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Management Analysis and Planning, Inc.

The New York Adequacy Study:
***“Determining the Cost of Providing All Children in New York an
Adequate Education”***

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The AIR/MAP research team takes sole responsibility for the entire substance and content of this report and operated independently on arriving at any recommendations regarding the costs of adequacy.

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Executive Summary

What is the cost of providing all New York public school students a full opportunity to meet the Regents Learning Standards?

This report presents the results of a fifteen-month project undertaken jointly by American Institutes for Research (AIR) and Management Analysis and Planning, Inc. (MAP) to answer the question posed above. The following discussion summarizes the major components of this “costing out” study. “Costing out” is a term regularly applied to this type of analysis of adequacy in education. In the course of this endeavor, AIR/MAP obtained input from professional educators and convened a full-day meeting with representatives of taxpayers, school board members, parents, legislators, and other constituencies.

The Bottom Line

Excluding transportation and debt service, public schools in New York State spent about \$31.71 billion in 2001-02 to educate its students.¹ This study suggests that an additional \$6.21 to \$8.40 billion would have been necessary in this same school year to ensure a “full opportunity to meet the Regents Learning Standards” to all students. Across this range of added expenditure, it was found that about 520 districts would have required additional funds, while the remaining 160 districts in the state were already spending at “adequate” levels.²

Research Methods

The methodological centerpiece for this study is referred to in school finance literature as a “professional judgment” approach. The AIR/MAP research team selected highly qualified New York State educators to serve on a series of professional judgment panels to design instructional programs necessary to meet the outcome goal specified above, i.e. a “full opportunity to meet the Regents Learning Standards.”³ These panels were then asked to specify the resources needed to deliver those programs.

AIR/MAP supplemented the information provided from these panels with commentary from an external cadre of researchers in the field, feedback from stakeholders outside of education, an analysis of staffing patterns in schools identified as “highly successful” in

¹ Analysis of expenditures on school transportation services and the debt service to acquire land and build school facilities was beyond the scope of the present study. Moreover, the \$31.71 billion does not include federal and state funding for pre-kindergarten programs not administered by the Department of Education.

² The analysis omits districts designated as “Special Aid” as well as those with a minimal teaching staff.

³ For a complete statement of the standards around which professional judgment panels were asked to design programs, see Appendix B in the full report.

serving their student populations, and econometric explorations of New York education labor markets.

AIR/MAP imputed costs to the instructional models resulting from this process. Various analytic techniques were used to estimate the costs of an adequate education. These included econometric modeling, analyses of “successful schools,” and current research on school effectiveness.

Overview of Instructional Program Design

The instructional program designs developed by the PJP added resources to reduce class sizes and add teaching specialists at all levels. This was especially true in the early grades to support improved reading and math programs. The panels also added resources for early education and extended day and summer school programs, especially for schools with higher proportions of students in poverty. Early education programs were included to help students prepare for school. The extended time programs were directed toward students currently unable to master the requisite skills during normal school hours. These programs were especially focused on children from economically disadvantaged families.

Why a Range of Numbers?

The range of numbers presented above reflects the fact that “costing out” methods are not an exact science. These analyses rely primarily on professional judgments regarding the services needed to achieve the outcome standard specified above. They also rely on assumptions regarding other factors likely to affect overall cost. An important example is the potential change in district administration that might be needed to support the instructional program descriptions derived through professional judgment. These alternative specifications and assumptions and their affect on the overall cost estimate for the state are described in detail in the full report. Reasonable people legitimately can disagree with these assumptions and would arrive at different conclusions using an alternative set. For this reason, full transparency regarding the full set of processes underlying this study, the varying assumptions used, and their effect on cost is essential. The state-of-the-art in pedagogy precludes predicting with certainty the ultimate effect of any intervention or outcome.

Public Engagement & the Professional Judgment Process

The initial stages of this project were devoted to a series of public engagement meetings in which the citizens of the state were provided an opportunity to express their views on what criteria should be used to define adequacy and what would be required to achieve adequacy in public schools. An important result of these meetings was the outcome standard specified for the study, i.e. providing all students with a “full opportunity” to meet the Regents Learning Standards.

Following the public engagement meetings, the AIR/MAP team developed a process for selecting “highly qualified” educators to serve on a series of professional judgment panels. Eight panels were organized to create descriptions of instructional programs that would meet the outcome criterion listed above for all children. These initial eight panels were asked to describe “adequate” programs for students living in poverty, for English language learners (ELLs), and for students in special education. Two additional panels were selected from the membership of the original eight to specify special education programs in more detail.

Following these initial meetings, the AIR/MAP team organized one additional panel from representatives of the first ten panels to help the research team synthesize, interpret, and revise the resource specifications. This panel, referred to as the *Summary PJP Team*, met on two occasions.

“Adequate” cost estimates were made at three stages of the professional judgment process. Stage 1 estimates are based on the initial specifications developed by the ten original PJPs that met during the summer of 2003.

Stage 2 estimates include revisions made by the *Summary PJP Team* at the first of its two meetings in December of 2003. These revisions included refined estimates of the variations in the enrollment patterns for add-on programs as well as other changes in the resource specifications.

Stage 3 include final revisions of the *Summary PJP Team* during their January 2004 meeting. This primary pertained to services for English language learners.

In general, the analysis of school program costs derived from the work of the PJPs show lower per pupil costs for larger schools, higher per pupil costs for schools with greater numbers of students in poverty, who require ELL services, or are in special education. Reflecting the judgment of the panels, poverty was seen to have an especially substantial influence on cost.

Central Administration, Maintenance, and Operations Costs

To compare the school program costs derived from the PJP process with current spending in the state, it was necessary to add cost estimates of such district-level functions as central administration and maintenance and operations, which were not included in the PJP process. Two alternative approaches were used to provide lower and upper bound cost estimates. One method simply uses current spending on these district-level functions. The alternative approach assumes that spending on at least some district-level functions will need to change in proportion to changes to instructional program spending based on the PJP specifications. While more precise analysis of district-level functions is beyond the scope of this study, it was felt that these parameters provide reasonable bounds for considering administrative costs within this context.

Geographic Cost Differences

The next step in the analysis was to develop an adjustment for geographic cost differences, i.e. variations in the cost of recruiting and employing comparable school personnel in districts across the state. These analyses focus on the compensation of public school teachers which, based on previous work by Chambers (1981b, 1997), has been shown to be highly correlated with cost differences for other categories of school personnel.

Four alternative models were used to estimate patterns of teacher compensation.⁴ Each showed highly similar patterns that are highly correlated with one another (all above 0.97). Depending on the model, districts with the highest teacher personnel costs pay anywhere from 40 to almost 60 percent more than the lowest cost districts for comparable teachers.

The model finally selected for use in this report is the most conservative in terms of the range of costs. This model was selected because it controls more effectively than the others for differences across districts in the qualifications of the teacher workforce. This is in keeping with the goal to isolate the impact of factors outside local control.

The results of these analyses were compared to variations in the cost of housing in New York State and in compensation for non-education wage earners with qualifications and background characteristics similar to teachers. For the most part, these analyses exhibit patterns of variation in cost similar to those observed for public school teachers throughout the state. Correlations between the teacher cost indices and these alternative measures were well above 0.80.

These analyses also indicated that teacher qualifications and job assignments interact. While level of compensation is clearly associated with ability to attract fully certified staff, teachers also appear willing to accept somewhat lower wages when they are allowed to spend more time teaching in subjects for which they are fully qualified.

The Results

Stage 3 Cost Estimates

Based on the PJP specifications at stage 3, in order to provide all students a “full opportunity” to meet the Regents Learning Standards New York State would have had to spend an additional \$7.20 billion in 2001-02 (see Exhibit 4-2) on districts not spending at “adequate” levels, while holding higher spending districts in place.⁵ This represents an

⁴ These include one that estimates separate equations for each of four years, a pooled cross-section time series model, a model that adjusted estimates for teacher turnover, and a teacher fixed-effects model. The availability of multiple years of data on individual school personnel permitted the analysis to compare and identify consistent patterns in cost differences over time.

⁵ We have preserved the numbering of the exhibits in the Executive Summary to reflect those found in the main body of the full report.

increase of 22.7 percent (i.e., a total spending level of \$38.91 billion) over the actual spending levels of \$31.71 billion in that same year.⁶

Based on these results, New York City Schools, enrolling approximately 37 percent of the state's students, would require an additional \$4.46 billion in 2001-02 dollars, an increase of 39.1 percent. Districts with average and high "needs to resource capacity"⁷, accounting for 30.7 and 14.1 percent of the statewide enrollment, would require additional expenditures on the order of \$1.23 billion and \$1.00 billion, respectively. Districts in the four big urban cities outside of New York City (approximately 4.6 percent of state enrollment) would need an additional \$0.42, billion.

Exhibit 4-2 - Total Expenditure Required to Bring All Districts to "Adequate" Spending Levels (Total Expenditure in Bold)

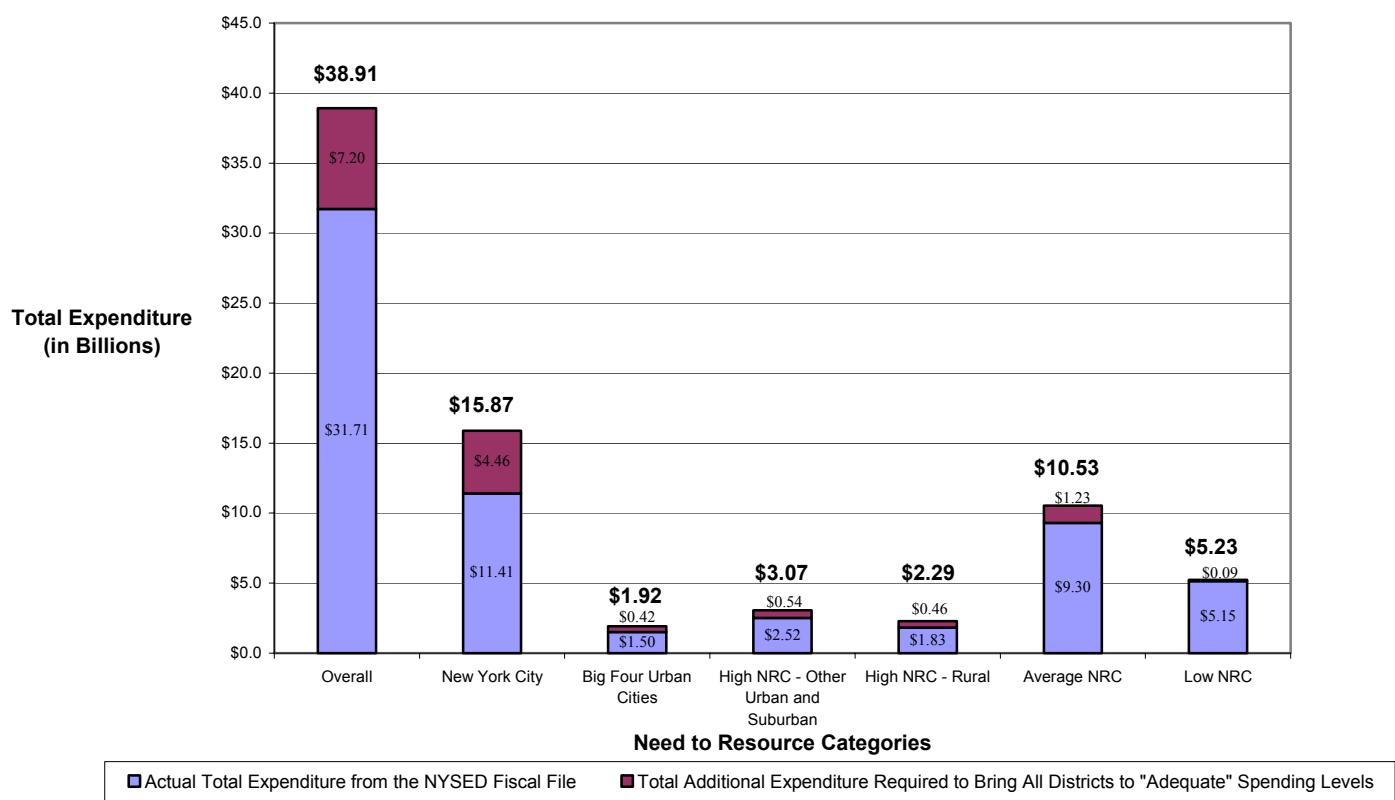


Exhibit reads: Total expenditure in 2001-02 was \$31.71 billion. An additional \$7.20 billion would have been necessary to bring all districts spending at less than adequate levels up to adequacy. Note, actual and additional expenditures may not add up exactly to totals (in bold) due to rounding errors.

⁶ Neither of these figures, the estimate of needed \$7.20 billion or the \$31.71 billion in actual spending, include home-to-school transport, district debt service, facility construction costs, or inter-district tuition payments.

⁷ The "needs to resource capacity" (NRC) index is a technical measure used by the New York State Education Department to capture the relationship between a school district's pupil needs and its locally taxable wealth.

Alternative Cost Estimates:

As suggested above, differing assumptions regarding how many stages of the PJP process to include and how to calculate district-level functions leads to different cost estimates.

Exhibit 4-3 below presents overall differences in the estimates of the costs of adequacy at the different stages (1, 2, and 3) of the professional judgment process. In addition, it also displays the impact of allowing for some growth in spending on district-level functions (overhead) in association with changes in spending on instruction.

Exhibit 4-3 - Total Actual and Projected Expenditures by Simulation Model

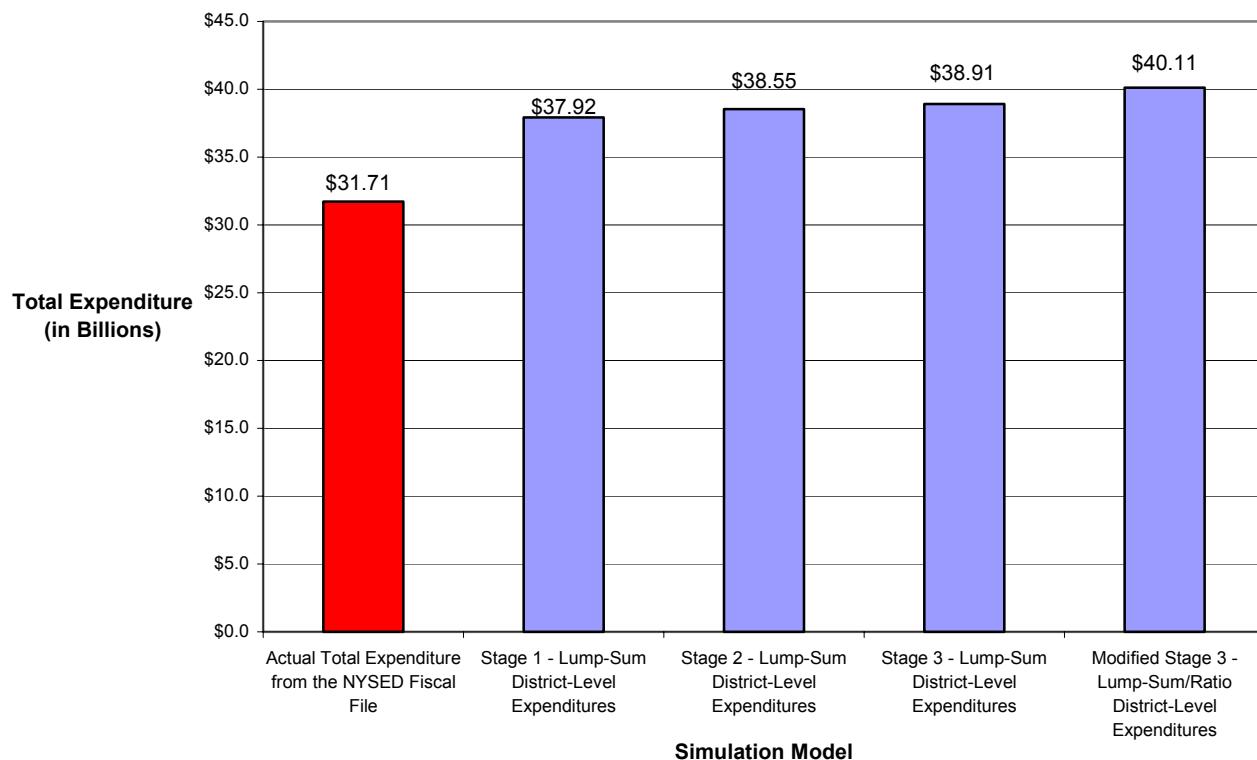


Exhibit reads: Total expenditure in 2001-02 was \$31.71 billion. Using the Stage 1 resource specifications an additional \$6.21 billion would have been necessary to bring all districts spending at less than adequate levels up to adequacy, making a total expenditure of \$37.92 billion.

Compared to total current spending of \$31.71 billion, the Stage 1 specifications suggest that an additional \$6.21 billion would be necessary to achieve adequacy in New York State. At Stage 2, which reflects a revised estimate of the projections of targeted enrollments in the preschool and elementary extended time programs as well as modified resource configurations at the middle and high school levels, the estimated additional necessary expenditure increases to \$6.84 billion.⁸ The Stage 3 estimate (i.e., \$7.20 billion) is the same as that presented in Exhibit 4-2. The difference between Stages 2 and 3 reflects an increase in the resources specified for ELL students that were considered

⁸ The only change between Stages 1 and 2 at the elementary level was in the projected number of students who would be enrolled in the preschool programs and the extended time programs. There were no changes in the resource configurations in the preschool and elementary extended time programs. Chapter 4 in the main body of the report contains a more detailed account of how the specified resource configurations and targeted enrollments changed over the three stages of the professional judgment process.

during the January meeting of the *Summary PJP Team* carried out in response to comments made at the end of the December 2003 meeting of the *Stakeholder Panel*.

