AID	2003-04 BASE	Change	Percent Change	% of Total Increase	Change per pupil
	Decile Range								
1	0.000	0.045	174,800	303,240,125	307,107,684	(3,867,559)	-1.26	-0.42	(22)
2	0.046	0.154	247,430	647,909,970	652,723,466	(4,813,496)	-0.74	-0.53	(19)
3	0.155	0.352	243,387	913,549,885	915,624,906	(2,075,021)	-0.23	-0.23	(9)
4	0.353	0.673	243,120	1,078,288,789	1,038,053,987	40,234,802	3.88	4.41	165
5	0.674	1.014	199,030	972,112,653	937,396,387	34,716,266	3.70	3.80	174
6	1.015	1.402	125,793	760,840,940	716,512,008	44,328,932	6.19	4.86	352
7	1.403	1.931	127,199	846,722,756	788,559,736	58,163,020	7.38	6.37	457
8	1.932	2.522	137,247	1,059,408,681	977,988,080	81,420,601	8.33	8.92	593
9	2.523	3.253	87,208	747,414,755	681,984,540	65,430,215	9.59	7.17	750
10	3.254	7.779	109,989	1,006,536,052	915,494,719	91,041,333	9.94	9.98	828
STATE (Excl. BIG 5)			1,695,203	8,336,024,606	7,931,445,513	404,579,093	5.10	44.33	239
New York City			1,039,848	5,669,647,199	5,269,434,916	400,212,283	7.59	43.86	385
Big 4 Cities			132,028	1,127,744,165	1,019,976,730	107,767,435	10.57	11.81	816
STATE			2,867,079	15,133,415,970	14,220,857,159	912,558,811	6.42	100.00	318

B. BY NEED/RESOURCE CAPACITY CATEGORY

Need/Resource Capacity	2003-04 Enrollment	2004-05 AID	2003-04 BASE	Change	Percent Change	% of Total Increase	Change per pupil
NYC	1,039,848	5,669,647,199	5,269,434,916	400,212,283	7.59	43.86	385
Big 4	132,028	1,127,744,165	1,019,976,730	107,767,435	10.57	11.81	816
Urban/Suburban High Need	235,343	1,646,164,297	1,510,480,409	135,683,888	8.98	14.87	577
Rural High Need	179,892	1,528,026,084	1,401,757,715	126,268,369	9.01	13.84	702
Average Need	878,538	4,307,829,667	4,157,467,045	150,362,622	3.62	16.48	171
Low Need	401,430	854,004,558	861,740,344	(7,735,786)	-0.90	-0.85	(19)
STATE	2,867,079	15,133,415,970	14,220,857,159	912,558,811	6.42	100.00	318

ANALYSIS OF AID CHANGES UNDER THE 2004-05 REGENTS PROPOSAL
TOTAL COMPUTERIZED AIDS WITHOUT TRANSPORTATION, BUILDING AND BUILDING INCENTIVE

A. BY NEED/RESOURCE INDEX DECILES WITHOUT BIG 5

Decile	Need/Resource Index		2003-04	2004-05	2003-04	Change	Percent	% of Total	Change		
	Decile Range		Enrollment	AID	BASE		Change	Increase	per pupil		
1	0.000	0.045	174,800	240,457,353	251,896,102	(11,438,749)	-4.54	-1.98	(65)		
2	0.046	0.154	247,430	499,147,843	529,343,029	(30,195,186)	-5.70	-5.22	(122)		
3	0.155	0.352	243,387	693,682,037	733,479,223	(39,797,186)	-5.43	-6.88	(164)		
4	0.353	0.673	243,120	840,724,248	825,479,529	15,244,719	1.85	2.64	63		
5	0.674	1.014	199,030	773,545,089	764,041,879	9,503,210	1.24	1.64	48		
6	1.015	1.402	125,793	603,224,311	578,730,770	24,493,541	4.23	4.23	195		
7	1.403	1.931	127,199	682,075,312	649,838,762	32,236,550	4.96	5.57	253		
8	1.932	2.522	137,247	877,898,869	813,216,891	64,681,978	7.95	11.18	471		
9	2.523	3.253	87,208	618,750,707	562,530,510	56,220,197	9.99	9.72	645		
10	3.254	7.779	109,989	842,766,786	763,039,606	79,727,180	10.45	13.78	725		
STATE (Excl. BIG 5)			1,695,203	6,672,272,555	6,471,596,301	200,676,254	3.10	34.69	118		
New York City				1,039,848	4,834,863,442	4,553,657,012	281,206,430	6.18	48.62	270	
Big 4 Cities			1.315	4.357	132,028	1,007,881,612	911,332,123	96,549,489	10.59	16.69	731
STATE			2,867,079	12,515,017,609	11,936,585,436	578,432,173	4.85	100.00	202		

B. BY NEED/RESOURCE CAPACITY CATEGORY

Need/Resource Capacity	2003-04	2004-05	2003-04	Change	Percent	% of Total	Change
	Enrollment	AID	BASE		Change	Increase	per pupil
NYC	1,039,848	4,834,863,442	4,553,657,012	281,206,430	6.18	48.62	270
Big 4	132,028	1,007,881,612	911,332,123	96,549,489	10.59	16.69	731
Urban/Suburban High Need	235,343	1,423,798,253	1,320,689,527	103,108,726	7.81	17.83	438
Rural High Need	179,892	1,228,589,766	1,129,834,388	98,755,378	8.74	17.07	549
Average Need	878,538	3,356,687,812	3,316,990,529	39,697,283	1.20	6.86	45
Low Need	401,430	663,196,724	704,081,857	(40,885,133)	-5.81	-7.07	(102)
STATE	2,867,079	12,515,017,609	11,936,585,436	578,432,173	4.85	100.00	202