

Comparison of School Aid Reform Proposals for New York State

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I. Introduction:

In June, 2003 the New York State Court of Appeals altered the education-finance landscape in New York with its ruling in *Campaign for Fiscal Equity v. New York*. This ruling called for “[r]eforms to the current system of financing school” designed to ensure “that every school in New York City would have resources necessary for providing the opportunity for a sound basic education.”² The ruling addressed a wide range of issues, but emphasized several key points from the standpoint of school finance reform: 1) the school finance system is the responsibility of the state government; 2) the standard set by the Court is a “*meaningful high school education*,” 3) reforms of the current system should provide students for the opportunity to reach this standard; and 4) the opportunity for a sound basic education must “*be placed within the reach of all students*,” including those students that are disadvantaged because of their socio-economic circumstances.

In other words, the Court was requiring the state to develop a school finance system to provide students the opportunity to graduate from high school with a meaningful education. In developing this system, the state confronts a number of choices. The objectives of the first part of this comparison are to discuss the key issues that are involved in developing an operating aid formula to support a performance adequacy standard. We review some of the methods that are available for estimating the cost of an adequate education, and highlight design choices in developing an operating aid system.

Following the narrative discussion of design choices are detailed comparisons of five different school reform proposals: Syracuse University proposal,³ Midstate School

¹ We are grateful to Michael Rebell, Brandon Gordon, Deborah Cunningham, and Roman Hedges for helpful comments. We are solely responsible for any errors or omissions in the description and comparison of school aid proposals. The views expressed in the analysis do not represent the position of Syracuse University or the Center for Policy Research.

² *Campaign for Fiscal Equity v. New York*, 2003. This quotation is from page 51 of the manuscript version of the opinion (available at www.cfequity.org) and the quotation on the next page is from page 50.

³ William Duncombe, Anna Lukemeyer, and John Yinger. 2002, “Financing an Adequate Education: A Case Study of New York.” *Developments in School Finance 2001-02*. Washington, DC: National Center for Education Statistics, NCES 2003-403: 127-154. (available on web: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2003403>)

Finance Consortium proposal,⁴ the Regents Proposal on School Aid for 2004-05,⁵ the Campaign for Fiscal Equity “Adequacy Study”, and state aid proposal,⁶ and the Final Report of the Commission on Education Reform (Zarb Commission).⁷ These proposals for selected for review, because they either have received significant attention in the media, and/or provide a detailed recommendation on costing out adequacy and designing an operating aid formula. Over the last several years a number of other aid reform proposals for New York have also been developed. These were deemed similar enough to the proposals we have considered or not of sufficient detail to provide a meaningful comparison.⁸

II. Design Choices:⁹

A. Estimating cost of adequacy:¹⁰

The process of developing an estimate of the cost of adequacy involves at least five steps. The objective of this section is to highlight the decisions that need to be made in each step and the choices available.

- 1) **Determining expenditure categories used in estimating cost of adequacy:** All of the methods used to calculate the cost of adequacy include some measure of actual spending as part of the calculation. A key step in using spending data is determining what expenditure categories to include. This choice should be linked to the types of programs to be funded by operating aid. In defining operating spending, total expenditure is the base and various

⁴ The Midstate School Finance Consortium, 2004, “The MSFC Proposal to Fund New York State Public Schools,” East Syracuse: Midstate. (website: www.midstateonline.org).

⁵ Board of Regents, 2004, “Regents Proposal on State Aid to School Districts for 2004-05,” Albany: New York State Education Department, January 2004. (available on web: <http://www.emsc.nysed.gov/stateaidworkgroup/>).

⁶ AIR/MAP, 2004, *The New York Adequacy Study: Determining the Cost of Providing All Children in New York an Adequate Education*, Volumes I and II (March 2004); Campaign for Fiscal Equity, “Making the Right to a Sound Basic Education a Reality,” (website: www.cfequity.org).

⁷ Commission on Education Reform, 2004, *Final Report*, Albany: author, March 29, which used analysis in Standard & Poor’s, 2004, “Resource Adequacy Study for the New York State Commission on Education Reform.” New York City: S&P, March. (<http://www.sp-ses.com/>)

⁸ The Fiscal Policy Institute developed an aid reform proposal in 1999 that was influential in the development of the Midstate Proposal (<http://www.fiscalpolicy.org/downloads/Newcfe.doc>). NYASBO (<http://www.nyasbo.org/Government/Reports/Holdings/A%20New%20Horse/anehorse.pdf>) and New York State Association of Small City School Districts (<http://scsd.neric.org/1>) also have aid reform proposals with a broad set of recommendations for reform.

⁹ For a detailed review of design choices in developing school finance systems, see John Yinger, 2004, “State Aid and the Pursuit of Educational Equity: An Overview.” In J. Yinger (ed.) *Helping Children Left Behind: State Aid and the Pursuit of Educational Equity*. Cambridge, MA: MIT Press.

¹⁰ For a detailed discussion of the process of estimating the cost of adequacy, see William Duncombe, Anna Lukemeyer, and John Yinger, 2004. “Education Finance Reform in New York: Calculating the Cost of a “Sound Basic Education” in New York City.” *Center for Policy Research Policy Brief*, #28, Syracuse, NY: Syracuse University (<http://www-cpr.maxwell.syr.edu/pbriefs/pb28.pdf>).

categories are subtracted from it. Some categories that might be removed include:

- a. transportation
- b. debt service
- c. capital expenditures (have to be careful not to double count capital financed with debt and debt service)
- d. possibly special education expenditures (or tuition provided to students in out-of-district schools)

This spending definition should include fringe benefits for staff, central administration spending, and operating and maintenance spending, because operating aid should fund general government operations.

- 2) **Choosing a standard:** Any method to estimate the cost of adequacy must identify some standard that is viewed as meeting the court mandate of a “meaningful high school education.” Components of that standard need to include clear definitions of:
 - a. **Measures:** Identification of measures to include in the standard. Some candidates in New York could include:
 - i. Passage of 5 Regent exams required for high school graduation,
 - ii. Dropout rates
 - iii. Passage of intermediate exams (4th and 8th grade ELA and Math)
 - iv. Attendance rates
 - v. Other more holistic assessments, such as student portfolios
 - b. **Identification of minimum level of performance by students.** For New York examples could include:
 - i. Regents exams: score of 65 (55) or above is passing
 - ii. 4th and 8th grade ELA (reach Level 3 or 4)
 - iii. Performance index used by SED, which has a scale of 0 to 200. Regents scores of 65 or higher, or levels 3 or 4 on 4th and 8th grade math and ELA exams is counted as 200. Regent Exams scores of 55 to 64, or level 2 on 4th or 8th grade exams is counted as 100.
 - c. **Identification of minimum level of performance by schools** or school districts. The key issue here is what level of student success is considered a realistic standard for the state to use in building its finance system. Some of the factors to be considered include:

- i. Will passage of alternative degree (GED) be considered acceptable and for what share of students?
- ii. What share of special education students will be exempt from state testing requirements? For those taking the exams, will they have the same standard?
- iii. Will 100 percent of regular students be expected to pass the Regents exams, or will a lower passing rate (e.g., 90%) be considered an acceptable standard?
- iv. What target percent of students reaching proficiency levels on the intermediate level is considered acceptable?

3) Estimating the cost in a typical district: There have generally been three approaches to estimating the cost of adequacy in a typical district.