The modified Stage 3 cost estimate of \$8.40 billion is highest because it includes spending on district-level functions that, to some degree, were assumed to grow in proportion to changes in instructional spending.

Thus, the estimates range from a low of \$37.92 billion to a high of \$40.11 billion. Using current (i.e., 2001-02) spending as a base, these estimates suggest that the additional investment required to achieve adequacy in New York State public schools ranges from 19.6 to 26.5 percent.

Patterns of Cost Differences

As shown in Exhibit 4-8, geographic cost variations, the scale of district operations, and differences in pupil need all play distinct roles in accounting for variations in the estimated cost of achieving adequacy. Analysis of the variations in the patterns of scale and need revealed that the five large urban districts tended to exhibit relatively high projected expenditures based on pupil needs, all else equal, and relatively lower projected expenditures associated with scale of operations, all else equal. New York City and other districts in the New York metropolitan area tend to exhibit the highest geographic cost differences associated with the salaries of school personnel.

Exhibit 4-8 - Relative Scale and Need Indices and Implicit GCEI by Need to Resource Capacity Category Based on Model Using Actual School Enrollment

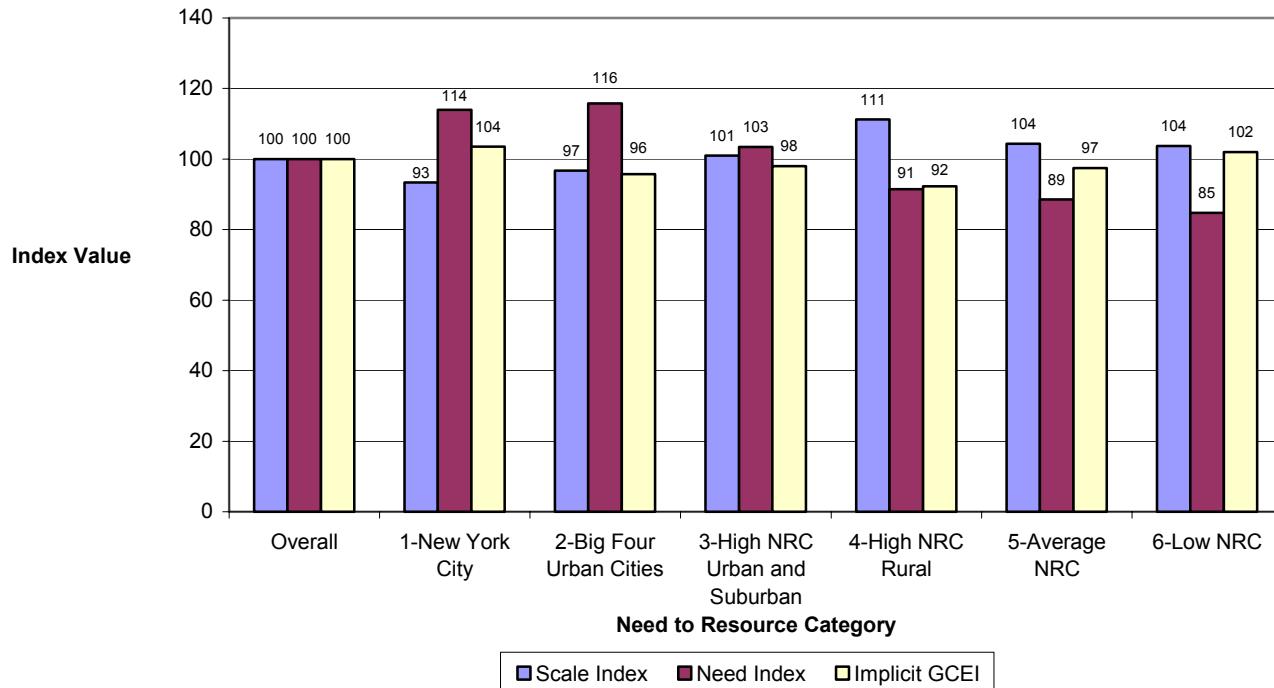


Exhibit reads: It costs approximately 4 percent more to hire a qualified teacher in New York City relative to a comparable teacher that instructs the average student in the state. Pupil needs in New York City are 14 percent higher than the statewide pupil-weighted average.

Concluding Remarks

Scale of operations and the distribution of special student needs (poverty, ELL, and special education) are the two major factors underlying the cost variations shown in this study. In turn, policy makers should consider the relative weights they choose to place on each of these factors. Due to the highly integrated fashion by which each of them was treated within the model, however, they may be best suited to block grant, as opposed to categorical, funding approaches. For example, categorical funding mechanisms such as special education funding weights will not be easily derived from this approach.

Also, although the Professional Judgment Panels derived instructional designs by which schools could construct an adequate opportunity to meet the Regents Learning Standards, this theoretical design does not include, or recommend, that the specific components of these models become mandates for local practice. However insightful the instructional designs created by Professional Judgment Panels or persuasive the case for their effectiveness, education continues to be as much of an art as it is a science. Harnessing creativity and commitment, and taking advantage of the experience of local educators, necessitates providing them with discretion to determine exactly how funds should be used.

Chapter 1 - Introduction and Overview

What is the cost of providing all New York public school students a full opportunity to meet the Regents Learning Standards?

This report presents the results of a fifteen-month analytic and scholarly effort undertaken jointly by American Institutes for Research (AIR) and Management Analysis and Planning, Inc. (MAP) to answer this question. This is a “costing out” study. “Costing out” is a term regularly applied to this type of analysis of adequacy in education. In the course of this endeavor, the AIR/MAP team obtained input from professional educators and held conversations with representatives of taxpayers, school board members, parents, legislators, and other interested constituencies.

With a combination of federal, state and local sources of revenue, the public schools in New York State spent a total of \$31.71 billion in the 2001-02 school year to educate its students. This amount is subsequently referred to in this report as total current expenditure.⁹ The estimates developed in this study suggest that the costs of an adequate education in New York State will require an additional investment of somewhere between \$6.21 and \$8.40 billion.

It is important to understand how to interpret these estimates. The range of estimates presented above reflect the amount of funds that will be needed to bring all districts not currently spending at levels deemed adequate by the analysis in this report up to a level to provide all students within those districts the opportunity to meet the Regents Learning Standards. The analyses contained in this report suggest, depending on the assumptions, that somewhere between 516 and 520 school districts are currently spending below adequate levels out of the total of 680 regular school districts in New York State.¹⁰

By implication, there are some districts in the State of New York that are already spending at adequate levels. This is not to claim that these districts spend too much money. They may well be spending more than the AIR/MAP projections of what is “adequate” simply because they are responding to community determinations of local needs or community preferences for added instructional and co-curricular activities. This is not a judgment that researchers are empowered to make, but rather a decision for local school boards and citizens.

⁹ Total current expenditure equals total expenditure less expenditures on transportation services and debt service. The present study excludes any analysis of expenditures on school transportation services and the debt service to acquire land and build school facilities. While these components are important, they are simply beyond the scope of the present study primarily because of time and budget limits to support the current work. Future work should be undertaken in these areas.

¹⁰ As mentioned above, the analysis includes only those districts not defined as “Special Aid” or with a minimal teaching staff.

The foundation for these estimates is based on the recommendations of a series of professional judgment panels made up of highly qualified educators. The instructional program designs that they developed suggest the need for additional resources to reduce class sizes and add teaching specialists at all levels, but especially in early grades to support improved reading programs and programs designed to improve student facility with numbers. Additional dollars are also needed to support early education programs and extended day and summer school programs for schools serving greater proportions of children living in poverty. Early education programs help students prepare for school and be ready to learn the critical reading skills that will be essential to their educational success. The extended time programs are directed toward students who are currently unable to master the requisite skills during normal school hours. Moreover, additional support resources will be required to support children and families from economically disadvantaged families.

Why do we report a range of numbers rather than a precise estimate? The “costing out” methods are not based on an exact science. Studies of education are no different from other studies by economists that are built on a foundation of assumptions about services necessary to achieve a certain goal for society. What will it cost to land a man on the moon, to clean up an oil spill in Alaska, or to eradicate a deadly disease? Each of these questions requires analysts to build a structure for costing out similar to what has been done in the present study. It follows that different assumptions can lead to different results.

In this report, the AIR/MAP team has attempted to make transparent all of the important assumptions. Reasonable people legitimately can disagree with these assumptions and would arrive at different conclusions using an alternative set. The state-of-the-art in pedagogy precludes predicting with certainty the ultimate effect of any intervention or outcome. A range of estimates is presented here along with the series of assumptions underlying each estimate. The transparency of this process allows readers or policy makers to make their own assessment of what assumptions or foundations they are willing to accept and to come up with what they regard as a reasonable estimate of the cost of achieving the goal.

Research Methods

The methodological centerpiece for this study has been what is referred to in school finance literature as a “Professional Judgment” approach. Suffice it to note here that the AIR/MAP research team selected highly qualified New York State educators to serve on a series of professional judgment panels to design instructional programs necessary to provide an opportunity for all children to meet the Regents Learning Standards.¹¹ These panels were then asked to specify resource requirements needed to deliver those programs. Detailed descriptions of the manner in which these teams operated are provided in Chapter 2.

¹¹ For a complete statement of the standards around which professional judgment panels were asked to design programs, see Appendix B to this report.

AIR/MAP supplemented these panels with commentary from an external cadre of researchers in the field, feedback from stakeholders outside of education who represented parties with an interest in education, an analysis of staffing patterns in schools identified as highly successful in serving their student populations, and econometric explorations of New York State school personnel labor markets. AIR/MAP analysts imputed costs to the instructional models designed by Professional Judgment Panels.

Financial “Adequacy” in a New York State Context

The concept of education funding “adequacy” was initially raised in New York State by the Court of Appeals in its 1982 decision in *Levittown v. Nyquist*, 57 N.Y.2d 57 (1982) that the state’s constitution guaranteed all New York children an opportunity for a “sound basic education.” The Court did not, however, attempt at that time to define a “sound basic education.”

In response to *Levittown*, the New York State Education Department convened a task force to define this critical term. That group decided that a “sound basic education” could best be defined not in the abstract, but in terms of learning standards. This decision led to an extensive state-sponsored research and public engagement process culminating in 1996 in the issuance of the Regents Learning Standards. The Regents Learning Standards establish detailed expectations for student achievement in seven academic content areas. In order to obtain a high school diploma, New York students must pass a set of Regents Examinations based on these standards.

Implementation of the Regents Learning Standards has led to extensive reforms in what and how schools teach and how classroom teachers are prepared and certified. However, there has not yet been a systematic attempt by the state to determine the amount of funding necessary to implement these reforms and to ensure that all schools have the resources needed to provide students an opportunity to meet the state’s challenging new standards. The research results reported here are intended to remedy that gap.¹²

In 1993, the Campaign for Fiscal Equity (CFE) challenged the state’s school financing system on the grounds that it failed to provide students sufficient opportunity for a sound basic education in New York City. CFE prevailed at the trial level. In 2001, State Supreme Court Justice Leland DeGrasse declared New York State’s school finance arrangements unconstitutional. The decision was appealed and implementation of a remedy was consequently delayed.

In June of 2002, the state’s intermediate appellate court, the Appellate Division, First Department, reversed Justice DeGrasse’s decision. The New York Court of Appeals, the state’s highest court, subsequently accepted jurisdiction of the case, and its final decision,

¹² It must be recognized that the success of schools also depends on other individuals and institutions to provide the health, intellectual stimulus, and family support upon which public school systems can build. Schools cannot and do not perform their role in a vacuum, and this is an important qualification of conclusions reached in any study of adequacy in education. Also, success of schools depends on effective allocation of resources and implementation of programs in school districts.

issued in June of 2003, reversed the Appellate Court’s decision and largely upheld the trial court’s original decision. Thus, New York State’s current education funding arrangements have been definitively determined to be unconstitutional and must be altered to ensure that funding is “adequate.”

Standards as a Means to Determine “Adequate” Resources

The Court of Appeals decision emphasizes the need for 21st century students to achieve academically at levels enabling them to perform productively in the economy and engage in civic activities such as voting in an informed manner and serving effectively as a juror. Previously mentioned, the New York State Board of Regents for reasons similar to those stated by Justice DeGrasse adopted “Learning Standards”. Consequently, this research project’s quest for “adequate” school funding relies upon the Regents Learning Standards as the performance criteria.

Conceptual Framework

To achieve this study’s objectives, the AIR/MAP research team determined conditions associated with school cost levels. The rationale here is that available revenues should, at a minimum, be sufficient to provide an opportunity for all students to meet the Regents Learning Standards and should be adjusted for cost variations beyond a local school districts’ immediate control.

AIR/MAP used a variety of analytical techniques in combination to estimate the costs of an adequate education. The professional judgment approach formed the centerpiece of the work. However, components of the analysis draw on other methodological tools and models to further support the results of the professional judgment model. These other methods include econometric methods, analyses of “successful schools,” and current research on school effectiveness.

Professional Judgment Model (PJM)

AIR principal investigators involved with this research project pioneered means for involving informed educators in the process of designing costing-out models. Initial research in this arena was conducted in Illinois and Alaska (see Chambers and Parrish, 1982 and 1984). These early studies were primarily oriented around input models that geared toward defining programmatic models that were appropriate to meet the service delivery needs of different student populations.

MAP principals more recently built on these prior developments in research performed for the states of Wyoming, Maryland, and Minnesota. MAP constructed simulation exercises to take advantage of the professional knowledge and expertise of teachers, principals, business managers, superintendents, and others to construct instructional programs capable of achieving specified student learning objectives.

In this research project, AIR/MAP researchers used the Professional Judgment Model approach, tailored to New York State’s various types of schools and districts to determine

the cost of an adequate education as designed by ten specially convened professional judgment panels (subsequently referred to as PJP) of 56 highly qualified educators.

There are three elements that distinguish the current work in New York and some of the more recent applications of the professional judgment model (e.g., MAP, 1997, 2001; Augenblick, 1997, 2001; and Augenblick and Myers, 2003) from the earlier work of Chambers and Parrish (1982a, 1984) on professional judgment. First, the goals established for the professional judgment panels (subsequently referred to as PJP) are clearly focused more on student outcomes. In the case of New York, it is represented in the Regents Learning Standards established by New York State.

Second, the professional judgment panels are asked to begin their deliberations by designing instructional programs at each school level. It is only after thinking about the content and structure of the educational program that the panels are then asked to develop the resource specifications necessary to delivery the services necessary to achieve the desired results for children.

Third, the professional judgment process is structured to provide for a more integrated approach to meeting the diverse needs of students. The early models developed by Chambers and Parrish organized separate panels to develop delivery systems for the various categories of children. The current process organizes educators to work together immediately to think about the instructional needs of all students in a more integrated fashion, and permits the educators to decide how to reflect the needs of the diverse groups of students to be served.

The professional judgment model as implemented in New York included organization of two additional panels. One of these additional panels was selected from representatives of the original professional judgment panels, and this panel was referred to as the *Summary PJP Team*. The *Summary PJP Team* was organized to review the synthesis that the AIR/MAP team developed of the delivery systems designed by the original PJP. The second additional panel was made up of stakeholders who are non-educators who represent various parties who have an interest in the financing of education. These stakeholders represent parents, taxpayers, the state legislature, the governor's office, school board members, and the business community.

Econometric Methods

The availability of the large-scale databases maintained by New York State's Education Department, made it possible to undertake econometric analyses of education-related costs. AIR/MAP relied upon econometric tools and standard labor market models to ascertain differences in the costs of comparable school personnel (teachers) from one geographic region to another within New York.

Econometric tools were also relied upon in exploring the variations in the patterns of projected per pupil expenditures. Specifically, once the projections for each district were developed from the professional judgment model, the AIR/MAP team examined the

patterns of variation in the costs of adequacy and how these related to variations in the scale of district operations and pupil needs.

Analysis of Successful Schools

The AIR/MAP team also constructed indices of student performance for New York schools, and then used econometric and statistical methods to identify those schools that were “unusually successful” or who were “beating the odds,” so to speak.¹³ These schools were unusually “successful” in producing high student performance relative to what researchers conventionally would predict from the characteristics of students served. To ensure consistent success for a significant length of time schools were labeled “successful” by the AIR/MAP research team if they maintained superior performance on average over a four-year period.

The primary use of the *successful schools* analysis was to help AIR/MAP select candidates who might serve on the professional judgment panels (PJP).¹⁴ In addition, staffing data for the *successful schools* were provided as background for, and to be included in, the deliberations of a meeting of a group of PJP representatives, who were asked at a later stage of the process to review the AIR/MAP synthesis of the PJP program designs and specifications. For more on the successful schools analysis and staffing profiles of those schools deemed “successful” the reader is referred to Appendix I.

Current Research

Educational policy literature contains a number of empirical studies of the consequences of educational settings and instructional strategies on student performance. Several of these studies have suggestive findings about such things as class and school size, early intervention programs, and professional development. The AIR/MAP team distilled and synthesized these data and provided an objective description of some of the mainstream educational research as background for PJP deliberations. This account of potentially effective settings and instructional practices can be found in Appendix B.

What Professional Judgment Panels Were Not Expected to Accomplish

Panels were not asked to determine levels of service involved in transporting students, maintaining and operating buildings, operating a district office, or providing food service. Similarly, debt service and major facility construction matters were not within the purview of the PJP. In a later analytic stage, the AIR/MAP team reincorporated cost estimates for district office functions as well as the maintenance and operations of district and school buildings.

¹³ The outcomes included in our analysis of successful schools include percentage of students meeting the Regents Learning Standards requirements for English and mathematics (for high schools) or students on a trajectory to do so (for elementary and middle schools), student attendance, and dropout rates (for high schools only).

¹⁴ This selection process is described in further detail below.

It should also be noted that no analysis of the expenditures on home-to-school transportation services or on debt service for school facilities was carried out as part of this project. Exclusion of these components is not to say that they are not important. Both interact in significant ways with any effort to address the adequacy of funding for educational services. However, these components of school expenditure require specialized analyses beyond the original scope of this project.

PJPs were not asked to impute dollar costs to the instructional programs they designed. Relying on labor-market adjusted professional salary figures for educators and state mean costs for matters such as fringe benefits, AIR/MAP researchers imputed these costs. PJPs were not asked initially to develop sophisticated cost adjustments for economies and diseconomies of scale accompanying large or necessary small schools and school districts. The AIR/MAP team used statistical methods in combination with the PJP specifications to estimate school and district scale economies. However, a subsequent meeting of the *Summary PJP Team* was convened to review and revise the AIR/MAP projections to account for the impact of small school size on resource specifications.

PJPs were not asked to convert instructional designs into state education finance distribution formula components. Presumably, this is a legislative and executive branch prerogative and not one for which most professional educators are equipped by training or temperament to perform.

PJPs were not requested to determine instructional programs or costs associated with a transition from what now exists to what might or ought to exist. Many individuals have raised questions regarding the resource intensity that PJPs accorded elementary and early childhood education in their design of what is “adequate.” These panels repeatedly expressed a philosophy or instructional strategy of early intervention. Moreover, they were certainly sensitive to the large body of students now in secondary school ill positioned to benefit from proposed early interventions.

In the same manner, PJPs were not asked to reform other, often quite important, components of New York’s education system. School district consolidation, charter schools, devolution of authority in large districts, school board structural reform, and a long list of other possible changes might well be in order. However, they were not the focus of PJP deliberations.

Finally, professional judgment panel participants were not asked to consider per pupil or aggregate costs or the statewide (re)distributional consequences of instructional designs. However important these school finance dimensions, they were set aside as policy-system prerogatives beyond the purview of professional educators. Their role was focused on developing appropriate delivery systems to achieve desired student outcomes.

An Overview of the Project

Exhibit 1-1 provides an overview of the organization of the project so the reader can see how the various steps in the process relate to one another.

Phase 1 of the project focused on the public engagement and initial successful schools analyses. The public engagement processes, which are described in more detail in Chapter Two, were designed by the Campaign for Fiscal Equity (CFE) to provide the general public with the opportunity to provide input on the goals and objectives of the process and on their thinking about what would be required to achieve the desired results for children. Immediately prior to the implementation of the public engagement process, CFE organized the Council for Costing Out (CCO), which encompasses a multitude of organizations and agencies with an interest in education and school finance in New York State. It is through the CCO that AIR/MAP was able to establish linkages with numerous agencies that facilitated the legitimacy of the study and helped gain access to necessary data during the course of the project. The CCO also provided a linkage to organizations from which the AIR/MAP team was able to obtain nominations for those who might participate in the professional judgment process.

The initial components of the successful schools analysis was directed toward identifying schools that would be contacted to search for highly qualified educators to participate on the one of the PJP's. The members of the PJP's were ultimately selected by the AIR/MAP team based on responses to the inquiries.

Phase 2 of the process included the meeting of the professional judgment panels. These included eight general education panels and two special education panels.

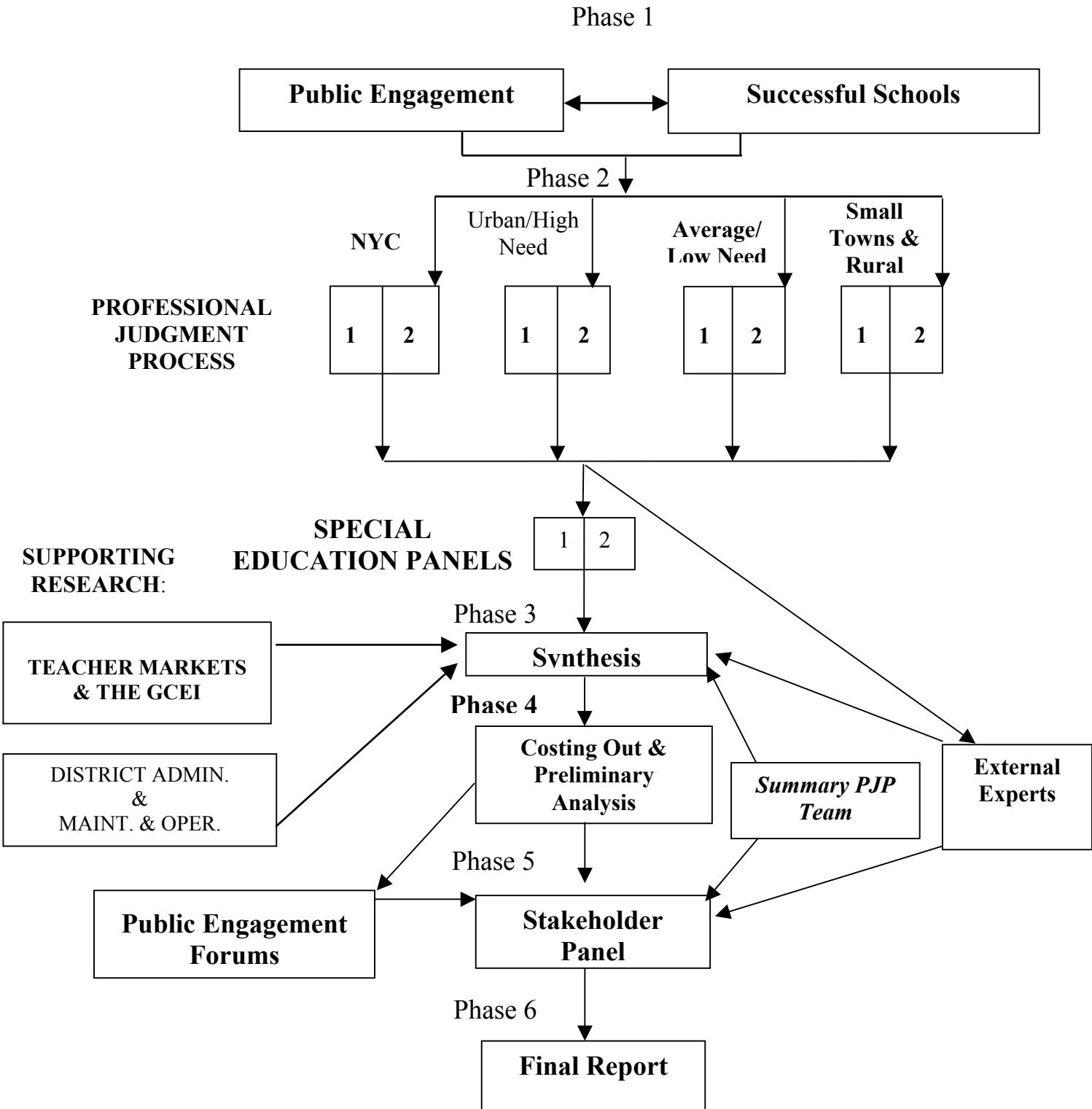
Phase 3 included three components: namely, the synthesis of the initial program specifications, an analysis of teacher markets and geographic cost differences, and an examination of current fiscal data to estimate current spending on district level functions not included as part of the professional judgment process. The analysis of teacher markets was, for the most part, focused on ascertaining how much more or less it costs to recruit and employ comparable resources across geographic locations within the State of New York.

Phase 4 included development of the initial estimates of the cost of the school prototypes and some preliminary numbers related to the cost of adequacy. It also included the conduct of reviews by the external panel of experts: Henry Levin, Margaret McLaughlin, Kenji Hakuta, and Gary Natriello.

Phase 5 included meetings of the *Summary PJP Team* and the *Stakeholder panel* along with public engagement forums that presented the preliminary results of the analysis to the public.

Phase 6 is the production of the final report, which brings all of the various pieces together.

Exhibit 1-1: Overview of Project Components



Organization of This Report

This report contains five main chapters and an extended set of formal appendices available in a separate document. Chapter 1 provides some context to the project and provides an overview of the results. Chapter 2 describes how the professional judgment process is utilized to construct the foundation for estimating the cost of an adequate education. Chapter 3 shows how geographic differences in the cost of school personnel are accounted for in the analysis. In Chapter 4 the detailed results of the actual “costing out” are presented. Chapter 5 offers conclusions and observations regarding processes involved with and outcomes from this study.

Report Appendices (A through L) contain technical information and copies of materials provided to the 56 New York education professionals who comprised the professional judgment panels upon which the AIR/MAP research team depended to design instructional programs capable of delivering an “adequate” education for public school students in the state. Because of the magnitude of these appendices, they have been placed in a separate document.

The five chapters of this report and detailed appendices will enable a reader to comprehend fully this study’s results. In addition, however, this detailed reporting is intended to fulfill one of the research team’s principal objectives, rendering transparent the processes by which “adequate costs” were determined. These detailed materials and descriptions of processes should enable other analysts to repeat these methods and to substitute their own assumptions for those of the AIR/MAP researchers, should they desire. As will be illustrated in a subsequent section, costing out analyses are highly sensitive to the underlying assumptions.

Chapter 2 - Measuring Pupil Need Through the Professional Judgment Process

The key element of this study's approach to estimate the cost of providing all students an opportunity to meet the Regents Learning Standards is what is commonly referred to as professional judgment (PJ). The primary characteristic of PJ methodology is that the levels of resources necessary to deliver desired outcomes are estimated from systematically derived judgments of groups of highly qualified education professionals. In most instances where PJ methodology has been employed, researchers have relied solely, or almost exclusively, on the outcome of the professional judgment process. In this study, the researchers have attempted to augment that judgment by engaging other interested parties in addition to examining resource allocation patterns of successful schools.

The first phase of the study entailed a process of public engagement and identification of successful schools. The successful schools analysis is discussed in more detail in Appendix I of this report. Public engagement is a unique component of the AIR/MAP study that tends to set it apart from similar studies. In this study, the opinions of a broad base of individuals and groups interested in public schools were obtained to augment and to inform the judgment of professional educators who participated directly in the professional judgment process.

Public Engagement

During the spring of 2003 the New York State Council for Costing Out¹⁵ (CCO) convened 13 meetings around the state to provide a forum for interested parties to address two questions:¹⁶

- What constitutes an adequate educational opportunity?
- What do public schools in New York need in order to ensure all their students an opportunity for an adequate education?

The first question was fundamental to the PJ process. Any estimation of costs requires first the definition of "cost to do what?" That is, what are the specific outcomes to be produced? The Court of Appeals in 1982 articulated a "sound basic education" as the standard. The Regents defined sound basic as meeting the Regents Learning Standards, and Judge DeGrasse considered, in part, the need for students to be able to perform productively in the economy and engage in civic activities such as voting and serving as

¹⁵ The Council for Costing Out (CCO) is comprised of representatives of a number of stakeholder organizations with an interest in education. The complete list of representatives and their organizations is included in the acknowledgments to this report.

¹⁶ For a detailed report on public engagement see: New York State Council on Costing Out, Adequate Funding for New York's Schools: Communities Speak Out on What Students Really Need to Succeed; June 2003. A copy of this report is provided in Appendix A of this report.

jurors. Forum participants quickly agreed that the outcome standard should be the Regents Learning Standards, but struggled with whether universal achievement was realistic. Consensus ultimately was reached that the outcome standard should be that all students be provided with a *full opportunity* to meet the Regents Learning Standards.

On the second question, there was a strong consensus that the following interventions and programs were critical to providing all students, especially those who are deemed at-risk, a full opportunity to meet the Regents Learning Standards:

- Early childhood programs, such as Head Start, full-day pre-kindergarten, and full-day kindergarten, supplemented with strong parent education components should be available for all students.
- Intensive early literacy programs, with specially trained teachers or tutors, are essential to ensure that all children read and write at grade level by the third grade.
- Academic intervention services, including after-school, summer school, and other programs that extend time on task should be available for all students who need them.
- Depending on concentrations of students with special needs, small classes of 10 to 20 in elementary grades, 20 to 25 in middle grades, and up to 25 in high schools were recommended.
- All students should have adequate access to guidance, social, and psychological support services.
- High-quality professional development aligned with learning standards directly related to teacher capacity and student-learning needs should be available to all teachers.
- Schools should make a maximum effort to involve all parents in their children's education.
- All special education students should receive the services of well-trained and highly qualified teachers in addition to other aids and services necessary for them to succeed in inclusion settings. Regular classroom teachers should be trained to meet the need of special education students.

All of the above information was provided to the educators participating in the PJ process prior to their being convened.

Professional Judgment Panels

Several researchers have used professional judgment methodology to estimate the cost of providing an adequate educational program.¹⁷. Although they have employed various procedures, all have in common a reliance on the judgment of professional educators derived through some systematic procedure. Just as there is no one best way to estimate the cost of providing an adequate education, there is no one best way to conduct a study that relies on professional judgment. There are, however, a number of criteria against

¹⁷ For example, see Chambers and Parrish (1982, 1984) and MAP Reports (1997, 2001) for previous studies that have used this approach.

which any professional judgment study can be measured. These may not be the only criteria one would use to evaluate the professional judgment process, but AIR/MAP proposes these as common sense standards against which any study of this type should be evaluated.

Criteria for evaluating professional judgment adequacy studies:

1. Transparency

Transparency is the primary advantage attributed to the professional judgment method for estimating adequacy. Therefore, the entire process conducted should be explicit so that policy makers and others can consider the validity of each aspect of their recommendations as well as the overall quality of its outcomes. This would include, at a minimum, that the following be reported:

- Outcome standards used to define an adequate education
- Participant selection criteria and procedures
- The role of the participant and the purpose of the process
- Participants' knowledge of the purpose to which their work product will be put
- Participants' qualifications
- All assumptions and instructions provided to the participants
- The roles of facilitators, observers and others participating in the process
- The original work product of each group
- Who made decisions leading to substantive conclusions, including the supporting rationale

2. Qualifications of Participants

Participants should be professional educators recognized as highly competent educators who are experienced in allocating resources and producing high-quality student outcomes.

3. Potential Conflict of Interest

To the extent possible, participants should be free of conflicts of interest. To the extent that they have potential conflicts, these should be made explicit.

4. Reliability

Multiple groups of similar expert educators should complete identical exercises to enhance the reliability of the process.

5. Records for Replicability

Sufficient records of the process should be reported to allow others to replicate it.

6. Pricing

Prices used to estimate costs should be market prices or result from rigorous economic analysis. (Price estimates tend to be beyond the expertise of school and classroom professionals.)

Recruiting Process

The objectivity and expertise of the educators involved in the professional judgment panels (PJP) is critical to the validity of the final product. Objectivity of participants is difficult to measure, but it is fair to note that all participants were aware that their work product would be used to attempt to influence levels of resources made available to public schools in the State of New York.

AIR/MAP engaged in an extensive effort to recruit highly qualified educators to participate on each of the PJP. Approximately 1,000 educators were considered for participation in the study. These individuals were identified as a result of their association with the Education Trust list of schools that are “beating the odds”¹⁸, successful schools identified through a separate AIR/MAP methodology described in Appendix I, and through nominations by members of the Council for Costing Out, school superintendents, and the New York City Schools Chancellor. See Appendix B for samples of correspondence with potential participants.

Selection Process

Approximately 275 educators responded to the invitations, and 56 were chosen to participate. To ensure that the diverse categories of districts across New York State were represented among the PJP, the 275 responses were first sorted according to four categories of school districts. These four categories are described below:¹⁹

- *PJP 1 - New York City*²⁰
- *PJP 2 - Mid- to Large-Sized Cities, Urban Fringes and Other Districts With High Needs-to-Resource-Capacity* – Districts other than New York City characterized by a high Needs-to-Resource-Capacity index located in the vicinity of any:

¹⁸ This list can be found at <http://www2.edtrust.org/edtrust>.

¹⁹ For more details about the categorization of school districts see Appendix B (*District Categorization Methodology for the New York Adequacy Study*). A discussion of the “needs-to-resource capacity” index used by the New York State Education Department may be found in <http://www.emsc.nysesd.gov/repcrd399/similar.html>.

²⁰ Most of the participants in the two New York City panels (PJP Category 1) were approved by the Chancellor’s Office for New York City Public Schools.

- Mid-size city (i.e. having a population less than 250,000) of a Metropolitan Statistical Area (MSA) or Consolidated Metropolitan Statistical Area (CMSA).
- Large city (i.e. having a population greater than or equal to 250,000) of a CMSA.
- Urban fringes of mid-sized and large cities (i.e. including any incorporated or census designated place) or places defined as urban by the Census Bureau.
- Four select large and small towns (i.e. with populations greater than or equal to 25,000, and between 2,500 and 25,000 inhabitants, respectively) and one rural place (Cortland, Ogdensburg, Olean, Plattsburgh and Watertown).²¹
- *PJP 3 - Mid-sized Cities, Urban Fringes and Other Districts With Average or Low Needs-to-Resource-Capacity* – Districts characterized by an average Needs-to-Resource-Capacity index located in:
 - Mid-size cities (same as in PJP 2 definition, above).
 - Urban fringes of mid-sized and large cities (same as in PJP 2 definition, above).
 - Large and small towns (same as in PJP 2 definition, above).
- *PJP 4 – Rural Areas Across All Needs-to-Resource Capacities* – Districts located in:
 - Any place defined as rural by the Census Bureau.
 - Fifteen select places defined as rural according to the N/RC index and as mid-size or large city urban fringe by the NCES locale classification.²²

The next step was to ensure that each of the four general education PJP's was comprised of at least one superintendent, elementary school principal, middle school principal, high school principal, classroom teacher, special educator, and business official. With the exception of New York City, no panel was to include more than one employee of a single district.