- a. **Cost function:** This approach collects information on spending, student performance, and other variables for all the school districts in the state and then uses statistical procedures to determine how spending levels vary with student performance indicators, controlling for these other variables. The cost of a sound basic education is then set at the level of spending required to meet a selected performance standard in a school district with average characteristics.
- b. **Professional judgment:** The professional judgment approach asks educators to draw on their experience to determine the staffing and program needs that a typical school requires to achieve a given set of student performance standards. Personnel costs are estimated using salaries in the average district. Central administration and non-instructional expenditures in the average district are sometimes added to the total.
- c. **Successful schools:** This approach identifies schools that meet the defined standard, and uses per pupil spending in these schools as a measure of the cost of adequacy. In some cases, these spending calculations are based only on districts with spending below the median for school districts meeting the standard. This step is intended to identify “cost-effective” districts, but it does not control for any variables other than cost-effectiveness that might influence school district spending.

Comment: The cost function and professional judgment approach can be designed to cost out adequacy for an average district at any standard. This is not the case for the successful schools approach. The higher the standard, the more atypical are the successful school districts in terms of property wealth, income and student needs. The result is that the cost of reaching adequacy using successful schools does not appear to increase very much as the standard increases. This is purely a result of the fact that

the group of “successful school districts” becomes more and more selective as the standard is increased. In addition, the assumption that the bottom 50% of districts meeting the standard are cost effective assumes that there is nothing else besides efficiency different between districts that would result in higher spending (e.g., size of district). The successful schools approach glosses over the complexity of estimating school district efficiency.¹¹

- 4) **Adjusting costs for higher resource prices:** Educational costs can vary across school districts due to differences in wage costs and construction, and land costs. Of particular importance for an operating aid program are differences in the salaries districts must pay to attract similar teachers. Factors outside district control that can affect teacher salaries include: cost of living differences, working conditions in the school district and school (e.g., safety and discipline problems), labor market conditions that can affect wages in the area (e.g., unemployment rate), and other amenities of the area that can make an area more or less attractive (e.g., crime rates). Ideally, geographic cost of education index would reflect these factors. Four approaches have been used to estimated geographic cost differences:¹²
 - a. **Cost function:** Cost functions should include measures of key resource prices, such as teacher salaries. The results of the cost function should be used to construct an overall cost index for education, which controls for differences in resource prices, student needs and scale. It is possible to take the results from the cost function and construct a separate teacher wage index. However, this index will not reflect the impact of working conditions on required wage rates to attract similar quality teachers, because the student need variables are held constant. Instead, it probably will reflect primarily cost of living differences.
 - b. **Cost-of-living index:** This approach estimates the price differences for a “market basket” of goods and services purchased by a typical consumer. This approach *does not* price the costs of a typical bundle of resources used by school districts. The states of Florida, Colorado, and Wyoming presently use this approach.

¹¹ See Robert Bifulco and William Duncombe, 2002, 2002. “Evaluating School Performance: Are We Ready for Prime-Time?” In William J. Fowler (ed.), *Developments in School Finance, 1999-2000*. Washington, DC: National Center for Education Statistics, NCES 2002-316: 11-28. (<http://nces.ed.gov/pubs2002/2002316.pdf>)

¹² For a good summary of approaches see William Fowler, and David Monk, 2001, *A Primer for Making Cost Adjustments in Education*. NCES 2001-323. Washington DC: U.S. Department of Education, Office of Educational Research and Improvement.

- c. **Private wage index:** This approach estimates average wages in the private sector, preferably in private sector occupations that are comparable to teaching. Occupational wage data is only available at the level of labor market areas (typically several counties). County level private wage data is available by industrial sector but not by occupation. Private wage data does not account for working condition differences across school districts. The regional cost index developed by SED is an example of this type of index. Other states using this approach are Ohio, and Massachusetts.
- d. **Hedonic wage model:** This is the most direct method for examining the determinants of teacher salaries. These models estimate the relationship between teacher salaries and factors within district control (e.g., teacher characteristics, school size), and factors outside district control (e.g., cost of living, types of students, district size, and local labor market conditions). A teacher cost index is calculated using the factors outside district control. The most frequently cited example is the teacher cost index developed for NCES by Jay Chambers.¹³

Comment: The hedonic salary approach is the most direct method for estimating the impact of differences in cost-of-living, working conditions, labor market conditions, and local amenities on the salaries to attract teachers with similar characteristics to a school district. However, teacher hedonic salary models often have difficulty estimating the impact of harsh working conditions (particularly high student needs) on required teacher salaries. In addition, these indices often exhibit limited variation, because they hold constant the major factors in teacher salary schedules (experience and education). The teacher cost index developed for CFE by Jay Chambers varies from 0.80 to 1.09, with most of the index values between .86 and 1.06. In the case of the AIR/MAP geographic cost index developed for New York, the statistical models used in developing this index do not include any measures of student needs that might reflect the harsher working conditions in high poverty school districts. The overall cost of education index developed with a cost function accounts for working conditions as part of the overall cost of education index.

- 5) **Determining the additional costs for high need students:** The key step in linking district resources to student performance in many districts is to determine the impact that student needs have on the resources required to bring students up to standards. Thirty years of academic research has established the importance that student, family, and peer characteristics have on student performance in school. Often this relationship is expressed as “pupil weights,” which indicate the percent increase in spending required to

¹³ Jay Chambers, 1996, “Public School Teacher Cost Differences Across the United States: Introduction to a Teacher Cost Index (TCI),” W. Fowler (ed.) *Developments in School Finance, 1995*, Washington, DC: NCES.

bring a disadvantaged student up to a given performance standard. For example a poverty weight of 1 indicates that a student living in poverty is twice as expensive as non-poverty student.

Any attempt to calculate the added costs of disadvantaged students faces three challenges: (1) it is difficult to untangle the effects of the many different factors that influence school spending and student performance; (2) there exists little scientific evidence about the effectiveness of various programs in boosting the performance of disadvantaged students; and (3) examples of high student performance in poor, urban school districts are difficult, if not impossible, to find.

Presently, there are three approaches to estimating the costs associated with pupil needs.

- a. **Cost function:** The cost function approach is designed explicitly to address the first of these challenges by directly estimating the relationship between spending, student performance and student characteristics using statistical methods. The approach does not require that specific programs be identified to estimate the impact of student needs.
- b. **Professional judgment:** The professional judgment approach estimates the impact of student characteristics by asking professionals to specify the additional programs and staff required to bring students up to a specified standard in a school with a high share of students living in poverty, high share of English language learners, or high share of disabled students. Typically, panels are asked to develop resource requirements in schools with low, average, and high incidence of disadvantaged student. Once these have been determined for certain types of districts, then simple extrapolation techniques may be used to estimate the additional costs associated with student needs in all districts.
- c. **Ad hoc (political) selection of pupil weights:** Most states employ some type of pupil weights for student needs in their aid formulas. The origins of many of these weights are obscure, and it is likely that most are based more on political compromises than estimates of the spending requirements associated with disadvantaged students.

Comment: Only the cost function and professional judgment approaches attempt to estimate the resource requirements associated with bringing disadvantaged students up to standards. The professional judgment approach relies on educated guesses by professionals on what programs and staffing ratios may be adequate to bring students in high poverty schools up to

standards. The cost function approach relies on the existing relationship between student needs and spending, controlling for other factors, to predict required spending. Both approaches have to extrapolate beyond actual experience because there are so few high-poverty urban school districts where most students are reaching high academic standards.

6) **Determining the cost impact of district enrollment size (and sparsity):**

There is significant empirical evidence that districts with low student enrollments (below 1500 students) require higher per pupil spending to reach academic standards.¹⁴ The key issue is whether consolidation of these districts is feasible and desirable. For districts where consolidation is feasible, there is no justification for state subsidies if the district chooses to remain small. For sparsely populated rural districts the decision regarding state subsidy is more difficult since the state must balance the potential cost savings from consolidation with the transportation costs imposed on students and parents. One of the key areas of cost savings as districts get larger is in central administration. Approximately half of the states in the country adjust for size and/or sparsity in the basic operating aid formula.¹⁵ There are several approaches for estimating the cost impacts of size:

- a. **Cost function:** Enrollment is typically included in cost models, and the results can be used to estimate the cost impacts of having low enrollment. The findings from many of these cost function studies is that costs per pupil increase exponentially as the enrollment decreases below 1500 students. Most cost savings from getting larger are exhausted by the time a district reaches 1500 students. In our research on New York we have not found that sparsity (pupil density) affects operating costs (excluding building and transportation).
- b. **Professional judgment approach:** It is possible using the professional judgment approach to develop very rough measures of the cost impacts of size. If panels are created for rural, suburban, and urban districts it may be possible that the panels will identify increasing costs associated with being in small districts. However, professional educators are typically asked to compare the program and staffing differences for schools of different sizes not districts. Since panels often focus on districts in a certain size range, any estimates of size effects on costs is across different panels, which significantly increases the possibility of measurement error. In addition, this approach often uses actual expenditures per pupil in a district for central

¹⁴ Matthew Andrews, William Duncombe, and John Yinger. 2002. "Revisiting Economies of Size in Education: Are We Any Closer to a Consensus?" *Economics of Education Review*, (21): 245-262.

¹⁵ Bruce Baker, and William Duncombe. 2004. "Balancing District Needs and Student Needs: The Role of Economies of Scale Adjustments and Pupil Need Weights in School Finance Formulas." *Journal of Education Finance* (29): 195-222.

administration, which does not control for differences in student performance, resource prices, or student needs across districts.

- c. ***Ad hoc (political) adjustment for size:*** Half of the states make some adjustment for size or sparsity, but it is unclear on what these adjustments are based. It is possible that many states are similar to Kansas in that they have based these size adjustments on averages of actual spending per pupil in districts in different size categories. This approach does not control for the differences in student performance, student needs, or resource prices in rural districts, and will tend to overestimate the cost impacts of being small.

Comment: Only the cost function approach estimates the cost impact of small enrollment taking into account student performance, resource prices, and student characteristics. The professional judgment approach provides at best a very crude estimate of the impacts of size, because this approach does not examine systematically differences in central administration costs. *The key factor affecting “economies of size” is district enrollment not sparsity.* Sparsity can be used to determine which districts should get a scale adjustment, by identifying which districts can and cannot consolidate easily. It is extremely important that estimates of size are only based on district enrollment and not school enrollment, because the latter is to some extent under the discretion of the school district.

B. Number of aid formulas (what to include in operating aid):

In designing a set of school aid programs to achieve certain educational and equity objectives, one of the fundamental choices is how many formulas to use. In this section we will highlight the advantages and disadvantages of the use of general operating aid versus categorical aid programs, and what criteria should be used in deciding on the use of categorical aid.

1) Disadvantages of using many categorical aid programs:

- a. ***Reduces transparency:*** The use of many categorical aid programs, which is the case presently in New York, increases the complexity of the school aid system. It is very difficult if not impossible for most district administrators to understand the implications of these many formulas, and predict aid distribution to their district. If transparency is one of the objectives of a school aid system, then limiting the number of aid programs should be a key goal of an education reform.
- b. ***Reduces equity:*** A number of formulas also increase the possibility of political manipulation of the formula by special interest groups. These political compromises often undermine the equity objectives of the reform.

- c. ***Reduces local discretion:*** Categorical aid programs are often accompanied with special reporting requirements that add to the paperwork burden on school districts, and reduce their administrative discretion. Unless there is very good evidence that local school districts will not effectively manage the program, micro management by the state government should be avoided.
- 2) **Conditions under which categorical aid may be appropriate:** Categorical aid programs may be appropriate in certain circumstances.
- a. ***Establishing a new program:*** If the state government is trying to get local school districts to establish a new program, then a categorical grant can provide an incentive for local involvement.
 - b. ***Incentives for increasing local effort in an existing program:*** For an existing program, categorical aid can only assure expanding the size of the program if the state funding is greater than what is presently spent by local districts, or the state imposes “local maintenance of effort requirements.” Local effort of maintenance implies that local districts cannot reduce previous local spending with the addition of state aid. Maintenance of effort requirements can be difficult to enforce, and often weaken over time unless they are indexed by inflation.
 - c. ***Need to maintain state oversight*** over the program: If the state government is concerned about the technical capabilities of the local school districts to provide the program efficiently, then a categorical grant accompanied with local reporting requirements can be used to provide oversight on program operation.
 - d. ***Legal requirements for separate reporting system:*** Federal mandates or court orders may require in certain circumstances separate reporting requirements. Separate reporting can be required even with a general purpose grant, but a categorical grant can include such requirements as a condition for receiving the grant. For example, the grant may require that grant receipts and expenditures be recorded in a “special aid fund” on the districts financial statements.
 - e. ***Different cost factors:*** If the factors affecting the cost of providing a particular function are very different than those affecting general operations, then a separate aid formula is needed to reflect this difference.
- 3) **Assessment of common categorical programs:** All states use some types of categorical aid programs in their school finance system. The following is a brief assessment of the justification for categorical aid in some areas where

New York presently uses categorical aid. *The design of aid programs to support disabled students, teacher training and recruitment, and capital construction are complex and the financial costs are high enough to warrant separate studies for these areas.*

- a. **Building aid:** Most states have some type of separate aid program to support capital construction in school district.¹⁶ A separate building aid program may be justified if the state wants to maintain oversight over local capital construction (e.g., state approval of local building permits), because of concerns about local technical capacity. Categorical aid can also be used to try and stimulate local investment in school facilities. States can use “spend to get” (matching grant) provisions to try and provide incentives particularly for low-wealth districts to spend more on buildings. Unfortunately, these provisions do not assure that all low wealth districts will respond to the incentives as demonstrated by high-need urban districts in New York over the last decade.¹⁷ These formulas can also include separate cost factors associated with capital expenditures that are not relevant for operating expenditures (e.g., geographic differences in land and construction cost).
- b. **Transportation:** Most states have a separate aid program for transportation. Possible justifications could include providing incentives for local districts to provide transportation, although there is little evidence showing that districts will not use operating aid for transportation. Some cost factors associated with transportation programs may not be relevant for operating aid programs (e.g., required pupil miles of transportation, pupil sparsity).
- c. **Special education:**¹⁸ Justification for a separate special education aid program(s) has been both on legal and incentive grounds. A separate program simplifies the process of accounting for state and federal funds, and can be linked to reporting requirements. The use of partial cost reimbursement (a form of matching grant) can serve as an incentive for districts to invest in special education services. In addition, if the incidence of disabilities in the population is not strongly related to other measures of disadvantaged students (e.g.,

¹⁶ Wen Wang, 2004, “Appendix C: A Guide to State Building Aid Programs for Elementary and Secondary Education,” In J. Yinger (ed.) *Helping Children Left Behind: State Aid and the Pursuit of Educational Equity*. Cambridge, MA: MIT Press.