Finally, within these constraints, every effort was made to select participants who represented the size and geographic diversity of school districts in New York.

Overview of the Process

Over the course of this study AIR/MAP convened 12 professional judgment panel sessions. In all, 55 outstanding educators participated, some on multiple PJP's.²³ Eight of the PJP's were designated general education and asked to design instructional programs for student populations of varying incidence of poverty and English language development needs. Two PJP's, comprised of selected members of the initial eight,

²¹ Detailed census definitions of CMSA and MSA are included in Appendix B.

²² In these instances, where the NYSED and NCES classification schemes contradicted each other, the classification rule was determined by the NYSED N/RC index.

²³ While 56 educators were originally invited and agreed to participate on the PJP's, one of the panel members was unable to attend the scheduled meetings due to an unavoidable conflict. A subset of the original eight PJP's served on the special education panels and subsequent *Summary PJP Team*.

addressed the specific needs of students identified for special education. The final PJP, which was referred to as the *Summary PJP Team*, met twice and assisted the AIR/MAP research team interpret, clarify, review, synthesize, and revise as necessary the results of the previous ten PJPs.

All of these PJPs were comprised of educators representing the four distinct categories of New York State school districts described above.

On July 21-23, four general education panels, representing each of the four district categories (i.e., PJPs 1, 2, 3, and 4), assembled at the New York State School Boards Association office in Latham, New York.²⁴ The following weekend, four additional PJPs representing these four district classifications met and completed exercises identical to those done the prior week. For this initial set of panels, the participants in each were entirely comprised of members from these types of districts (i.e., the two PJP 4 panels were entirely comprised of educators from rural districts). This produced eight sets of initial results, two for each of the PJP categories 1 through 4.

All panels deliberated independently of one another. Each general education panel was comprised of one superintendent, one special educator, one elementary school principal, one middle school principal, one high school principal, a school business official, and a classroom teacher. Except in the case of PJP 1 (New York City) no two participants on a PJP were from the same school district. See Appendix B for lists of educators serving on each PJP.

Prior to convening, each participant received a summary report of the public engagement process, a summary of research on effective educational practices and interventions, and instructions for completing the professional judgment process.²⁵ Panelists were informed that the public engagement report and summary of research were provided for their information, and they could rely on them to the extent that they chose.

Participants were directed to design instructional programs for prototypical elementary, middle, and high schools that they agreed would provide a full opportunity to the student populations specified in the instructions to acquire the knowledge currently specified by the Regents Learning Standards. Specifically, the panels were asked to design programs to achieve the following objective:

²⁴ The AIR/MAP team is deeply indebted to the NYSSBA leadership for providing their conference facilities for not only the meetings of the PJPs, but also for a number of other strategic meetings that occurred during the project.

²⁵ See Appendices A and B for copies of the materials provided to the PJPs and other relevant information associated with the selection and organization of the panels.

Exhibit 2-1 – Desired Educational Outcomes

The federal No Child Left Behind Act and state law require all students in every school district to meet the Regents Learning Standards within the next 11 years and to make steady progress toward that goal each year. As of 2005, all high school students (except for certain special education students) will be required to achieve a passing score of 65 on the Regents examinations in English, social studies, mathematics, and science to receive a high school diploma. As of the 2005-06 school year, students in grades 3-8 will be tested in English, and mathematics (and shortly thereafter in science) to determine whether they are making satisfactory progress toward meeting the Learning Standards. Rates of yearly progress toward these goals will be disaggregated by racial, economic, disability and limited English proficiency categories.

Your job is to design an instructional program that will provide all students in the school a full opportunity to meet the Regents Learning Standards, and to attain a Regents diploma. For students in the early grades and preschool, this means designing an instructional program that will seek to address any learning problems with which students enter school. For students further along in their educational career, it means addressing any deep-rooted educational deficiencies that may have developed as thoroughly as possible, and minimizing dropout rates.²⁶

Only after they had designed instructional programs were the panel participants asked to determine the types and levels of resources necessary to implement those programs.

The instructions developed by the AIR/MAP team contained 14 assumptions that described the context in which an instructional program was to operate and certain constraints on the resources the PJP could affect. The purpose of the assumptions was to make the exercise as realistic as possible within the constraints of available participant time and expertise. For each PJP, prototypical school enrollments were the average enrollment of elementary, middle, and high schools within that school-district category. Panelists were instructed to assume that specified levels of spending on facilities, district administration, and transportation were given and could not be changed as part of the exercise. They were told that the levels of textbooks, instructional supplies and equipment, and teacher training are typical of schools in the district category under consideration. That is, panelists were to assume that prototypical schools were not being newly created, but rather that these schools were to be thought of as ongoing enterprises. Also, they were told to use their professional judgment of what types of special education students should be served in neighborhood schools, as opposed to other locations (e.g., programs provided by the Board of Cooperative Educational Services (BOCES)).²⁷

²⁶ This statement was presented to the PJPs in the original instructions provided to the panels to carry out their job during the summer meetings.

²⁷ The two special education PJPs addressed this issue in greater detail.

Finally, panelists were instructed to assume that all personnel were state-certified and that salaries were adequate to attract and retain these personnel. Asking panels to make these assumptions does not necessarily imply that they are true; but these issues are beyond the scope of this study and, in some cases, participants would have lacked specific knowledge or expertise to render a professional judgment.

The first task completed by each PJP required all participants to review and agree upon a list of program elements (e.g., personnel, supplies, assessment) required to implement an instructional program sufficient to produce the outcome standard specified above. Over the next three days the PJPs completed six additional tasks. The final task was an evaluation of the process by each participant. The other five tasks required each PJP to develop instructional programs calculated to meet the educational needs of various student populations, in accordance with the specified outcome standard. These student populations were characterized by varying percentages of students in poverty and of English language learners (ELLs). The poverty levels ranged from the 25th to the 90th percentile of eligibility for federally subsidized meals within the specified PJP and the median and 90th percentile of English language learners (ELLs) specific to each PJP. All PJPs completed a common exercise where the student eligibility for free- or reduced-price lunch and ELL identification were set at the state median. See Exhibit 2-2 for a tabular summary of the scenarios presented to each of the PJPs.

		Scenario				
		1	2	3	4	5
PJP 1	% Free/Reduced Lunch	34.2	65.8	85.3	93.0	96.6
	% English Language Learners	1.5	9.7	9.7	9.7	26.7
PJP 2	% Free/Reduced Lunch	34.2	45.9	62.5	79.7	91.9
	% English Language Learners	1.5	2.6	2.6	2.6	18.8
PJP 3	% Free/Reduced Lunch	4.5	11.7	23.6	34.2	36.0
	% English Language Learners	0.9	0.9	0.9	1.5	0.9
PJP 4	% Free/Reduced Lunch	18.1	30.6	34.2	40.4	49.7
	% English Language Learners	0.0	0.0	1.5	0.0	1.8

Grey cells denote state median values. Yellow cells denote PJP-specific median values.
Exhibit 2-2 states that for their first scenario PJP 1 was required to design an adequate instructional program to serve a student body in which 34.2 percent were eligible for free or reduced lunch and 1.5 percent were English language learners.

On August 18-19 and August 25-26, two separate PJPs were convened to specifically address services for special education students – one panel for each set of dates. These panels were comprised of a subset of educators who had served on the original eight panels.²⁸ As their focus was special education, these two panels included all eight special educators from the prior PJPs, one from each of the PJP types 1-4. This placed four special educators on each of the special education PJPs, which were then balanced by

²⁸ Only a single member of one of the special education PJPs did not participate in any of the general education PJP meetings.

four general educators. These were selected to balance the range of professional expertise found in the general education PJP (i.e., teaching, school administration, and business office). Selection was also guided by the desire to have two representatives from each of the four categories of general education PJP on each committee. Thus, each of these two special education panels had four general and four special education representatives from the New York City to the rural PJP types. Both special education PJP were given the same instructions (see Appendix B).

On December 10, 2003 and January 14, 2004, a summary panel was convened for the purpose of assisting the AIR/MAP research team in clarifying, interpreting, and synthesizing the results of the previous ten panels. The *Summary PJP Team* members were selected from the larger set of participants engaged in the initial ten panels. The *Summary PJP Team* members were selected to achieve a professional balance comparable to the initial general education panels described above (i.e. to include general and special education instructional expertise, as well as administrative and business office representation). Members were also chosen to allow a regional balance between New York City, other large to mid-level cities, and rural areas.²⁹

The members of this summary panel also represented and described the process to date and program results at a Stakeholder Meeting, held in Latham on December 11, 2003. In addition to these PJP representatives, the stakeholder panel consisted of representatives from various constituency groups with an interest in the reform of school finance. These additional stakeholder panel members included representatives of parents, school board members, taxpayers, legislators, the New York State Education Department, the Governor's staff, and the current Commission appointed by the Governor of New York to review school funding alternatives.

The stakeholder committee was provided the latest data used by the AIR/MAP team to develop the adequacy cost estimates. The non-educator members of the stakeholder panel had the opportunity to query the members of the professional judgment panels about their program designs and specifications and to provide input to the AIR/MAP team prior to the final processing and analysis of the data. This meeting included a general presentation of study approach, comments from PJP participants regarding their experience and results to date, three breakout sessions to discuss a specific set of questions posed by the research team, and a general discussion regarding the specifications and the process. The questions discussed in the breakout meetings as well as notes from each of the sessions from this day are included in Appendix B.

Synthesis of the PJP Specifications – Translating Specifications into Cost Estimates

Following the initial meetings of the PJP in the summer of 2003, the AIR/MAP team had 40 data points from the general education panels and 8 additional data points from the special education panels. These data points included all of the resource specifications alongside the designated mean enrollment levels for each school level (i.e., elementary,

²⁹ See Appendix B for the instructions used with this panel.

middle and high schools) and the composition of student needs as reflected by the percent of students eligible for free and reduced lunch programs, English language learner programs, and special education services.

The first step was to discern whether these data reflected any systematic patterns of variation. The first graphics that were created to begin exploring these data are presented in exhibits 2-3A, B, and C. Each exhibit shows the relationship between per pupil expenditures for school program costs across the poverty levels presented to each of the PJP during their exercises. School program costs include the total expenditures on the school-level resources specified by each PJP excluding preschool programs (i.e., pre-kindergarten and early childhood development programs), which were treated separately.³⁰

To aggregate to total expenditure, it was necessary to multiply the full-time equivalencies of personnel by the average compensation levels for the various categories of school personnel included in the elementary, middle and high school prototypes developed by the PJP.³¹ The total personnel costs were then added to the total of the non-personnel costs for instructional supplies, materials, equipment, professional development, and student activities to determine the total per pupil expenditure.

³⁰ As indicated previously, school program costs also exclude district-level functions such as central administration, maintenance and operations, school facilities, and transportation services. In addition, discussion with members of the *Summary PJP Team* in subsequent meetings indicated that these school program costs excluded interscholastic athletic programs and expenditures on non-personnel resources for school administration.

³¹ Average compensation levels were derived from the Personnel Master Files (PMF) provided by the NYSED. AIR/MAP calculated the pupil-weighted averages of the full-time salaries for teachers, principals, and other certified personnel and estimated from Census sources the average salaries of non-certified personnel. These data were pupil-weighted so that the salaries represented those paid to personnel working in the district attended by the average student in New York State. Use of a pupil-weighted average compensation level allows us to use a geographic cost adjustment in a way that is fiscally neutral with respect to the number of students within a district. The data on benefit rates was provided by Charles Shippee of the NYSED and were derived from the ST3 fiscal data files maintained by the department.

Exhibit 2-3A - Necessary Per Pupil Expenditure for Elementary School Program Specifications Across School Poverty

(excludes preschool program costs as well as district administration, maintenance and operations, school facilities, and transportation)

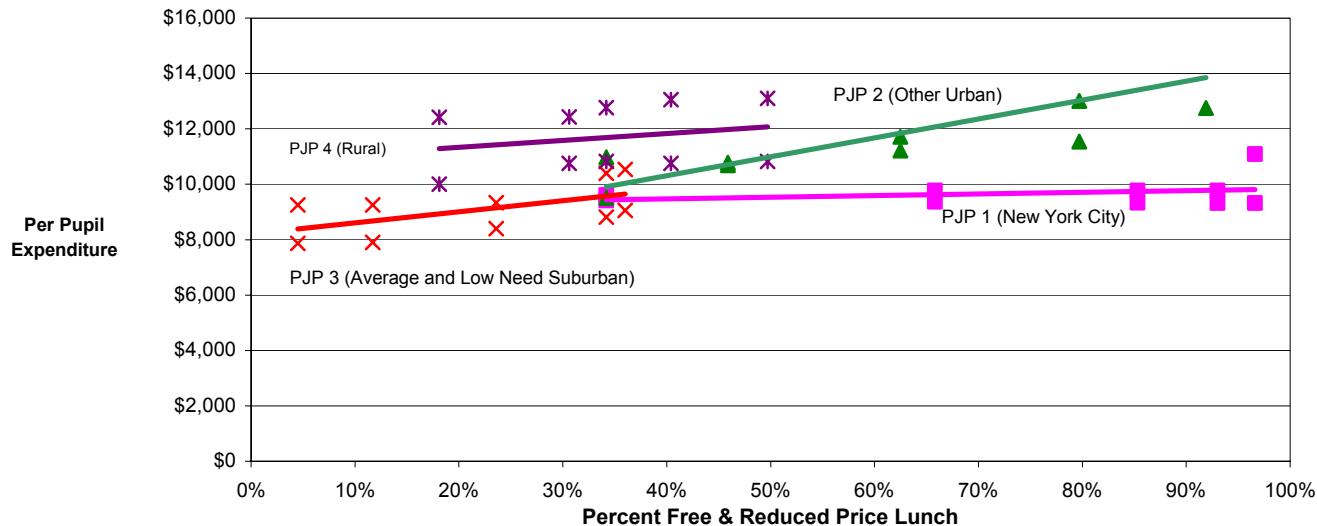


Exhibit reads: The calculated per pupil costs of the specifications developed by the PJP's representing rural districts for an elementary school with relatively low poverty (i.e., 18.1 percent of the student body eligible for free or reduced lunch) are \$10,000 and \$12,417, respectively.

Exhibit 2-3B - Necessary Per Pupil Expenditure for Middle School Program Specifications Across School Poverty

(excludes preschool program costs as well as district administration, maintenance and operations, school facilities, and transportation)

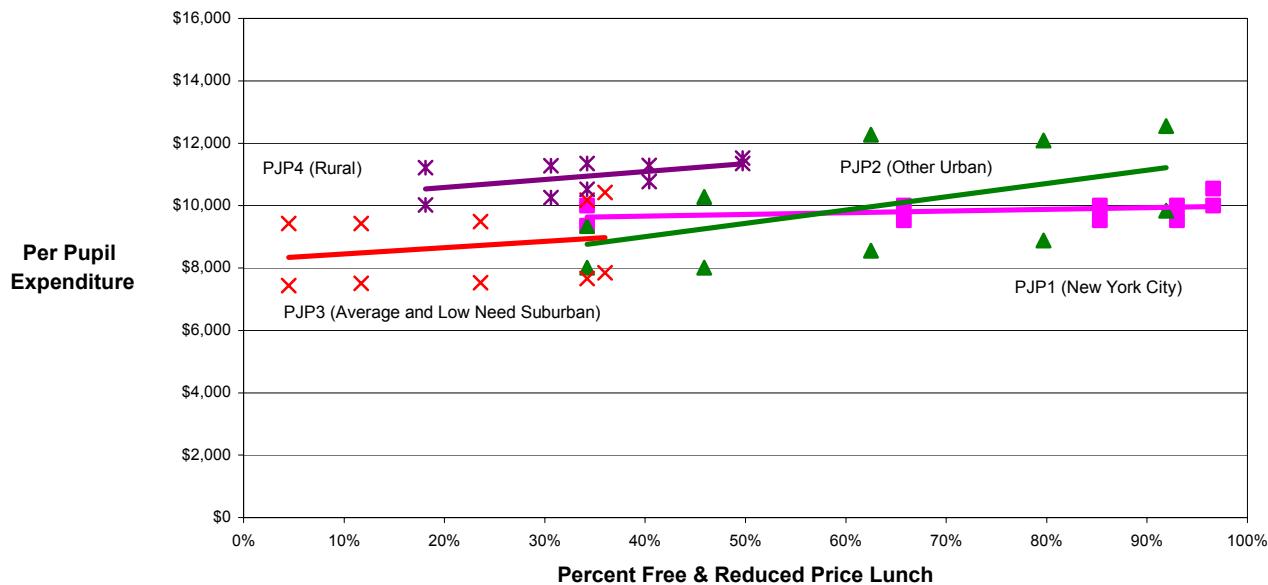


Exhibit reads: The calculated per pupil costs of the specifications developed by the PJP's representing rural districts for a middle school with relatively low poverty (i.e., 18.1 percent of the student body eligible for free or reduced lunch) are \$10,028 and \$11,210, respectively.