¹⁷ New York State Education Departments, State Aid Working Group, 2002, “School District Responses to Building Aid Incentives,” *Research Monograph*, Albany, NY: NYSED.

¹⁸ For good summaries of special education finance nationally and in New York, see Thomas Parrish, “Restructuring special education funding in New York to promote the objective of high learning standards for all students.” *Economics of Education Review* (19): 431-445; Thomas Parrish, Jay Chambers, and Cassandra Guarino, 1999, *Funding Special Education*, Thousand Oaks, CA: Corwin Press.

child poverty), then a separate grant formula may be required to assure equitable distribution of funds.

However, the states are reconsidering separate funding for special education on several grounds. IDEA requires provision of education in the least restrictive environment possible, which is associated with an expansion of inclusive education services. In addition, NCLB and state accountability reforms have expanded the inclusion of disabled students in state testing systems. In addition, there is a concern that present cost reimbursements have encouraged over-classification, particularly of students with learning disabilities.

- d. ***Disadvantaged students:*** Approximately half of the states have a separate aid program to support disadvantaged students, primarily students living in poverty and students with limited English proficiency.¹⁹ New York State presently has Extraordinary Needs Aid, Limited English Proficiency Aid, Magnet Schools, and Bilingual Education Grants. Separate funding for disadvantaged students might be justified on several grounds. If districts would not normally offer services for disadvantaged students, then categorical grants might lead to an increase in services for disadvantaged students. However, if disadvantaged students are best served in regular classrooms, then determining the impact of categorical grants on district funding for disadvantaged students will be very difficult. Since the goal of programs for disadvantaged students is often to bring them up to grade level and integrate them into regular classes, there is not strong justification for separate aid program for these students. Instead, the extra costs associated with disadvantaged students should be incorporated into regular operating aid. In addition, a separate funding program for these students makes it easier politically to marginalize funding to high-poverty schools. This has certainly been the case in New York.
- e. ***Aid for instructional material:*** New York State presently has aid programs for textbooks, computer software, computer hardware, academic support, library materials, and learning technology grants. Unless the state government is concerned that districts will not invest adequately in instructional material and equipment, it is difficult to find a convincing justification for this type of aid. In fact, if the district has spent with local funds at least as much as the state grant, the grant might have very little impact on local funding (unless a local effort of maintenance provision is provided).

¹⁹ Kevin Carey, 2002, "State Poverty-Based Education Funding: A Survey of State Programs and Options for Improvement," Washington, DC: Center on Budget and Policy Priorities.

- f. ***Aid for teacher training and recruitment:*** Because of the importance of teachers to student success, and concerns about teacher shortages, particularly in hard to staff schools and subjects, states have begun to introduce teacher incentive aid programs.²⁰ New York has several teacher related aid programs: Teacher Support Aid, Teacher Centers, Teacher-Mentor Intern, and Teachers of Tomorrow. Given that teacher salaries are the principal operating expenditure of districts, aid for these programs will need to be justified on grounds of creating incentives for districts to create new programs. The key issue is why districts would not undertake these initiatives on their own if adequate operating aid was provided? One explanation may be institutional constraints either created by state or federal statute (or regulation), or by teacher's unions. For state governments, it may be more cost effective to relax regulations than to create separate aid programs. Before New York creates a number of teacher incentive aid programs, research on the most effective funding mechanisms to encourage the increase of high quality teachers in high poverty schools should be undertaken. Across-the-board increases in teachers' salaries funded by the state may be a particularly ineffective and expensive mechanism for improving teacher quality.
- g. ***Incentive aid programs:*** New York offers several aid programs that are clearly meant to influence district behavior by offering financial incentives. For example, New York has the Reorganization Incentive Operating Aid, and Reorganization Incentive Building Aid to encourage small districts to consolidate. Other examples in New York could include Tax Effort Aid, grants to support conversion to full day kindergarten, and Grants for Early Grade Class Size Reduction. To use an incentive aid program, it is important that there be: 1) strong justification for encouraging this change to take place; 2) good evidence that the aid program is effective at changing behavior; and 3) good evidence that the aid program is targeted effectively.
- h. ***Aid for new programs or extra services:*** States may choose to fund education support services and related programs through school districts even though the services may be provided by external providers. A good example in New York is "Universal Pre-Kindergarten Aid," which provides funds for districts to establish UPK programs, or fund other organizations providing PK services. Other examples might include: aid for dropout prevention programs, summer school programs, programs for homeless or runaway pupils, and incarcerated pupils. While states may want to financially help districts to start a pilot program, it is important that they also fund (or perform) rigorous evaluations of these programs. For states to continue to

²⁰ Education Week, 2003, "If I can't learn from you..." *Quality Counts 2003*. Bethesda, MD, Education Week.

provide on-going support for these programs, it is important that there be strong evidence that these programs are successful, and that districts will not continue to fund them on their own if they were provided adequate operating aid. Indeed, if there is evidence that certain programs are successful, school districts are likely to adopt these programs without any specific financial incentive.

C. Operating aid formula design:

Most states in the country provide some type of operating aid program.²¹ The principal objective is to improve school finance equity in the state. By providing non-categorical aid to districts, the state government is not attempting to influence the types of programs provided or how resources are allocated by local districts. The appropriate design of an operating aid program depends on the equity standard chosen by the state.²² In designing an operating aid formula, it is important for New York to consider the following issues.

- 1) **How is education aid to a school district determined?** The first decision in designing a school aid system is how aid to local districts is determined. Is it the result of a political bargaining process, or is it determined by a preset formula? The decision of the Court of Appeals in the CFE case suggest that the state needs to create a rational basis for its school funding system related to providing a meaningful high school education. Thus, some type of formula distribution of aid is required to comply with the court decision. Less obvious is whether political compromises, such as save harmless provisions, will violate the court decision.
- 2) **Is funding linked to local tax effort?** One of the basic design features of any intergovernmental aid program is whether the aid received by a district should be linked to district spending. If there is concern that some local districts will under fund schools, then incentives might be included in the basic aid formula to stimulate local tax effort. There are three different types of aid formula designs:
 - a. **Lump-sum aid (foundation formula):** Under this type of program the aid received by a district is set by a formula that is independent (at least in the short-run) of any decisions made by the district on how much to spend. The “foundation formula” is the most common example in education of a lump-sum grant; indeed, it is used in the vast majority of states. The foundation formula is designed to bring

²¹ Yao Huang, 2004, “Appendix A: State Operating Aid Systems,” In J. Yinger (ed.) *Helping Children Left Behind: State Aid and the Pursuit of Educational Equity*. Cambridge, MA: MIT Press.

²² William Duncombe, and John Yinger, 1998, “School Finance Reform: Aid Formulas and Equity Objectives,” *National Tax Journal* (51): 239-262.

students up to a particular minimum standard, which can be defined in terms of spending, resources or student performance. Lump-sum programs, if designed well, can provide districts with more certainty with regard to funding levels.

Foundation formulas are designed to provide the difference between a foundation spending level (which should be adjusted for wage costs and student needs) and an expected local contribution. The local contribution is usually defined as a state-determined local tax rate multiplied by the district's actual property tax base. In some states (but not New York), this state-determined local tax rate is required; that is, districts are not allowed to levy an effective property tax rate below this level. Unless this tax rate is required, the foundation formula does not guarantee that every district will reach its foundation spending level. These design issues are discussed in more detail below.

- b. ***Matching grants (power equalizing formula):*** Under a matching grant program (“spend to get”), the amount of aid that districts receive varies depending on the level of local revenue effort. The most common version of this grant in education is “district power equalizing” or “percent equalizing” grants. Power equalizing grants were first developed over 30 years ago to improve spending equity across districts. Power equalizing grants are linked to district wealth; that is, the state matching rate is higher in low-wealth districts than high-wealth districts. Presently, many states use this type of grant as a “second tier” of aid above the foundation grant to give every district access to the same effective tax base.

- i. ***Closed-ended matching aid program:*** A compromise between these types of aid programs is the so called “closed-ended matching grant,” which matches local spending with state aid up to some maximum amount. The major reason for this type of program is to encourage local effort in low-effort districts, but not to subsidize local tax effort beyond a certain point. The closed-ended feature also limits the budgetary impacts of the grant. In practice, closed-ended matching aid programs often end up looking like lump-sum aid, because most districts end up at the maximum amount.

Comment: *If the equity standard in a state is a performance adequacy standard, then we have demonstrated that the most effective formula for achieving this standard is a foundation formula with adjustment of the foundation amount for student need and resource cost differences.*²³ A number of states have

²³ William Duncombe, and John Yinger, 1998, “School Finance Reform: Aid Formulas and Equity Objectives,” *National Tax Journal* (51): 239-262.

supplemented the foundation with a 2nd tier of aid that involves a wealth equalized matching grant. Even though the incentive to increase local effort may be much higher in low-wealth districts using these formulas, the limited evidence available suggests that these incentives are not large enough to convince many high-poverty urban districts to increase their tax effort.²⁴ A more effective mechanism for assuring adequate local effort may be to enforce the minimum tax rate provisions of the foundation formula.

- 3) **Design of foundation aid system:** Assuming that New York state government decides to use a foundation formula for its basic operating aid program, there are several important design choices. These choices can be highlighted by presenting a basic foundation formula:

Total aid = Foundation amount – Minimum local revenue effort

Minimum local revenue effort = Minimum local contribution rate X
Local fiscal capacity

If the foundation amount in a district is greater than the minimum local revenue effort, then the district receives the difference in aid. If the minimum local contribution is greater than the foundation amount, then aid is usually set equal to zero or some minimum per pupil.

- a. ***Determining the foundation amount:*** *If a foundation program is being used to fund a performance adequacy standard as implied by the CFE decision, then the foundation amount should reflect in each district the funding necessary to provide district students the opportunity of reaching the selected standard. The foundation amount should come directly from the estimates of required spending to reach adequacy. As discussed above the estimate of the cost of adequacy should reflect the impact of differences in required teacher salaries (and, if possible, other resource prices), in student needs, particularly the incidence of disadvantaged students, and the higher costs in districts with low enrollment that cannot feasibly consolidate. Funding for disadvantaged students should be incorporated into the foundation amount rather than through a separate aid program(s).*
- b. ***Determining the fiscal capacity of a district:*** Foundation aid is the difference between required spending to provide adequate education and a reasonable local contribution. The minimum local contribution rate is set by the state and it can choose whether to

²⁴ John Yinger, 2004, "State Aid and the Pursuit of Educational Equity: An Overview." In J. Yinger (ed.) *Helping Children Left Behind: State Aid and the Pursuit of Educational Equity*. Cambridge, MA: MIT Press.

enforce this level of local effort (see below). The minimum effort rate is multiplied by the local fiscal capacity. The fiscal capacity measure should reflect the ability of the local school district to raise revenue through general taxes. For all but the Big 5, the only general tax available to local school districts is the property tax. While some districts may receive distributions of county sales taxes, districts have no control of this source of revenue. *Since the property tax is the only general purpose tax used by districts, equalized property values should be the principal measure of local fiscal capacity. The measure of equalized value should include only taxable property, and hence should exclude any estimate of the value of government and non-profit property.*

New York has used a measure of fiscal capacity (CWR) that also includes a measure of income (average adjusted gross income of district residents). We see no justification for the use of CWR instead of equalized property value. Some people have expressed concern that a property value measure is not appropriate for high-wealth counties (e.g., high value commercial or industrial facilities) that have a number of lower-income residents, particularly on fixed incomes (e.g., retired individuals). In fact, however, these counties are able to export a large share of their tax burden to the non-resident owners of commercial and industrial property and have a much higher fiscal capacity than other counties with lower-income residents. If policy makers are concerned about the impact of property taxes on lower-income residents, a more appropriate mechanism for helping these citizens is through targeted property tax relief rather than a general increase in school aid. For low-income elderly home-owners, the state already provides a generous property tax exemption through the enhanced exemption in the STAR program. For low-income renters, who may pay property taxes through their rent, an expanded circuit-breaker program may be a good mechanism for helping reduce their property tax burden.

- c. ***Minimum local contribution rate:*** Once the measure of fiscal capacity is determined then the required local contribution rate must be selected. There are three key issues that should be considered in its selection:
- i. ***What should be the local contribution*** to school finance system? The local contribution rate is the most direct mechanism for setting the local versus state share of financing the reform.
 - ii. ***Should the local contribution rate vary across districts?*** In a standard foundation formula the minimum local contribution rate is the same for all districts. One possible justification for

lower rates in some districts is based on the concept of “municipal overburden.” The argument is that large municipal governments often provide a broader range of social services to their citizens than suburban and rural areas. The higher property tax burdens to support these other services reduces the capacity of cities to fund education. Thus, the expected local contribution in cities should be less than in non-urban areas. A measure of urban poverty for example could be introduced to reflect these higher needs. Despite the popularity of the concept of municipal overburden among plaintiffs in school finance cases (particularly in the 1970s and 1980s), there is very little evidence supporting its existence.²⁵

iii. ***Should the minimum local contribution rate be enforced?***

Under a standard foundation formula, the minimum local contribution rate is required of local school districts. New York has not enforced this provision in the past, but some other states have (e.g., Kansas). Without enforcement of the minimum tax rate provision, there is no guarantee that districts will not use some of the education aid for property tax relief, or in the case of the dependent districts other municipal services. There is strong evidence that some high-need urban districts in New York have consistently maintained local tax effort,²⁶ but others have not. An alternative approach to assuring local tax effort is to put in place a “maintenance of effort” provision, which often requires that local spending not decrease from the previous year. This type of provision does little to encourage districts with low local tax effort to increase their tax effort. Enforcement of a minimum tax provision will require that New York State government take a stronger role in setting local tax rates than it has been willing to take in the past.

- d. ***Should federal aid be counted in local contribution?*** The answer to this question depends on the purpose of the federal programs, and whether state operating aid system should be fiscally independent of the federal budget. The major form of federal aid received in most states is funding through the Elementary and Secondary Education Act and in particular funding for Title 1. It is difficult to argue that the programs funded by Title 1 are not part of the basic instructional mission of school districts, particularly districts serving a significant number of disadvantaged students. *However,*

²⁵ Jerry Miner and Seymour Sacks, 1980, *Municipal Overburden and School Finance in New York State Revisited*, Syracuse, NY: Syracuse University; Harvey Brazer and Therese McCarty, 1987, “Interaction Between Demand for Education and for Municipal Services.” *National Tax Journal* (40): 555-566.