Exhibit 2-3C - Necessary Per Pupil Expenditure for High School Program Specifications Across School Poverty

(excludes preschool program costs as well as district administration, maintenance and operations, school facilities, and transportation)

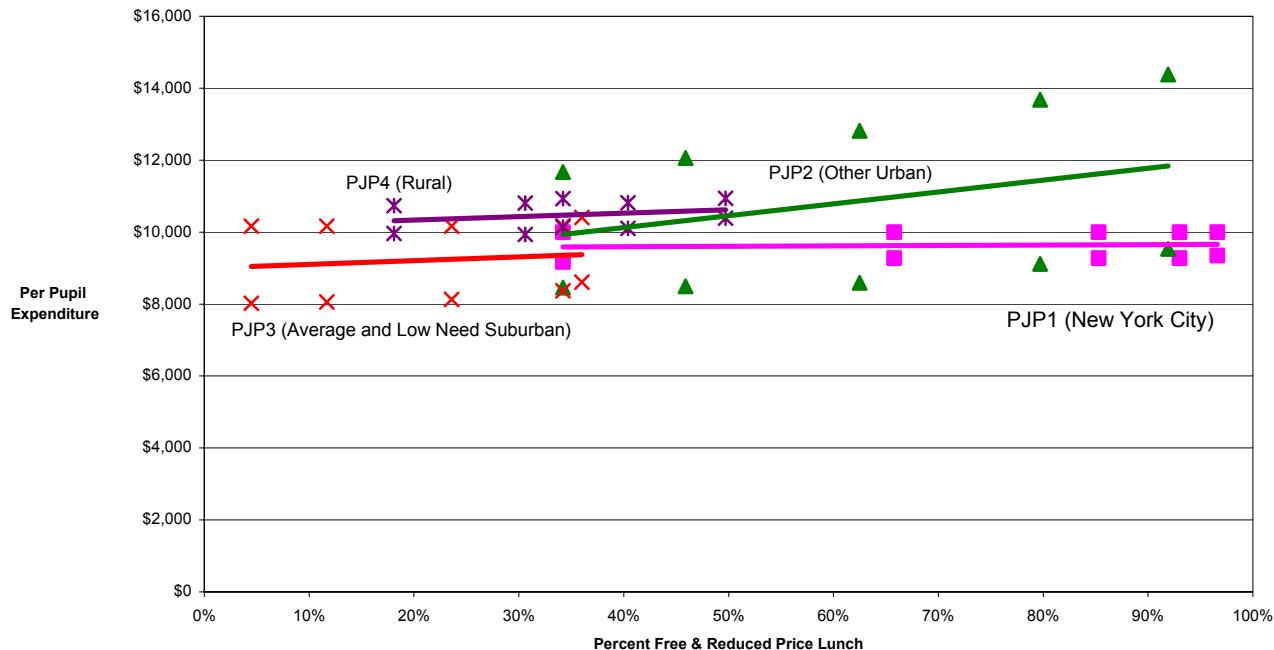


Exhibit reads: The calculated per pupil costs of the specifications developed by the PJP's representing rural districts for a high school with relatively low poverty (i.e., 18.1 percent of the student body eligible for free or reduced lunch) are \$9,361 and \$10,735, respectively.

The various points on each diagram represent the total per pupil expenditure derived from each of the exercises, and each point is color coded according to the PJP from which it came. There are four trend lines on each of the diagrams, and each trend line corresponds to one of the four PJP categories. Each trend line starts and stops at the extreme values of the poverty levels reflected in the set of exercises for each PJP category. For example, one can see that the poverty levels included in the exercises for PJP 2 (Other Urban) ranged from about 34 percent to over 90 percent of students eligible for free and reduced price lunch programs.

At first glance, these exhibits suggest a disparate pattern of variation of adequacy with respect to one dimension of pupil need: namely, poverty. However, a more detailed examination of these data reveals some interesting patterns. Each of the PJP four categories was instructed to specify resources for schools that were of a different sizes equal to the within-PJP average. For example, the average enrollment for elementary schools in PJP 1 (New York City) was 774, while the average enrollment of elementary schools in PJP 4 (Rural) was set at 414. It turned out the average elementary enrollment levels for elementary schools in PJP's 2 and 3 (Other Urban and Average and Low Need Suburban) were quite similar at 504 and 492, respectively. With this in mind, one can see that school size appears to play a role in the way panels specified resources. The smaller schools specified for the rural PJP show somewhat higher per pupil costs than the

larger suburban and urban schools, and the significantly larger elementary schools in New York City exhibited even lower costs at any given level of poverty.

Virtually, all of the lines exhibit a positive slope with respect to poverty (i.e., higher levels of student poverty are associated with higher per pupil expenditures), though the slope for the New York City line was relatively gentle. The impact of increases in poverty in PJP 2 (Other Urban) tended to be much larger as reflected in the steeper slope of the trend line for this category.

The next step for the AIR/MAP team involved synthesizing the patterns of variation reflected in these initial specifications developed by the PJPs. Using the range of size and pupil needs reflected in the 40 data points provided by the general education PJPs, the AIR/MAP team used statistical methods (i.e., *multivariate regression models*) to construct representative patterns of variation in the specified personnel and non-personnel resources required to achieve the goal put forth in the PJP exercises (i.e., that in Exhibit 1) across the schools of varying size and pupil demographics in New York State. Eight additional data points provided by the special education PJPs, making a combined total of 48 data points (i.e., 40 from the general education and eight additional from the special education PJPs), were utilized to obtain further information about how special education resources varied across different levels of identification of special education eligible students.³²

The multivariate analysis was utilized to generate a set of worksheets that presented the patterns of variation in elementary, middle, and high school program specifications and subsequent expenditures in relation to school enrollment and pupil needs as proxied by the percent of students eligible for free and reduced priced lunch programs (henceforth referred to as student poverty), English language learner (ELL) programs, and special education services. The worksheets represented the best estimate, vis-à-vis a multivariate analysis of the patterns of variation observed in the initial PJP data points, of the necessary resources at each schooling level (elementary, middle and high) required to achieve the objective put forth in Exhibit 2-1 across schools of varying size and need. Therefore, the estimated FTE staffing levels and expenditures contained in the worksheets represented an amalgam of the specifications of the various PJP teams from all across the state.³³

Summary PJP Team Review

This synthesis of the initial PJP specifications were used as the basis for presentations made by the AIR/MAP team to the Summary PJP Team and Stakeholder Panel meetings held in December of 2003. The worksheets were explicitly designed to present the specifications in a way to obtain reactions from the Summary PJP Team and to permit

³² The raw data derived from these initial exercises are presented in Appendix G along with the regressions that were used to synthesize the resource specifications.

³³ Appendix G contains each of the major sets of worksheets from which all simulations contained in this report have been run. It also contains the raw data derived from the initial specifications of the summer meetings of the PJPs along with the regressions used to process those data and create the initial worksheets used for the Summary PJP meetings in December of 2003.

them to make any revisions deemed necessary to achieve the desired results for the children of New York State as described in Exhibit 2-1. The worksheets lay out the estimated total FTE for each category of school personnel and the total expenditure for each specific type of non-personnel resource by school level (i.e., elementary, middle and high) across schools of varying levels of size and need.

The AIR/MAP research team next selected representatives from the original panels to serve on the Summary PJP Team. Through a structured set of exercises, the AIR/MAP team asked the Summary PJP Team to review the patterns of resource utilization represented in the worksheets in Appendix G and to provide further input as to whether these patterns of resource use are appropriate to achieve the desired goals. At all points along the way, the AIR/MAP team encouraged the Summary PJP Team to keep the goals in mind and to evaluate how each resource specified will be used to achieve the desired outcomes. Based on the advice of the Summary PJP Team modifications were made to the synthesized specifications.

Description of the School-Level Worksheets

The school-level worksheets were organized around instructional programs or service delivery systems directed at specific populations of students. First, there were separate worksheets for elementary, middle, and high schools, and each of these worksheets included the resources required for the specified grade-level appropriate instructional programs. Exhibit 2-4 below lays out the programs included in each of the school-level worksheets.

Exhibit 2-4 – Programs Specified in PJP Worksheets by Schooling Level

Program	Elementary School	Middle School	High School
Kindergarten			
Grades 1 through 5			
Grades 6 through 8			
Grades 9 through 12			
Pre-kindergarten (4 year olds)			
Early childhood development (3 year olds)			
Extended day			
Extended year			

The elementary school included programs for kindergarten students, students enrolled in grades 1 through 5, pre-kindergarten students (i.e., 4 year olds), those in early childhood development (i.e., 3 year olds), and programs for students requiring extended day and/or extended year (i.e., summer school) services. The middle and high school programs included the appropriate services for grades 6 through 8 and 9 through 12, respectively, along with the extended day and year programs.

Within each program component there were two types of resources: personnel and non-personnel. The personnel data on these worksheets were expressed in the form of total

full-time-equivalent staff, while the non-personnel data are expressed in total dollar expenditures.

Summary and An Example of the Synthesis

The exhibits presented in this section provide an example of the patterns of variation found in the data following the final stage of meetings between the AIR/MAP team and the Summary PJP Team that occurred in January of 2004. It is important to recognize that this set of results represents only one of the possible specifications underlying the adequacy cost estimates presented later in this report. The AIR/MAP team has conducted a full simulation of the PJP specifications at various stages of the work. For ease of future reference, each stage of the analysis and synthesis process is described below:

Stage 1. Initial specifications—Summer 2003. This stage reflects the synthesis of the initial specifications presented to the AIR/MAP team by the original ten general and special education PJP following the summer meetings.

Stage 2. Summary PJP Revisions #1—December 10th, 2003 meeting. This stage reflects the revised specifications that were based on the December meetings of the Summary PJP Team.

Stage 3. Summary PJP Revisions #2—January 14th, 2004 meeting. This stage reflects the revised specifications that were based on the January meetings of the Summary PJP Team that were held, in part, to respond to comments of the full Stakeholder panel meeting of December 11th, 2003.

The expenditure figures represented in the exhibits that follow represent total school program expenditures per pupil only and do not include preschool programs or any of the district-level functions such as central administration, maintenance and operations, home-to-school transportation, and school facilities that were not included in the school prototypes developed by the PJP. The way in which these four components are handled is discussed later on in this chapter. These figures also use standardized or average compensation rates (including salaries and benefits) for the various categories of school personnel included in the school prototypes. Adjustments for geographic differences in the costs of education are used to apply these prototypes at a subsequent stage of the analysis.³⁴

The Base Level of Resources: the Effects of School Size

Based on our analysis, some resources vary significantly with school size, while others do not. Exhibit 2-5 shows the relationship between expenditures per pupil and school size, controlling for pupil needs, within the ranges of enrollment represented in the original PJP exercises this summer for elementary, middle, and high school, respectively.³⁵ At each school level, the PJP specifications generate a negative relationship between overall expenditures per pupil and the enrollment of the school.

³⁴ Details on construction of the index used to adjust the cost figures for geographic differences are contained in Chapter 3.

³⁵ We are only able to reflect the economies of scale that are represented within the range of schools sizes included in the PJP exercises. To go beyond these limits would not be an appropriate use of the data.

Exhibit 2-5 reveals that, based on the PJP specifications, the total estimated cost per pupil decline by 16.8 percent in moving from the smallest prototypical elementary school (with enrollment equal to 414) to the largest (with enrollment equal to 774) the PJPs were required to specify resources for.³⁶ In addition, this exhibit also shows that the average middle and high school of sizes within our sample range (543 to 951 and 576 to 1,184 for middle and high schools, respectively) cost more per pupil than an elementary school of the same scale.³⁷

Exhibit 2-5 - Index of Per Pupil Expenditure by Enrollment Level for Elementary, Middle, and High Schools

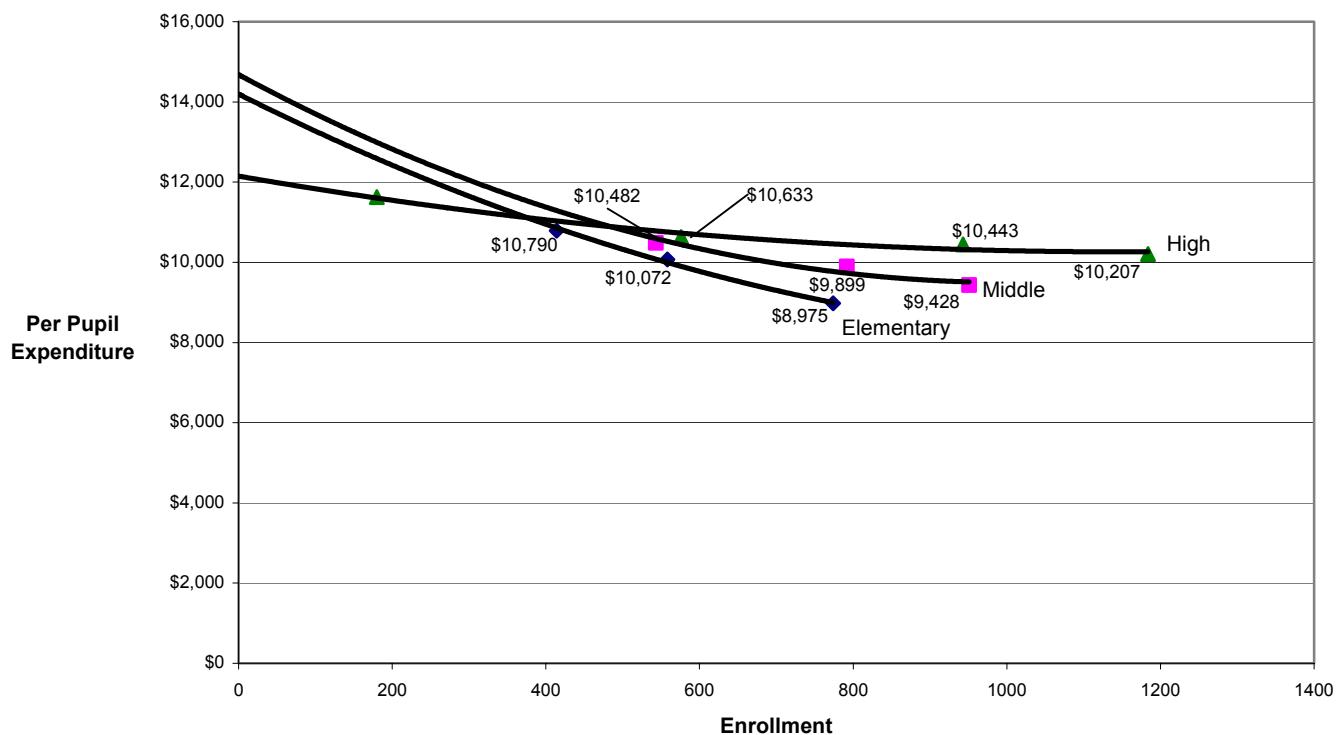


Exhibit reads: The projected per pupil costs of large elementary, middle and high schools (with enrollments of 774, 951 and 1,184, respectively) are \$8,975, \$9,428 and \$10,207, respectively.

The Resource Effects of Increases in Poverty

Exhibit 2-6 shows the relationship between expenditures per pupil and the percent of students eligible for free- and reduced price-lunches, controlling for school enrollment and the percent of other special need students. The exhibit shows a positive relationship between per pupil costs and school poverty, based on the responses of the PJPs. Based on these specifications, it appears that poverty has a very dramatic impact on elementary

³⁶ This is easily calculated as follows:
 $(\text{Per Pupil Expenditure}_{\text{Enrollment}=414} - \text{Per Pupil Expenditure}_{\text{Enrollment}=774}) / \text{Per Pupil Expenditure}_{\text{Enrollment}=414}$ or
 $(\$10,790 - \$8,975) / \$10,790 = 0.168$.

³⁷ This is shown by the fact that for all enrollment levels above 543 the elementary school line falls below the middle school line, and the middle school line in turn falls below the high school line.

relative to middle and high school programs. For an elementary school at a low poverty level (i.e., with 4.5 percent of its students eligible for free or reduced lunch) per pupil expenditure would be 18.1 percent lower than a school with average poverty (i.e. with 34.2 percent of its student body being free/reduced lunch eligible).³⁸

Exhibit 2.6 - Per Pupil Expenditure for the Base Program by Percent of Pupils Eligible for Free & Reduced Price Lunches for Elementary, Middle, and High Schools

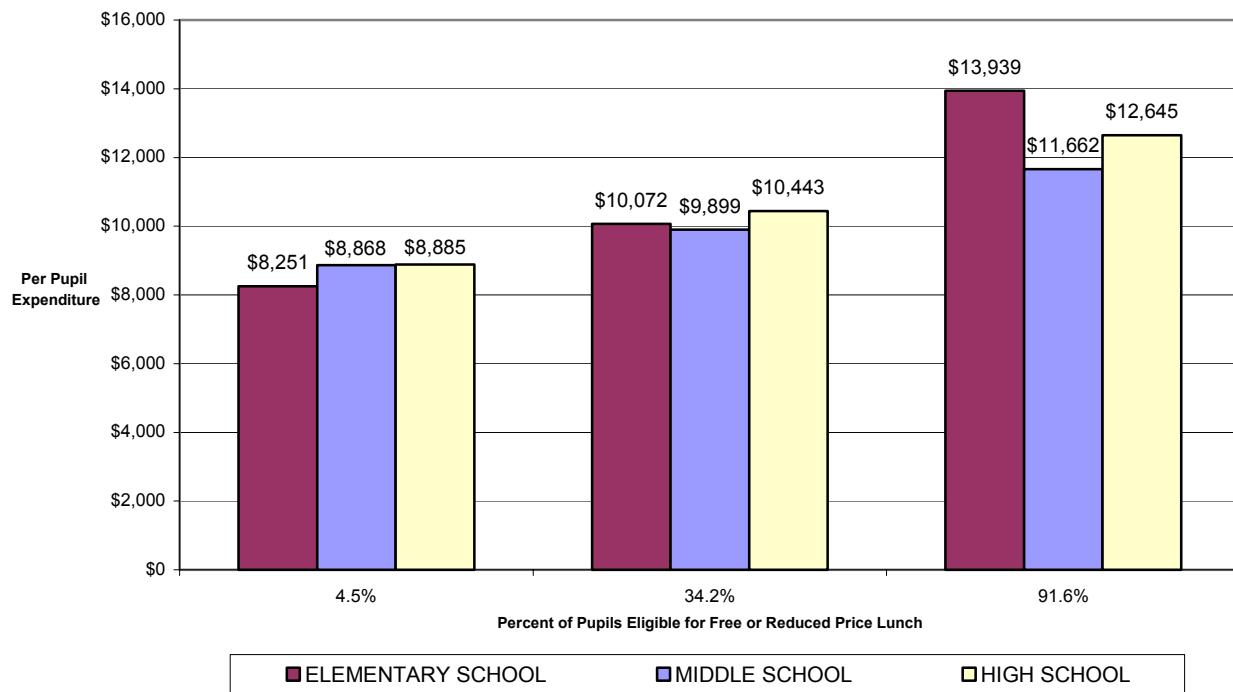


Exhibit reads: The calculated per pupil costs of average poverty elementary, middle and high schools (with percent of student body eligible for free or reduced lunch equal to 34.2 percent) are \$10,072, \$9,889 and \$10,443, respectively. Note, this assumes percent of special education and English language learner students equals 9.8 and 0.9 percent, respectively.

The Resource Effects of Additional Students Eligible for Special Education Services
 Exhibit 2-7 shows the relationship between total expenditures per pupil and the percent of students eligible for special education services in the elementary, middle and high school models derived from the PJP specifications. For each school level, an increase in the identification of special education students from 9.8 percent to 14.2 percent is associated with approximately a 2 to 3 percent increase in total spending per pupil. It is at 2.8 percent at the elementary level, 2.0 percent at the middle school, and 2.6 percent at the high school level.

³⁸ This can also be easily calculated:

(Per Pupil Expenditure_{34.2% Poverty} - Per Pupil Expenditure_{4.5% Poverty}) / Per Pupil Expenditure_{34.2% Poverty} OR
 $(\$10,072 - \$8,251) / \$10,072 = 0.181$.

Exhibit 2-7 - Per Pupil Expenditure by Percent of Students Receiving Special Education Services Across Elementary, Middle and High Schools

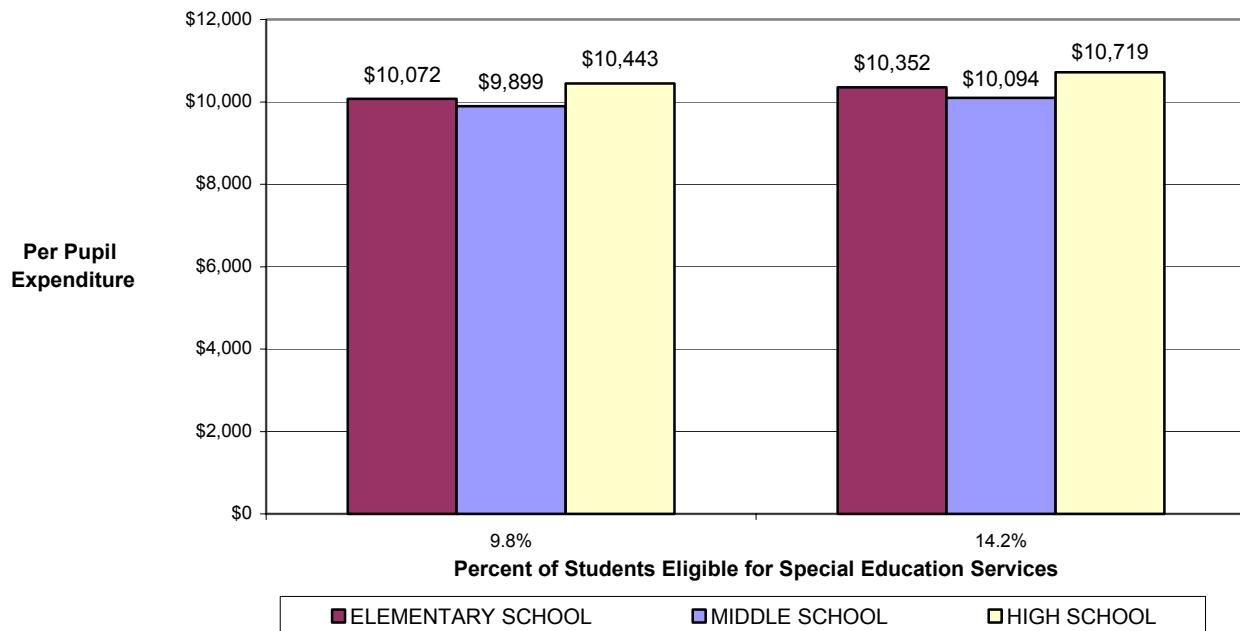


Exhibit reads: The calculated per pupil costs of elementary, middle and high schools with percent of student body in special education equal to 9.8 percent) are \$10,072, \$9,899 and \$10,443, respectively. Note, this assumes percent of students eligible for free or reduced lunch and English language learner students equals 34.2 and 0.9 percent, respectively.

The Resource Effects of Additional English Language Learners (ELL)

Exhibit 2-8 shows the relationship between total expenditures per pupil and the percent of students eligible for ELL programs in the elementary, middle and high school prototypes. For each school level, an increase in the percent of students who are identified as ELL from 0.9 percent to 18.8 percent is associated with an approximate 3.2 percent at the elementary level, 3.5 percent at the middle, and 3.4 percent high school level.³⁹

³⁹ Note that the charts presented in this section attempt to isolate expenditure changes in response to variation in a particular scale or need characteristic holding all other characteristics constant. Therefore, the preceding charts illustrate the *marginal* expenditures with respect to changes in scale or needs. It is important to note that the analysis does not imply that the PJPs devoted no resources for poverty, special education or ELL in school exercises where the percentage of student with these special needs were low.

Exhibit 2-8 - Per Pupil Expenditure by Percent of English Language Learners for Elementary, Middle, and High Schools

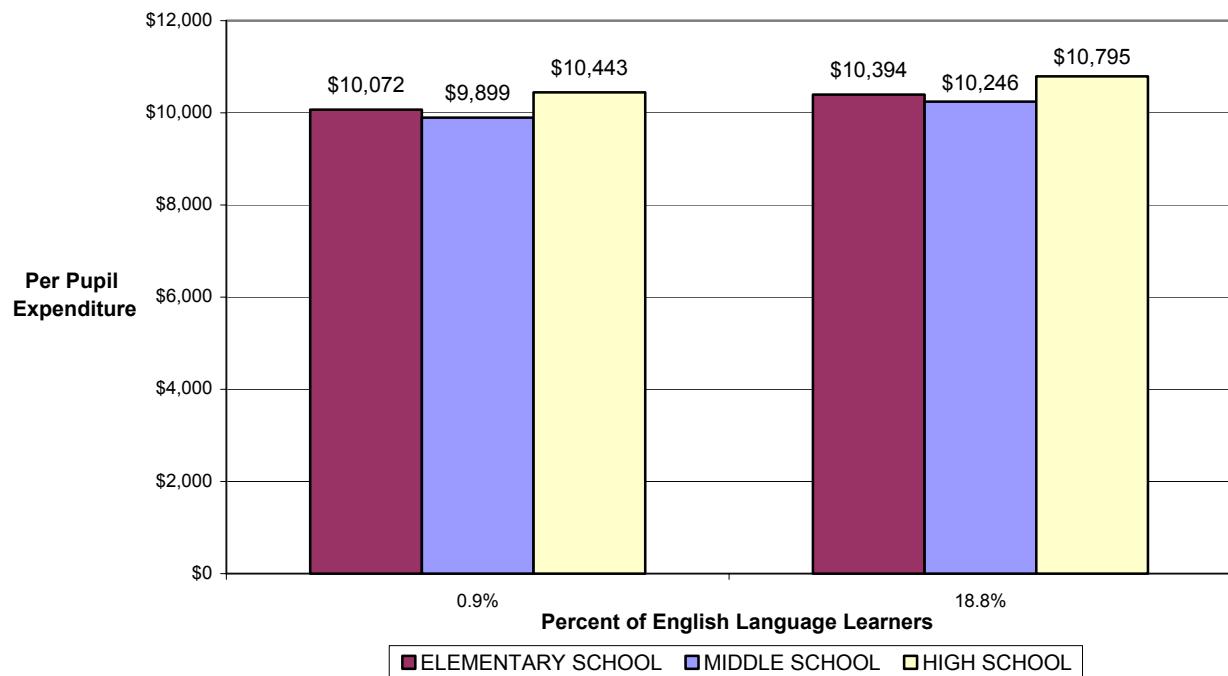


Exhibit reads: The calculated per pupil costs of elementary, middle and high schools with percent of student body that are English language learners (equal to 0.9 percent) are \$10,072, \$9,889 and \$10,443, respectively. Note, this assumes percent of students eligible for free or reduced lunch and in special education equals 34.2 and 9.8 percent, respectively.

Description of the District-Level Special Education Resources

The district level worksheet reflects specifications developed by the special education PJP, and it encompasses three dimensions of special education services.⁴⁰ A portion of these resources reflect related service personnel who serve multiple schools throughout the district, but who generally operate out of the district office or possibly other agencies such as the BOCES. These resources have been specified in terms of personnel or non-personnel resources, but may be translated into tuition or other kinds of transfers among districts or between districts and other agencies. In addition, there are some special education teaching resources specified in this district model that are available to serve other low incidence special education students who are unlikely to be distributed evenly across schools. Finally, the special education PJP decided to specify the preschool special education resources at the district level rather than attach them to schools. For this reason, all preschool special education resources originally specified at the school levels were set to zero. As with the school-level worksheets, personnel resources are expressed in FTEs, while the non-personnel resources are expressed in dollars per pupil.

⁴⁰ An example of this worksheet can be found in Appendix G.

There is one important change, however, in the way personnel FTEs are calculated at the district level. The special education PJP tied these resources to district enrollment rather than to the number of students specifically identified as eligible for special education services. That is, regardless of the actual special education identification rate, FTEs are expressed as a total per one thousand (1,000) students enrolled in the district. To be clear, the enrollment figures refer to total enrollment and not enrollment in special education. The numbers in the worksheet represent averages over the values specified by the two special education panels. The model district represents the average size of school districts in New York State, which enrolls about 4,225 students. For example, the panels specified that a district enrolling 4,225 students would need 1.10 FTE physical therapists to serve the population of students who might need such services. This calculates to represent an average of 0.26 FTE physical therapists per 1,000 students enrolled (i.e., $(1.10 \text{ FTE} / 4,225 \text{ District-Level Enrollment}) * 1,000 \text{ Students} = 0.26 \text{ FTE Per 1,000 Students Enrolled}$).

Exhibit 2-9 shows the average per pupil expenditures attributed to these components of the special education at the district level. The overall per pupil expenditure required to cover the necessary district-level resources for special services was \$437 for each pupil in the district, regardless of their status with respect to special education. The largest proportion (42 percent) of this is attributable to personnel services for kindergarten through grade 12, while smaller shares are earmarked for preschool personnel and non-personnel resources for all students (34 and 24 percent, respectively).

Exhibit 2-9 - Per Pupil Expenditure on District-Level Special Education Resources (Share of Per Pupil Expenditure in Parentheses)

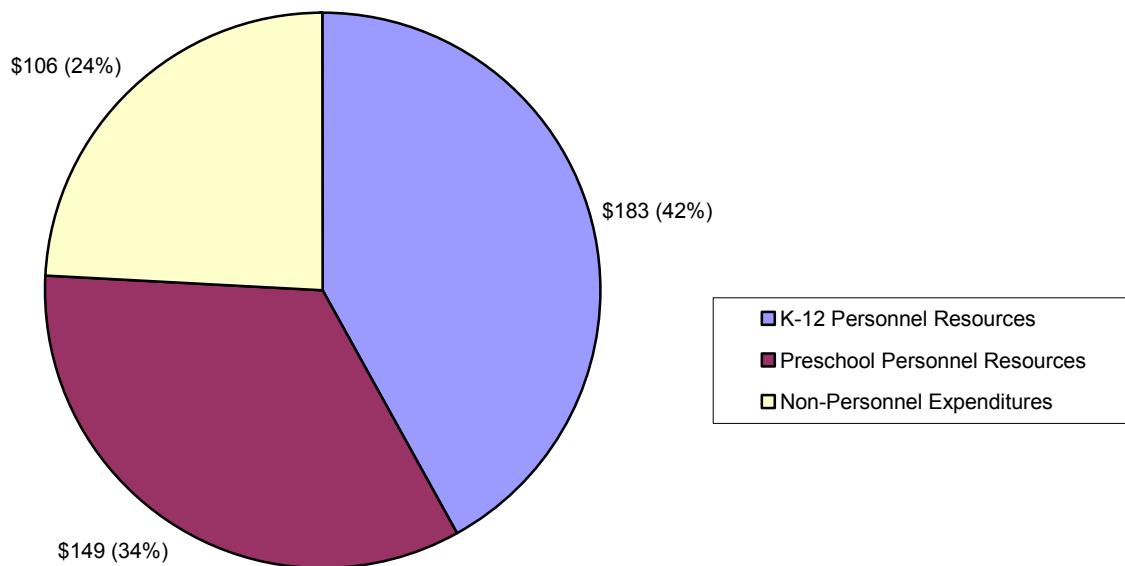


Exhibit reads: The projected per pupil costs of district-level for special education services for kindergarten through grade 12, preschool and non-personnel services (spread over all students) are \$183, \$149 and \$106, respectively. Note, these represent costs per pupil over all pupils in the district, regardless of whether they are in special education or not.

Summary Description of the PJP School Program Specifications

The most important point to keep in mind in interpreting the levels of education resources emanating from the PJP process is the outcome standard specified for this study. Each committee was asked to design a program that *would provide all students in a school a full opportunity to meet the Regents Learning Standards, and to attain a Regents Diploma.* Committee discussions focused on considerable challenges associated with meeting this outcome standard⁴¹, especially in the state's high poverty schools. It is with this outcome standard in mind that the program specifications resulting from the PJP process must be interpreted.

The main component of the PJP specifications underlying the adequacy standards found in this report is a strong instructional base for all students; with additional resources added as school poverty rises. In addition, the base instructional program was built around a solid foundation of professional development for all staff members.

The program developed by the PJP also includes a substantial investment in early childhood programs, including full-day kindergarten for all. High quality early childhood and preschool programs targeted to children ages three and four, respectively, were also included and subsequently costed out. The program specifications provided public support for these programs targeted to the proportion of three and four year olds in poverty based on school-level free and reduced lunch eligibility.

A highly integrated program was designed for children with disabilities. More than 95 percent of the elementary children with disabilities were expected to be served in neighborhood schools, while about 90 percent of middle or high school children with disabilities would be served in their neighborhood schools.

Extended day and year programs were also considered a critical component of meeting the outcome standard. As with the early education programs, enrollments in these extended time programs were linked to the percent of students living in poverty attending the school.

The discussion below summarizes the PJP results in terms of alternative student to staff ratios. In interpreting these ratios, it is important to keep in mind that the purpose of the PJP exercises was to specify the resources considered necessary to achieve educational adequacy. Although resource quantities resulting from these exercises are specifically delineated (e.g., core classroom teachers, other teachers, instructional assistants, etc.), no intent is implied that individual school districts and schools should be constrained by these specifications. Rather, it is believed that individual schools should be allowed

⁴¹ As evidence of its high standards, *The Education Week, Quality Counts 2001 Report* gave New York an “A” for its standards and accountability. In addition, the American Federation of Teachers report, *Making Standards Matter, 2001*, offered the following: “The standards are strong, most of the tests are aligned to strong standards.” It should be noted that this high standard has been incorporated into the state’s obligation to meet levels of proficiency as dictated by the federal No Child Left Behind Act. A summary of New York’s approved NCLB accountability plan can be found at <http://www.emsc.nysesd.gov/deputy/nclb/accountability/2-03-att-b.htm>.

flexibility to use their resources in ways they believe will be most effective within each local context. Thus, in interpreting the class size estimates shown below, it should be kept in mind that localities should be free to make trade-offs among the various categories of personnel (i.e., core classroom teacher, instructional aides, and other non-teaching staff) as they see fit to meet the programmatic needs of students. How local school officials decide to use these resources will affect such measures as class size within each school. Such decisions would continue to be determined locally.

Core Educational Programs

Three alternative ratios may best summarize the program specifications emanating from the PJP process. The first measure is class size, which results from dividing the number of students in the school by the number of core teachers specified by the panelists. The pupil-teacher ratio includes all of the teachers in the school in this type of calculation. For example, this ratio includes art, music, and physical education teachers, as well as specialists in the areas of special education and Title I. Yet, a third ratio would be that of pupils to all professionals in the school, which would also add other professional staff specified for the school to the counts above. These include such supplemental staff as counselors, nurses, psychologists, social workers, and building administrators. In interpreting these last two ratios, keep in mind that unlike current practice in most New York school districts, virtually all special education service providers have been directly assigned to neighborhood schools.