²⁶ New York State Education Departments, State Aid Work Group, 2003, “Analysis of Local Effort in New York State School Districts,” Draft, Albany, NY: NYSED.

Title 1 aid is provided as a supplement to state and district funds, not a substitute. Thus, federal aid should not be included as part of local contribution to the foundation funding level.

Comment: In designing a foundation formula to assure a meaningful high school education, it is important that:

- The foundation amount should be based on the analysis of the required costs to meet the adequacy standard. The foundation amount should vary across districts reflecting differences in student needs, resource prices, and, perhaps, district size.
- The measure of fiscal capacity should reflect the principal tax base available to local school districts, the property tax. Equalized property values that exclude tax exempt government and non-profit property should be the measure of fiscal capacity.
- The minimum local contribution rate should be enforced to assure that the foundation spending level is reached in every district. There is not strong evidence to support the concept of municipal overburden, so adjusting the local contribution rate for student need is not justified.
- Federal aid is provided to supplement not supplant state funds; thus, federal aid should be excluded from the calculations of operating aid.

4) **Transition adjustment:** Making a major change in a state aid system can have dramatic impacts on local budgets. Districts experiencing a large drop in aid will have to dramatically increase local tax rates or cut spending. Districts with a large increase in aid may have difficulty putting in place the programs to effectively utilize the increase. The result may be a reduction in local tax effort, or expansion of simple but costly programs (e.g., generous salary increase or significant class size reduction) without adequate analysis of cost effectiveness. The danger of extending the transition period too long is that the momentum for the reform will be lost, and transition adjustments will become frozen in place. There are several options for aid transitions:

- a. **Limited aid growth or decline over a transition period:** For example with a five year phase-in period, the decline or increase in aid may be only 20% in the first year, 40% in the second year, etc. There is no reason that the phase-in on the up-side needs to be the same as on the down-side.
- b. **Save harmless provisions:** A save harmless or hold harmless provision, which prevents any district from receiving less aid than the previous year, is a form of transition adjustment. There is no limit on the upside on the increase in aid, but a hard limit on the downside that never goes away. If the level of aid for school districts is going to increase significantly because a large increase in state funding for schools, then save harmless provisions will affect very few districts. If

the overall level will not increase significantly, however, save harmless provisions will effectively remove many districts (often the wealthiest districts) from the new formula. In essence the state will be operating two formulas. With a slow growth in overall aid levels over time, these provisions can last for many years.

- c. ***Minimum aid provisions:*** Another alternative is to use a minimum aid provision, which sets a floor on per pupil aid. This provision could either be set permanently or could be a component of a phase-in provision. For example, a phase-in arrangement may allow aid to drop by a percent each year unless aid dropped below the minimum. The minimum aid per pupil could be phased out after the transition, although significant pressure may emerge at that point to maintain it.

Comment: *If the purpose of the transition adjustment is really to smooth the path to the new formula and not to undermine the new aid system, then the transition period should be no more than five years, and save harmless provisions and/or minimum aid provisions should not be included.* There is no reason that the transition provisions for increases in aid should be the same as those for reductions in aid. For example, a possible transition adjustment is a three-year phase-in of increases in aid, but a five-year phase-in of reduction in aid. In addition, save harmless provisions may be popular among high-wealth districts, but they dramatically increase the amount of money that must be raised to implement any reform plan. We think it is a mistake to protect wealthy school districts when the taxes of citizens around the state are being raised to fund a new aid program.

Comparison of School Aid Reform Proposals for New York State

II. Estimating the Cost of Adequacy

William Duncombe and John Yinger, The Maxwell School, Syracuse University, April 2004

Components	Syracuse University	Midstate Consortium	Regents Proposal	CFE Proposal	Zarb Commission
Per Pupil Spending Required to Meet Standard (2004 dollars):					Used 2006 NCLB standard:
AVERAGE (pupil weighted)	\$14,107	NA	\$9,057	\$12,975	\$12,679 (GCEI) to \$13,420 (RCI)
New York City	\$19,007		\$12,277	\$14,282	\$13,649 to \$15,590
The Big Four	\$16,271		\$9,343	\$14,149	\$13,012 to \$12,208
High-Need Urban Suburban	\$13,129		\$8,936	\$13,311	
High-Need Rural	\$10,131		\$7,788	\$12,296	
Average Need	\$10,357		\$6,599	\$11,665	
Low Need	\$11,063		\$6,542	\$11,964	

1) Spending categories included in calculation of cost of adequacy:

Overall comments: The Regents Proposal has included the fewest spending categories, by far, and the CFE proposal includes the most spending categories (with special education and preschool). The spending definitions for Syracuse University and Zarb Commission are similar, and Midstate is somewhat less inclusive. The Regents proposal includes instructional spending (and fringe benefits), which does not cover many spending categories normally covered by operating aid (such as operating and maintenance and central administration).

Total expenditures minus transportation, debt service, other undistributed expend., capital, and tuition payments for out-of-district student placements.	Total revenue minus revenue related to debt service, transportation, building constr., extraordinary needs aid, and federal Title 1 aid.	Instructional expenditures, plus fringe benefits for staff, Removes special education. Does not include central administration, transportation, operating & maintenance, community services, and debt service.	Total expenditures minus transportation, and capital construction. Spending does include special education, and pre-school.	Total expenditures minus capital, debt service, transportation
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2) Adequacy standard selected:

Overall Comments: It appears that the CFE proposal sets by far the highest standard with a 100% Regents Diploma rate. Even if the passing rate was 95%, very few districts would presently meet the standard. The Syracuse University and Regents proposals have the lowest standards with approximately 50% of districts reaching the standards at present.

Percent of district present ^y meeting the standard	51% (160)	NA	46%	Under 5% of districts had 100% Regents Diploma in 2002	17% (208 NCLB) to 46% (Regents)
a) Measures	Based on Board of Regents accountability system: Regents: Math and English 8th grade: Math and ELA 4th grade: Math and ELA	Do not specify a standard the finance system is expected to support. Instead, uses the average per pupil spending (excluding revenue related to transportation, debt service, ENA, federal Title 1, severely handicapped children, tuition to other schools, and BOCES aid).	Based on students reaching Regents Learning Standards Regents: Math, English, Global History, U.S. History, Earth Science 4th grade: Math and ELA	Regents Learning Standards Measure: Percent of 9th grade cohort of students receiving a Regents Diploma is probably best overall measure. Regents: Math, English, Global History, U.S. History, Earth Science	Look at three different standards: Regents proposal, SED NCLB standards in 2006 & 2008 Below are NCLB standards: Regents: Math and English Dropout rate: % of 9th grade cohort not graduating in 4 years. Regents Diploma rate 8th grade: Math and ELA 4th grade: Math and ELA

Components	Syracuse Univeristy	Midstate Consortium	Regents Proposal	CFE Proposal	Zarb Commision
b) Minimum student performance level	Scale of 0 to 200. Weighted average of exams (Regents-50%, 4th-25%, 8th-25%) Regents: 65+ --> 200 4th and 8th grade exams: 55-64 -->100 Level 3 & 4 --> 200 Level 2 --> 100	Implicitly is selecting performance level in district with average spending as the standard	Looked at percent of students reaching proficiency levels on a 0 to 100% scale. Proficient is defined as: Regents: 65+ is proficient 4th grade: Level 3 and 4	Percent of students passing 5 Regents Exams with a score of 65 or higher. Appear to be using a 100% passing rate on all 5 Regents Exams as their standard.	Scale of 0 to 200. I am not sure how exams are combined. Regents: 65+ --> 200 4th and 8th grade exams: 55-64 -->100 Net score scale for dropout rate. Net score scale for Regent Diploma rate 4th Math: 149 (2006) 162 (2008) 4th ELA: 138 (2006) 154 (2008) 8th Math: 105 (2006) 129 (2008) 8th ELA: 126 (2006) 144 (2008) Regents Math: 146 (2006) 159 (2008) Regents English: 154 (2006) 169 (2008)
c) Acceptable performance standard for district	Looked at 2 scores based on these exams: 130, and 160. State average is 160. Does not imply all students pass Regents exams.		Simple average of tests. Standard is 80% passing rate.		