These three ratios are shown for elementary, middle, and high schools at the three levels of school poverty specified for the panels. Because each of these successive measures counts more of the school's professional staff, these ratios become progressively smaller. One observable trend is added emphasis on the earlier grades, with the ratios generally growing progressively larger in the upper levels of schooling.

The resource ratios shown in the table below also generally decline as poverty rises, reflecting the general view of the panels that more resources are needed in high poverty schools to meet the outcome standards specified for this study. However, this is not always the case as shown for middle school class size, which remains constant as poverty increases. In reviewing this trend, the summary PJP panelists argued that this relationship between class size and poverty made sense in middle schools because of the fairly generic nature of the middle school curriculum. Bigger issues for this population, they argued, were programs such as dropout prevention and counseling. Thus, while class sizes remained flat as poverty rises, more "other" (non-core) teachers and support staff were added. Conversely, given the much more specialized nature of the high school programs, substantial class size differences were specified for this level of schooling with rising poverty. To allow for these kinds of differences, the relationship between allocations of education staff and poverty is best viewed through the types of multiple measures featured in the Exhibit 2-10, below.

Exhibit 2-10 – Alternative Measures of Pupil to Staff Ratios

Schooling Level	Class Size and Staffing Ratios	Percent Students Eligible for Free and Reduced-Priced Lunch		
		4.5%	34.2%	91.6%
Elementary	Class size	16.8	15.7	14.0
	Pupil-teacher ratio	12.3	10.6	8.4
	Pupil-to-all professional staff ratio	9.9	8.6	6.8
Middle	Class size	22.6	22.6	22.6
	Pupil-teacher ratio	15.1	14.7	14.1
	Pupil-to-all professional staff ratio	12.3	11.9	11.3
High	Class size	29.1	24.3	18.4
	Pupil-teacher ratio	16.9	15.1	12.6
	Pupil-to-all professional staff ratio	13.1	12.1	10.3

Notes: All class sizes and pupil-staff ratios presented in the table above are based on resource specifications at Stage 3 of the professional judgment process.

Class size = Total Enrollment / Core Classroom Teachers

Pupil-teacher ratio = Total Enrollment / (Core Classroom Teachers + SE Teachers + Other Teachers)

Pupil-to-all-professional-staff ratio = Total Enrollment / (Core Classroom Teachers + SE Teachers + Other Teachers + Guidance Counselors + School Psychologists + Social Workers + Other Pupil Support + SE Pupil Support + Nurses + Librarians-Media Specialists + Principals + Assistant Principals + Other Professional Staff)

Elementary School⁴²

For grades 1-5, class size for an elementary school at the average poverty level for the state (34.2 percent free and reduced lunch eligibility) was set at about 17, falling to 14 students in very high poverty schools (i.e., where 91.6 percent of the students were free or reduced lunch eligible). These class sizes, as well as all of the other resources included in their specifications, were based on the professional judgment of the panel members. Rationale for these determinations cited by panel members included research⁴³, the need for reduced class size due to the much higher integration of special education students as compared to current practice⁴⁴, and the high educational outcome standard set by the state.

⁴² Discussions of resource specifications at each schooling level focus on resources required for a school with enrollment set approximately at the mean size for each level, elementary, middle or high. Systematic variations in staffing ratios were also associated with variations in school size that exist across the state.

⁴³ As an example class size research, see the Tennessee Project STAR Final Report by Word et al. (1990).

⁴⁴ Data from the 2002 Annual Report to Congress on the Individuals with Disabilities Education Act (IDEA), distributed by Office of Special Education Programs (OSEP), US Department of Education, reveals that nearly one-half of all special education students in New York State spend over 20 percent of their school day outside the general education classroom. For more on this, go to <http://www.ideaadata.org/>.

On average, one teaching assistant was included to be shared across three elementary classrooms. In addition to core classroom teachers, one “other” teacher was included for every three core classroom teachers, with this ratio increasing to about one “other” teacher per two core classroom teachers in very high poverty schools. This “other” category includes specialists teaching such things as art, music, and physical education. In high poverty schools, reading teachers, language arts specialists, and math specialists were included in this “other teacher” category. Additional pupil support personnel such as social workers, school psychologists, guidance counselors, nurses, and librarians were specified for the highest poverty schools.

Middle School

Average class size for grades 6 to 8 was set at about 23 students. “Other” teachers were allocated to the average middle school at a ratio of about one for every 2.6 core classroom teachers. For middle schools with high percentages of students in poverty this ratio dropped to one “other” teacher for every 2.2 core teachers. This resulted in a pupil-teacher ratio for middle schools at the average poverty level of about 15.

In addition, social workers, school psychologists, guidance counselors, nurses, and librarians were specified. In the average middle school of 950 students, a total of ten full-time-equivalent professional support staff was included. Accounting for all professional staff, the average pupil-to-all professional staff ratio for middle schools at the average poverty amounted to approximately 12.

High School

Class size for grades 9 through 12 was set at 24, dropping to 18 in very high poverty schools. On average, “other teachers,” as described above, were allocated to high schools at a ratio of one for every 2.2 core classroom teachers. Counting all teachers in a school, the student teacher ratio for high schools was set at an average of 15, ranging from 13 to 17 in high to low poverty high schools, respectively.

In addition, in the average high school of 1,131 students, 12.1 full time equivalent professional support staff were included. Including all credentialed staff, the ratio of students to all professional staff at the high school level was 12, ranging from 10 to 13 in the state’s highest and lowest poverty high schools.

Special Education

All of the PJP panels came up with a fairly similar vision of the sub-population of special education students that should be served within their neighborhood school as opposed to more centralized assignments (e.g., a special class in some neighborhood school or a special school). Nearly all of the panels placed this percentage at about 90 to 95 percent.

For grades 1-5, the average caseload across all categories of disabilities was about ten students per special education teacher in schools with average incidence of special education and average poverty. With changes in poverty, this ratio ranged from an average of 11.4 in low poverty schools to 7.8 in higher poverty schools.

For grades 6-8, the average caseload across all categories of disabilities was about 11.5 students per special education teacher in schools with average incidence of special education and average poverty. At the high school level, the average caseload across all categories of disabilities was about 13 students per special education teacher.

It should be noted that the numbers above refer to average caseloads for special education service providers, rather than class size. Under the specifications above, a large percentage of special education students would be served in general education classrooms. Indeed, the PJP class size specifications shown above were developed with a high degree of inclusion of special education students in mind. Nevertheless, even when included in general education classrooms, special education students will receive some supplemental services from specialists. Since these students are generally not in the same classrooms with these specialists, but rather are supported by them in general education classrooms, the ratios for these specialists are cited as caseloads.

Because the vision for special education described above is fairly different from what is currently seen in many districts throughout the state, and because many of the staff supporting special education students would also have responsibilities for all students (e.g., psychologists, counselors, and social workers), it really is not possible to compare the cost of the model above against current spending for special education in New York State. The notion is that resources devoted to special education services become blended with resources for all students and are not as easily separable as they might be under more “traditional” models of service delivery.

However, it is clear that cost supplements, as well as cost savings, are included in the model specifications. The special education service approach described above adds to the cost of serving special education students by virtue of the need for more general education classes of a smaller size to fully accommodate their inclusion. On the other hand, these added costs must be considered in light of cost savings associated with the substantially reduced use of separate facilities for students in special education. These forgone costs include the need for extensive services to transport students to centralized schools, the cost of maintaining separate facilities, and the cost of an extensive administrative infrastructure to maintain them. In addition, on the benefit side, the panelists argued for a highly integrated special education program to allow students in special education the increased access to the core curriculum they considered essential to a receive a full opportunity to acquire the knowledge specified by the Regents Learning Standards

Extended Day and Extended Year Programs

At all levels, the PJPs felt that even schools with zero poverty would have students at risk of not passing or meeting Annual Yearly Progress (AYP). Therefore, extended-day programs should be offered to even the lowest levels of poverty, and extended-year programs should be offered to comparable proportions of students, as set by poverty level.

For elementary students, the panels felt that on average 20 percent of all students could benefit from extended-day/year programs, with estimated need ranging from 10 to 50 percent of all students from low to high poverty schools. At the middle school, as the 8th grade pass rate is low, these percentages were extended somewhat to an average of 30 percent, and a range of 10 to 60 percent of all students in accordance with school poverty.

At the high school level, extended day needs were estimated to be somewhat lower than for extended year, with averages of 30 percent and 35 percent, respectively. The need for extended day programs was estimated to range from 10 to 40 percent in accordance with poverty, as compared to 15 percent to 50 percent for extended year programs.

Summary

These program provisions call for bolstered education spending in many districts, and for the state overall. The panel members deliberated carefully over what would be needed to meet the high educational outcome standard that has been adopted by the state. In addition to enhanced educational outcomes resulting from this investment, panelists as well as expert consultants agreed that some cost reductions over these higher levels of spending should be realized over time. For example, strong early childhood programs should reduce the need for special education and remedial services.

Central Administration and Maintenance and Operations: District-Level Functions Outside of the School Prototypes

With the exception of the district-level components of the special education instructional program, the instructional program prototypes developed by the PJP's were focused at the school level. However, one of the ultimate goals was to compare these results with current levels of spending in New York State. Thus, the next step in the process for developing the full cost model was to obtain an estimate of those functions and activities that were excluded from the deliberations of the PJP's.

Because of the special complexities involved in determining district administration, maintenance and operations services, home-to-school transportation services, and capital facilities costs, this study did not attempt to determine “adequate” levels for these components of educational expenditure. Rather, we utilized extant fiscal data provided by the NYSED to determine current allocations for the first two components (district administration and maintenance and operations services) for each district in order to permit comparisons of total expenditures estimated from AIR/MAP models. The AIR/MAP models of adequacy focused on allocations at the school level for instruction, support, and administration. The discussion that follows provides some details of how these costs were actually estimated and then added back to the expenditures derived from the school prototypes developed by the PJP's, thus allowing us to compare the costs of adequacy with actual current expenditures.

Transportation Services and School Facilities

For the purpose of comparison, the analysis conducted by AIR/MAP excluded home-to-school transportation and debt service associated with the acquisition of land and constructions of school facilities. In the original proposal for this project, these elements of expenditure were declared as beyond the scope of the project given the availability of funds to support the research. This is not to say that transportation and school facilities are not important. Moreover, the school prototypes developed by the PJP may have serious implications and impacts on expenditures in these areas.

With respect to transportation, one of the components stressed by the PJP during their deliberations was the inclusion of students with disabilities as much as possible in programs provided in neighborhood schools. If the emphasis was to involve a decrease in the extent to which students with disabilities are transported out of their neighborhood schools, this greater degree of inclusion could have the impact of reducing the costs of home-to-school transportation. Further analysis is necessary to determine precisely what impact this might have and whether, in fact, there would be any savings in transportation costs.

Based on the results of this study, the PJP specified that adequacy would require additional school-level resources to achieve the desired results for students. This took the form of smaller classes and additional instructional and support staff. Along with these staff would be the need for additional classroom and office space in which to work that would undoubtedly have important implications for spending on school facilities. Again, further research and analysis is required to address these needs as they were beyond the scope of the present project.

Determination of Total Current Expenditure – The Point of Comparison

For comparative purposes, the AIR/MAP team deducted expenditures for transportation and school facilities (i.e., debt service) from total expenditures.⁴⁵ This figure, which is subsequently referred to as *total current expenditure* (TCE), became the primary point of comparison for the expenditures derived from the prototypes developed by the PJP. However, in order to use TCE, it was necessary to add on top of the AIR/MAP expenditure estimates for the school prototypes all of those expenditures that were not included in the PJP specifications. Extended discussions were held with members of the *Summary PJP Team* during and after the January meeting to ascertain what was and was not included in the PJP prototypes.

⁴⁵ AIR/MAP removed expenditures on tuition payments to other school districts and payments to charter schools. In the case of tuition payments, it was determined that expenditures for actually serving the children for whom tuition payments were made were reflected in the districts in which they were served. In the case of charter school payments, AIR/MAP excluded these expenditures since charter schools operating outside of the district were not included in any of the school level or district level calculations. In both cases, AIR/MAP was able to obtain unduplicated enrollment counts to appropriately calculate per pupil expenditures. Finally, it should be noted that the TCE used here can be seen as a lower bound, as not all expenditures on preschool programs that occur in New York State (i.e. Head Start, Even Start, etc.) are captured in the ST3 data (further discussion of this issue is contained in Chapter 4).

For the most part, the components that were taken off the table during the PJP deliberations included central administrative expenditures and maintenance and operations. However, there were a couple of additional items that were also not reflected in the PJP specifications. Each of these items is described briefly below.

- **Central administrative functions** – Items included in this category are expenditures on the board of education, chief administration, general support staff, personnel and business functions, other special items, curriculum development and supervision, research planning and evaluation, and community service.
- **Maintenance and operations and related central services** – This includes building maintenance and operations, the central storeroom, central processing.
- **Other components** – School level spending not included in the PJP prototypes include are non-personnel expenditures associated with school-level administration (i.e., non-personnel components of instruction are in the model, but not those corresponding to school administration) and interscholastic athletics as well as the school administrative and support functions for extended year or summer school programs.

There are two different approaches one could take to add the expenditures from the above-mentioned district-level components to those projected from the prototypes depending on whether you expect these centralized (district-level) components to vary with an expanded instructional program. On the one hand, one could assume that no additional expenditure is needed and simply add the current actual expenditures on these centralized services. However, this may be an unrealistic assumption for several reasons. For instance, as the size of an instructional program changes, one might anticipate certain elements of centralized services to change as well. If the instructional program involves increased staff-to-pupil ratios, services that support human resources and payroll systems may well increase. Similarly, more elaborate instructional programs might generate the need for additional resources for administrative oversight. A relative increase in staff also likely has implications for the space allocated in school buildings, which would in turn affect maintenance and operations costs as well as those related to other centralized services. With these issues in mind, using an approach that accounts for the potential relationship between breadth of instructional program and need for corresponding centralized services to estimate these specific district-level expenditures may be more appropriate.

Unfortunately, a precise determination of the extent to which these kinds of resources might be needed was beyond the scope of the current study. Further analysis would be necessary in future studies of this kind to ascertain what kinds of changes in these types of resources are likely to be appropriate and to what extent they might change. Nevertheless, it was decided that the current study could help to place some limits on the possible changes in the costs of centralized services. To this end, the AIR/MAP team has described in detail the two alternative methods used in the present study to place some limits around the estimates of the total cost of an adequate education. Each of these

alternatives for adding back the items excluded in the PJP prototypes is briefly described below, and estimates associated with these alternative methods will be presented later in this report.

The Lump-Sum Approach

This first method, which shall be referred to as the *lump-sum* approach for short, is the one originally specified in the AIR/MAP proposal. That is, the per pupil amounts currently expended in each district for these components that were excluded from the prototypes would be added back on top of the projected school program expenditures deemed necessary to achieve adequacy.

Combined Lump-Sum/Ratio Approach

This second method divided the expenditures for the components that were excluded from the school prototypes into two groups: those not expected to grow with an expanded instructional program and those thought to increase with the size of the instructional program. Based on conversations with fiscal experts in New York, it was suggested that the following categories of centralized district functions may tend to grow with increases in the instructional program: finance administration, staff administration, maintenance and operations, special items⁴⁶, curriculum development and supervision, and research and planning. An overhead ratio was calculated based on the 2001-02 NYSED fiscal file (ST3 data), which determined the ratio of these expenditures to the actual current spending on items that were included in the prototype models. For example, the overhead ratio for maintenance and operations (M&O) would include the M&O expenditures in the numerator and the actual 2001-02 expenditures on those resources included in the prototype models for the denominator. This ratio would have then been applied to (multiplied by) the projected spending on the school-level programs derived from the PJP specifications. This ratio may well represent an upper bound since it essentially assumes that the growth rate of these centralized services would be the same as the growth rate in instruction. While this may have some intuitive appeal, we have no empirical evidence on which to determine how accurate such an approach might be. Further research on this issue is beyond the scope of the present project.

The remaining components of the district functions and other items excluded from the PJP specifications thought not to vary with instructional program would simply be added as lump-sum per pupil amounts to the projected spending derived from the PJPs. For this reason, this approach represents a combined lump-sum/ratio approach.

Summary

This chapter has described the full set of procedures used for carrying out the professional judgment approach to determine the costs of adequacy in New York State. The initial stages of this project were devoted to a series of public engagement meetings in which various constituencies within New York State had an opportunity to express their views on what would be required to achieve adequacy in public schools and what

⁴⁶ These are defined as those with function codes 1710 through 1989 in the NYSED ST3 fiscal file.

criteria should be used to define adequacy. Adequacy was ultimately defined in terms of providing all students with an opportunity to meet the Regents Learning Standards.

Following the public engagement meetings, the AIR/MAP team organized processes for selecting highly qualified educators to serve on a series of professional judgment panels. Eight panels were organized to develop specifications for the instructional programs necessary to achieve the desired results for all children. While the original eight panels were asked to address programs for students living in poverty, ELL students, and students with disabilities, two additional panels were selected from the membership of the original eight to address issues related to special education programs that may not have been covered in the first eight.

Following these initial meetings, AIR/MAP team organized one additional panel from representatives of the first ten panels to help the research team synthesize, interpret, and revise the specifications. This panel was referred to as the *Summary PJP Team*, which met on two occasions.

There were three stages of the professional judgment process at which adequacy cost estimates were made. This chapter described these three stages as follows:

- Stage 1. Initial specifications—Summer 2003
- Stage 2. Summary PJP Revisions #1—December 10th, 2003 meeting
- Stage 3. Summary PJP Revisions #2—January 14th, 2004 meeting

Details of the changes in the school program prototypes that occurred at each stage of this process will be described in Chapter 4 along with the results.