3) Estimating the cost required to meet the standard in a typical district:

Overall comments: In general, the spending levels match the strength of the standard and how inclusive the spending definition is. The Regents proposal has the lowest standard and the least inclusive spending definition. CFE has the highest standard and spending definition. Syracuse and Midstate proposals are in between. The surprise is the Zarb proposal, which has very high average spending even with a relatively moderate standard. The average spending level in the Regents proposal also do not vary much between a lower and higher standard, which is one of the

Spending required in average district (2004 dollars)	\$10,811 (standard of 160)	\$9,031 (2004 dollars)	\$6,600 (with average regional cost and subsidized lunch)	\$12,975 (average)	\$12,659 to \$12,900 Average (with NCES GCEI)
CPI used to bring up to 2004 dollars	Use cost function approach: Results of cost function can be used to estimate cost in district with average performance and cost factors.	They don't estimate the cost of reaching a student performance standard	Use successful schools approach: Take districts meeting standard and estimate per pupil spending if district had no subsidized lunch students and have regional cost index equal to 1. Take the average of the 50% of districts with the lowest per pupil spending.	Use professional judgment approach: Selected 8 panels of educators to develop the program elements and staffing levels for different types of districts for prototype schools with different levels of subsidized lunch and LEP shares.	Use successful schools approach: Basically followed the same approach as in the Regents proposal.

4) Adjusting costs for higher resource prices:

Overall comments: Looking at differences by need/resource capacity categories, the NCES index varies the most, and the CFE index varies the least. All these indices have one of their highest values in NYC and their lowest values on average in rural districts. The other consistently above-average category is low-need districts, which are primarily downstate suburbs. None of these indices directly controls for working condition differences (as measured by pupil need variables) across districts that could affect required teacher salaries. The overall cost index in the Syracuse proposal will reflect these differences, but not the separate wage index created from the underlying cost model. The CFE hedonic salary model does not include any student need variables, although these would normally be part of a teacher hedonic model.

Comparison of Index Values by Region:					Either used NCES (Midstate) or SED regional cost index
New York City	1.18	1.11	1.24	1.10	
The Big Four	0.98	1.08	0.99	1.00	
High-Need Urban Suburban	1.02	1.03	1.01	1.01	
High-Need Rural	0.87	0.91	0.89	0.93	
Average Need	0.99	0.99	0.98	0.99	
Low Need	1.18	1.13	1.17	1.09	

Components	Syracuse Univeristy	Midstate Consortium	Regents Proposal	CFE Proposal	Zarb Commision
	Use cost function approach: Teacher salaries are in the cost model. Estimated overall cost index includes adjustment for teacher salary differences. If results for teacher salaries are used by themselves to develop a wage index it will not reflect student need differences.	Use hedonic salary index: In their operating aid formula they use the NCES teacher cost index for 1993. Average index value is 100.	Use private wage index: SED developed regional cost index based on 63 similar private sector occupations. Index is for 9 labor market regions. Lowest cost region is set equal to 100. Index presented above is centered at the state average for comparison purposes.	Use hedonic salary index: CFE had AIR/MAP develop a hedonic salary model for New York using recent data. Index is based on 12 factors outside district control. Index does not include student need measures to capture working conditions in district.	Use hedonic salary index or private wage index: Provide choice of either the NCES cost of education index for 1993 (based on hedonic salary model), or the SED cost index.

5) Determining the additional cost of high-need students:

Overall comments: *The only weights that were estimated from data collected in New York are those from Syracuse University and CFE. The weights estimated from the cost function approach (Syracuse) are much higher than those calculated from the professional judgement approach (CFE). The Regents used weights similar to Syracuse, at least for low-income pupils, and the Zarb Commission used relatively low weights based on weights in a typical state aid formula.*

Comparison of Pupil Weights by Category:					
Subsidized lunch share	1.5	In categorical grant	0.5 to 1.0	These are estimates (see below) 0.81 (ES), 0.37 (MS), 0.49 (HS)	0.35
Census poverty share	1.05	N/A			
LEP	1.05	In categorical grant	Categorical grant	0.17 (ES), 0.19 (MS), 0.19 (HS)	0.2
Special education	In categorical grant	In categorical grant	Categorical grant	0.64 (ES), 0.45 (MS), 0.59 (HS)	2.1

Use cost function approach: Pupil needs are part of an overall cost of education index. Can also estimate pupil need index or pupil weights based on results from cost function for student need variables.	They do not adjust for student need in operating aid formula. Use separate categorical aid for high need students. Use extraordinary needs count as basis of distribution of aid (subsidized lunch count + LEP count)	They do not specify where the weights come from. The weight goes up with the concentration of poverty.	Use professional judgment approach: Each panel was asked to develop required resources for 3 student need ranges. They used this to estimate per pupil spending by student need level. Pupil weights were developed based on this information. Regression analysis is used to estimate required cost per pupil for all districts.	Other state experience: "drawn from a review of research literature on the coefficients that education agencies tend to use in practice." Zarb Commission did not explicitly recommend weights, but used these weights in cost of adequacy recommendations.
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6) Determining the cost impact of district enrollment size:

Overall comments: *Research on determinants of school district cost indicates that enrollment size, not sparsity, is most related to costs. The cost function includes enrollment as cost factor. The professional judgment approach appears to indirectly account for district enrollment differences. All other proposals use sparsity (pupils per square mile) and not enrollment.*

Use cost function approach: Estimate the impact of different enrollment classes on costs controlling for other factors. This can be used to develop an enrollment index.	No adjustment for enrollment size in operating aid formula. Use the sparsity adjustment in ENA count as part of ENA aid program. Sparsity adjustment uses information on pupils per square mile.	Use the sparsity adjustment in ENA count as part of pupil need calculation. Adjustment uses information on pupils per square mile.	Use professional judgment approach: Panel results were used in regression of spending, school enrollment, and pupil need variables. Results used to predict costs in other districts. Impact of district enrollment appears indirectly in this process. They did calculate scale index to reflect cost differences by enrollment size.	Don't appear to adjust for enrollment size or sparsity in calculating the cost of adequacy.
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Comparison of School Aid Reform Proposals for New York State

III. Operating Aid Programs

William Duncombe and John Yinger, The Maxwell School, Syracuse University, April 2004

Components	Syracuse Univeristy	Midstate Consortium	Regents Proposal	CFE Proposal	Zarb Commision
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B. How many aid programs besides operating aid?:

Overall Comments: Only the Regents Proposal and CFE reports provide detail on what categorical aid programs will be eliminated and which will be kept. Midstate and the Zarb keep categorical aid for disadvantaged students. All but CFE and Midstate appear to keep Excess Cost Aid for special education students pretty much intact.

Categorical grants:

Building aid	X	X	X	X	X
Transportation aid	X	X	X	X	X
Excess cost aid	X	Only severely handicapped	X	Only severely handicapped	X
Extraordinary needs aid		X			
LEP aid			X		New Supplemental Needs Aid
Instruction materials (textbooks, software, library materials)			X	Private school only	X
Pre-kindergarten aid	na		X		
	Don't provide specifics Keep building, transportation, excess cost aid programs, and BOCES aid.	Appear to replace all categorical aid categories except aid programs: ENA, Building Aid, Transportation Aid, and BOCES Aid.	Keep 31 categorical aid programs or grants in their present form.	Keep 5 to 10 categorical aid programs, but all are small except Building aid and transportation aid	Do not provide many details but are proposing categorical aid for high need students, instructional material, special education, building and transportation

C. Design of Operating Aid Formula

1) & 2) Type of Operating Formula and Use of Political adjustments:

Overall comments: All of the different proposal use some variant on a foundation formula. There is some difference on whether there is a save harmless provision or not.

Foundation formula	Foundation formula	Foundation formula	Foundation formula	Foundation formula
Political adjustment: Basic proposal doesn't have save harmless, but look at aid with save harmless	Political adjustment: Use save harmless	Political adjustment: \$500 per pupil minimum aid and limit on decrease per year.	Political adjustment: Use save harmless	Political adjustment: Use save harmless

3) Design of Foundation aid system:

DESCRIPTION OF FORMULA	Total aid= (Foundation per pupil x comprehensive cost index x enrollment) - (local contribution rate x total property values) - total federal aid	Total aid= (Foundation per pupil x GCEI x enrollment) - (local contribution rate x total property values) - federal IDEA Aid and Impact Aid	Total aid= (Foundation per pupil x RCI x total weighted pupils) - (local contribution rate x income (alt. wealth) index x total property values)	Total aid= (Foundation per pupil x education need index x geographic cost index x enrollment) x (50% / poverty adjusted CWR)	Do not specify in sufficient details to describe their aid formula.
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Components	Syracuse Univeristy	Midstate Consortium	Regents Proposal	CFE Proposal	Zarb Commision
Enrollment measure	avg. daily membership (CAADM)	avg. daily membership (adjusted) (adjusted DCAADM)	avg. daily membership (new TAPU)	enrollment	

3a) Determining the foundation amount:

Overall Comments: All but the Midstate proposal use the foundation amount calculated as part of estimating the cost of adequacy in their aid proposal. Midstate uses average spending as the base for calculating the foundation amount--it is not linked to student performance. Syracuse foundation levels are by far the highest for NYC, and Syracuse and Regents both have a significant range between NYC and low need districts (NYC is 88% higher in Regents proposal, 72% higher in Syracuse proposal), compared to CFE proposal (NYC is only 19% higher) and Midstate (NYC is actually lower).

Per Pupil Foundation Amount (2004 dollars):

Academic Standard	State average (160)	NA	Regents Proposal	Regents Learning Stand.	Used 2006 NCLB standard:
AVERAGE (pupil weighted)	\$14,107	\$9,064	\$9,057	\$12,975	\$12,679 (GCEI) to \$13,420 (RCI)
New York City	\$19,007	\$9,399	\$12,277	\$14,282	\$13,649 to \$15,590
The Big Four	\$16,271	\$9,041	\$9,343	\$14,149	\$13,012 to \$12,208
High-Need Urban Suburban	\$13,129	\$8,908	\$8,936	\$13,311	
High-Need Rural	\$10,131	\$7,785	\$7,788	\$12,296	
Average Need	\$10,357	\$8,720	\$6,599	\$11,665	
Low Need	\$11,063	\$9,616	\$6,542	\$11,964	

Use cost function approach: To get the estimate of the cost of adequacy. Take the required cost in average district and multiply in by an overall cost index, which accounts for scale, student need and resource prices.	They simply take the foundation amount (\$9,031) and multiply it by NCES geographic cost index. No adjustment for student needs. Students needs are in a separate categorical grant.	Use successful schools approach: To get the cost in a district with no cost adjustment (\$4,504). Multiply by SED regional cost index and an index of student need and sparsity. This index is based on ENA count without LEP variables. Allow poverty effect to go up with concentration of poverty	Use professional judgment approach: to get the foundation amount. It will differ across districts based on student needs, scale, and geographic cost index.	Use successful schools approach: Use approach very similar to Regents Proposal to get baseline spending. This is multiplied by the selected geographic cost adjustment and the count of total weighted pupils.
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3b) Measuring fiscal capacity:

Overall Comments: All the formulas use property values as one component of fiscal capacity. (Midstate does use CWR in the ENA formula.) Syracuse and Midstate use it as the only component. The Regents proposal multiplies full value by an income index which greatly reduces fiscal capacity in districts with low income and low property wealth. CFE adjusts the CWR measure by weighted pupils. Assuming that my calculations are correct, then property value and adjusted CWR are similar, but the Regents approach results in much larger variation in fiscal capacity across districts.

Fiscal Capacity Measure as Percent of Average (should be viewed as approximations of actual distribution)

New York City	0.65	0.65	0.33	0.59	Not sufficient details to calculate.
The Big Four	0.46	0.46	0.17	0.61	
High-Need Urban Suburban	0.47	0.47	0.15	0.34	
High-Need Rural	0.48	0.48	0.13	0.38	
Average Need	0.75	0.75	0.35	0.73	
Low Need	2.41	2.41	3.97	2.63	

Use equalized property values	Use equalized property values	Use equalized property values	Created a new CWR, using poverty weighted pupils as the enrollment base for FV and income. Subsidized lunch weight used in calculation is 0.6	Unclear exactly how fiscal capacity is calculated but it appears to include income, property wealth, and possibly adjustment for poverty
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Components	Syracuse Univeristy	Midstate Consortium	Regents Proposal	CFE Proposal	Zarb Commision
3c) Local Contribution Rate:					
Local contribution rate:	1.5% of full value	1.435% of full value	1.5% of full value This is multiplied by income index (which was included above in fiscal capacity comparison)	State share for district with adjusted CWR =1 is 50%.	Do not specify the local contribution rate.
Is it required across districts?	Yes, if the student performance is below standard and local contribution is less than required foundation level.	Yes, if local contribution amount is below foundation level	No	Yes, if local contribution amount is below foundation level	Only enforce effort of maintenance provision for Big 5 cities based on present provisions for NYC. In most cases prevents decreases in education spending from previous year.
3d) Is federal aid counted in local contribution?					
	Yes. If federal aid was not part of local contribution and local contribution rate stayed the same, then state aid would increase \$1.4 billion with two-thirds of this in NYC	Yes. Federal impact act and IDEA aid.	No	No	No
4) Transition adjustment:					
	Don't specify	Three-year phase-in Allows for ENA in first year, Basic operating aid 2nd year, cost adjustment in 3rd year.	Seven-year phase-in 5 to 15% cap on loss and gain per year.	Four-year phase-in Equal change each year and no loss of revenue (save harmless)	Five-year phase-in Equal change each year and no loss of revenue (save harmless)