As an example of the analysis done by the AIR/MAP team, exhibits were presented showing the variations in per pupil program costs for elementary, middle, and high schools by enrollment and levels of student need. The results showed, all else being equal, lower per pupil costs for larger schools and higher per pupil costs for schools with greater numbers of students in poverty, requiring ELL services, or eligible for special education services. The effect of poverty was especially dramatic showing a substantial influence on per pupil costs.

The work of the PJPs involved more than just the resource specifications underlying the school program cost estimates. The members of the PJPs offered a rich description of some of the programmatic elements upon which the cost estimates are based. This chapter provided a description of the nature of some of those recommendations by the panels. Smaller class sizes, enhanced availability of extended time programs, and increased access to early intervention services highlight the school prototypes developed by the PJPs. All of this was suggested in view of what would be necessary to meet the Regents Learning Standards.

Additional expenditures were included to reflect the costs of certain specialized resources for school-aged and preschool students with disabilities. In addition, the prototypes also

include targeted preschool programs geared toward serving more students in higher poverty schools.

Finally, this chapter describes the procedures for comparing the projected expenditures derived from the professional judgment process with actual current spending in New York State public schools. Such a comparison required the AIR/MAP team to add to the projected school-level costs derived from the PJP specifications the estimated amounts spent on those district-level functions that were not included as part of the PJP process.

Two alternative approaches were used to provide a lower and upper bound on the adequacy cost estimates: one method that simply adds the current spending on these district-level functions as a lump sum and an alternative that adjusts spending on these functions to reflect some of the potential changes that may occur with changes in the size of the instructional program. While more precise analysis of district level functions is beyond the scope of this study, it was felt that these two estimates provide reasonable bounds within which the true costs of these functions lie.

Chapter 3 - Geographic Cost Differences

Introduction

State legislatures are increasingly aware that educational dollars don't go quite as far in some parts of their state as they do in others. Because any such inequalities in purchasing power undermine the equity and adequacy goals of school finance formulas, legislatures are searching for appropriate mechanisms for geographic cost adjustment.

The primary determinant of geographic variations in purchasing power is variation in the price school districts must pay for their most important resource—teachers. Therefore, this study has undertaken a comprehensive analysis of teacher compensation.⁴⁷

The first step in this analysis involved identifying a comprehensive list of variables that affect the patterns of variation in the salaries of teachers. Clearly, the qualifications and other attributes of the teachers themselves influence the salaries they are willing to accept and the salaries that districts are willing to pay. Teachers with advanced training or experience will expect higher wages from school districts than teachers who recently received a bachelor's degree. Working conditions also influence salaries. Teachers will require additional compensation to teach especially challenging students or take on additional duties. Finally, because teachers must live in reasonably close proximity to their workplace, the community surrounding the school district will influence the salary expectations of teachers. Districts in isolated or high cost-of-living areas will need to offer higher wages to attract qualified teachers.

The variables in this list are of two types: *cost* factors and *discretionary* factors.⁴⁸ The *cost* factors are those characteristics of the community and school district within which the teacher is employed that are, for all intents and purposes, outside the control of district decision makers. For example, the cost of living or the physical remoteness that characterize a region in which a district or school is located cannot be changed by school officials.

⁴⁷ While there are other factors that can play a role in variations in the costs of educational services within states, the present study limits the analysis to school personnel, which make up the largest portion of school district budgets. A more refined analysis would include energy costs and the costs of transporting goods and services to districts in more remote regions of a state. However, these kinds of analyses would require more detailed data than are readily available and would only apply to a small portion of the expenditures incurred by public school districts.

⁴⁸ In the traditional economics literature, these *discretionary* and *cost factors* have been referred to as the *demand* and *supply factors* that affect teacher salaries. The terms *discretionary* and *cost factors* have been adopted here to convey a critical distinction between the *demand* and *supply factors*—that is, the extent of control by local school district decision makers. Local decision makers have control, at least in the long run, over the *demand factors* which include the characteristics and qualifications of personnel, while they have no control over the factors which affect the willingness of school personnel to *supply* their services to local school districts. By virtue of their effect on the supply of school personnel, these factors affect the cost of comparable personnel in different locations—hence the name cost factors.

The *discretionary* factors are those that are within the control of local school district decision makers. Over the long run, districts can adjust the levels of experience, education, and the job assignments of individual school personnel.⁴⁹ The balance of experience and inexperienced teachers, the percentage of teachers who hold master's degrees, and the class assignments of these teachers are all factors that may impact the willingness of an individual to accept a job, and they are all within the control of the district.

Variations in school district purchasing power are reflected in *uncontrollable* variations in teacher compensation. Therefore, the final step of the analysis was to use a model of teacher compensation to predict the salary that each school district would need to pay to hire a comparable individual. The ratio of the salary we predict that the Rochester school district must pay to hire the typical teacher in the state, divided by the state average predicted salary for such a person, represents a measure of the geographic cost of education in the Rochester city school district.

Modeling Teacher Compensation

The *hedonic wage model* was first adapted for the purpose of estimating geographic cost of education indices by Chambers (1981b) and is now widely used by economists for this purpose.⁵⁰ Within this framework, teacher compensation is determined by the full collection of teacher, job and community characteristics.⁵¹ The specific explanatory variables included in the analysis are presented in Exhibit 3-1.

⁴⁹ In the face of catastrophic or unforeseen events, controllable factors can be temporarily outside of local control. For example, if sudden changes in the economy cause changes in the population that result in declining enrollments in schools, this can result in a district facing a teaching force with a higher level of experience than they would have otherwise chosen. Thus, in these short-run events, even teacher characteristics can be outside local control and may be considered to be part of the cost factors in calculation of the cost-of-education index. This can only be determined as a matter of policy and based on evidence that external changes have occurred that create such changes for the district. Nevertheless, these are the kinds of factors that need to be considered in discussions with school, district, and state officials in the application of the cost index methodology presented here.

⁵⁰ See for example, Chambers (1978, 1980, 1981a, 1981b, 1995), Chambers and Parrish (1982, 1984), Augenblick and Adams (1979), and Wendling (1979).

⁵¹ Measures of a district's ability to pay are notably absent from a willingness-to-accept model of teacher compensation. Most teachers are not willing to accept less compensation from poor districts simply because the districts are poor. Instead, highly qualified and mobile teachers tend to accept the most attractive job offers, leaving teachers with fewer options or fewer skills to accept the remaining positions. Thus the distribution of teacher characteristics varies according to each districts' ability to pay, but the salary of a teacher with given characteristics does not.

Exhibit 3-1 – Determinants of Teacher Compensation	
<p>Teacher Characteristics:</p> <ul style="list-style-type: none"> • Total years of teaching experience • Educational attainment • Age and gender • Certification status • College attended (bachelor's degree) <p>Discretionary Job Characteristics:</p> <ul style="list-style-type: none"> • Teaching assignment • Job classification • Certified math teacher • Certified science teacher • Certified elementary teacher • Percent time in field of certification • Assignment to a high school • Assignment to an elementary school • School size 	<p>District Characteristics:</p> <ul style="list-style-type: none"> • District enrollment • Distance to center of New York City • Distance to center of nearest large city • Climate <p>Community Characteristics:</p> <ul style="list-style-type: none"> • Population • Population density • Population growth rate • Unemployment rate • Market concentration in education • Land price • MSA size • Indicator for NYC metropolitan area

Our measure of compensation is the full-time equivalent salary for individual teachers, adjusted upward to reflect average district outlays for benefits. All of the data on individual teachers, their compensation and characteristics are drawn from New York State Education Department (NYSED) databases (i.e., the Personnel Master File or PMF for short, and the Teacher Certification File). Data from NYSED Fiscal Analysis and Research Unit (FARU) are used to estimate the average benefit outlay for each district.

The teacher characteristics include experience, educational attainment, age and gender. Because other studies have found experience to be the primary determinant of educator salaries, it is important to ensure that this indicator is consistently defined.⁵² Individual records indicating full-time equivalent salaries below \$20,000 or above \$120,000 are considered implausible and are omitted from the analysis. Teachers who are employed

⁵² We used multiple years of data to construct a timeline of experience for each teacher, and flagged each record that was anomalous. Common anomalies include having 0 years of experience for three years running, or having recorded experience decline through time. Whenever possible, we used the multiple years of data to impute anomalous values. (For example, if the time line indicated that years of experience were 7 in 1999, 8 in 2000, 8 in 2001 and 10 in 2002, we adjusted the value for 2001 to indicate 9 years of experience). Anomalies that could not be resolved were flagged as missing data. Records with missing data were assigned an experience value of 0 and flagged with an indicator for missing experience.

less than 8 months of the year or who are employed by multiple school districts are also excluded.

Teacher certification is particularly important in light of the recent changes in federal law. For this reason, a series of indicator variables reflecting certification status are included in the analysis. These variables include whether the teacher holds a permanent teaching certificate, a 5-year provisional certificate, a certificate of qualification, or a temporary teaching certificate. It is hypothesized that, all other things being equal, a teacher with a permanent teaching certificate will command a higher wage than other teachers.

Finally, to more closely control for variations in teacher qualifications, we also included indicator variables for the college from which teachers received their bachelor's degree. Any school from which 25 or more teachers graduated was assigned a unique indicator. There were a total of 742 college indicators. One would expect that teachers from more selective or better quality schools will be preferred and will be able to command higher compensation or employment in more attractive districts, all else equal.

In addition to personal characteristics, individual-specific job characteristics are also included in the model. Indicator variables are used to capture common classroom assignments (English, Mathematics, Physical Education, Reading/Language Arts, Science, and Social Science). Job classification indicators capture the fact that teachers can also be given “specialist” assignments (resource specialist, subject matter specialist, and media specialist).

Because a teacher can hold a certificate and still not be certified in their assigned subject, we include indicators for whether or not teachers are certified in the specific subjects to which they are assigned (Mathematics, Science, Elementary Education) and the percent of time the individual spends teaching in his or her field of certification. One would expect that teachers who are teaching in their field would be more attractive to potential employers. On the other hand, teachers may find job assignments less attractive that require them to teach outside the field for which they are fully certified. In either case, whether or not teachers are assigned to subjects in their field is clearly a matter that is both influential on salaries and within school district discretion.

While most working conditions are generally viewed as within school district control, other district characteristics that are largely uncontrollable also influence teacher compensation. Two that have proved particularly influential in previous analyses of teacher compensation are school district size and school district location. School district size is reflected with a series of indicator variables classifying districts as small (student enrollments between 500 and 1,000 students), smaller (student enrollments between 250 and 500 students), and smallest (total enrollments below 250 students). Twenty-nine percent of New York school districts fit into one of these three categories. Emphasis is placed on small districts because those are the districts unable to take advantage of economies of scale and therefore likely to have unusually small class sizes for reasons that are beyond school district control. The expectation is that small class sizes represent

particularly attractive working conditions and that teachers would be willing to accept lower compensation in exchange for smaller class sizes.

Three school-specific dimensions of location are also included in the analysis: namely, distance from the center of the nearest large city, distance to the center of New York City, and average annual precipitation at the closest weather reporting station. In most cases, the latitude and longitude of individual schools are provided by the National Center for Education Statistics Common Core of Data (CCD). However, where the CCD lacks information on school location, the school is assigned the latitude and longitude of the center of the zip code area in which the school is located.

The key community characteristics are labor market conditions and urbanicity. To capture general labor market conditions, the unemployment rate for the relevant labor market was used in the model.⁵³

There are also labor market dimensions that are unique to education. Communities with a limited amount of educational competition have very different labor markets than communities with an array of educational choices. The option value of being able to change employers without changing houses may make educators willing to accept lower wages in communities where there are more potential employers. In addition, the lack of employment choices could give districts monopsony power and hold wages down. On the other hand, a lack of educational choice may allow districts to generate economic rents, some of which could be distributed to educators in the form higher salaries. Therefore, while the degree of educational competition clearly influences wages, increased levels of competition could either raise or lower wages.

We use a Herfindahl index to measure competition in public education. The Herfindahl index is the sum of the squared market shares (in this case, enrollment shares) and ranges from 0 to 100. It is used extensively in the analysis of monopoly power and has a demonstrated ability to explain teacher compensation. Within New York, the Herfindahl index ranges from 3.5 in the Albany metropolitan area (the most highly competitive education market in New York) to 57.5 in Yates County (the most concentrated education market in New York). The New York City metropolitan area has a Herfindahl index of 32.9.

Urbanicity is the other key community determinant of teacher compensation. Urban areas offer obvious amenities but at the cost of urban disamenities such as crime, congestion and a high cost of living. Previous studies of labor markets for school personnel and intuition about metropolitan labor markets generally suggest that large central cities tend to pay higher salaries for comparable personnel to compensate them for the difficulties of working in the environments common to the inner city schools. Crime

⁵³ Throughout the analysis, the labor market was defined to correspond to the metropolitan area in which the district is located for urban districts and to correspond to the county for districts in non-metropolitan areas. The only exception was that the unemployment rate used in the estimation was measured at the county level in upstate metropolitan areas. It is expected that defining the unemployment rate at the county level for the upstate metropolitan areas has a negligible impact on the final index.

rates are higher in the central cities and these districts tend to serve a more diverse population of students with respect to their educational needs. These factors create challenges to teachers for which they tend to expect compensation. On the other hand, previous studies have also shown that one has to compensate teachers for living and working in relatively remote areas with more limited access to shopping, medical, and cultural facilities that are common in the more urbanized areas.

Distance from the centers of economic activity capture one dimension of urbanicity. Data from the 2000 U.S. Census on the population of the community, its population density and growth rate are included in the analysis to capture other dimensions of urbancity. As a general rule, larger communities and more densely populated communities tend to have more of both the amenities and disamenities of urban life. In addition, relatively rapid population growth tends to signal a relatively attractive place to live.

Undoubtedly, some community characteristics that could influence wages have been omitted. However, these characteristics should be capitalized into the value of land in the community. To capture these effects, and to reflect unmeasured variations in the cost of housing, the price of undeveloped land in the metropolitan area/county and a measure of the geographic size of the metropolitan area/county are included in the model.⁵⁴ Assuming that land prices fall systematically as the distance from the city center increases, one can approximate the land price at any radius from the city center using these two indicators.⁵⁵

Finally, it is important to recognize that the New York metropolitan area is a unique labor market, containing over 60 percent of the teachers in our sample. Therefore, an indicator variable for the New York metropolitan area is included in the model. Including such an indicator prevents the characteristics of New York City from totally dominating the estimated relationships between teacher compensation and community characteristics.

⁵⁴ Data on the price of undeveloped land comes from the 1997 Census of Agriculture.

⁵⁵ Land prices fall as one moves further from the center of a metropolitan area. One can describe this relationship as $P_r = (1 - \gamma)^r P_{core}$ where r is the radial distance from the center, γ is the rate of depreciation, and P_{core} is the average price of undeveloped land at the center of the metropolitan area.

Taking logs of this equation, $\ln(P_r) = r \ln(1 - \gamma) + \ln(P_{core})$. We lack data on the price of undeveloped land at the center of the metropolitan area (largely because there isn't any), but we have information on the average price of undeveloped land in the MSA. If we assume that such land is located on the fringe of the MSA, the price of land at the center becomes $\ln(P_{\tilde{r}}) - \tilde{r} \ln(1 - \gamma)$ where \tilde{r} is the distance from the fringe to the center. Knowing the price of undeveloped land and the radial distance from the center to the fringe, we can approximate the price of land at any radial distance from the center as

$\ln(P_r) = (r - \tilde{r}) \ln(1 - \gamma) + \ln(P_{\tilde{r}})$. Therefore, to capture the price of land in the vicinity of the school district—an important determinant of housing costs—we include the log of the price of undeveloped land in the MSA, the approximate distance from the center to the fringe in the MSA and the distance from the school to the center of the MSA as explanatory factors in the hedonic wage model. For rural areas, we presume that undeveloped land is available throughout the county and therefore that the distance from the center of the market to the fringe is effectively zero.

Estimating Index Values

Regression analysis is used to quantify the systematic relationship between teacher compensation and the collection of *discretionary* and *cost* factors. Then the personnel cost indices are calculated by running simulations of the salaries and wages paid to comparable personnel across local schools and districts. More concretely, these simulations involve examination of the *variations in wages or salaries associated only with the variations in the cost factors, while controlling for (holding constant) the influence of the discretionary factors.*⁵⁶ The personnel cost indices reflect *how much more or less it costs in different geographic locations (i.e., school districts) to recruit and employ comparable school personnel.*

Multiple strategies are followed to estimate the relationship between the factors and teacher compensation. The first strategy is to develop a model of teacher compensation for the 200102 school year (the most-recent data available for analysis). The second strategy is to pool data from the 200102 school year with data from the three previous school years into a single model wherein the parameter estimates of the model are constrained to be the same in all years.⁵⁷ Pooling the data makes use of a greater number of observations and therefore generates more precise estimates of the statistical relationship between teacher compensation and the characteristics of individuals, jobs and communities (provided, of course, that the underlying relationship is stable over time). Pooling also minimizes the impact of transitory effects and one-time events, making it a better estimate of persistent cost differentials than an estimate based on a single year of data.

While pooling generates more precise estimates of the relationship between compensation and the factors included in the model, it is still vulnerable to omitted variables bias. Scholars have expressed particular concerns that even a broad array of observable teacher characteristics cannot fully capture variations in teacher training, professional qualifications or classroom effectiveness.⁵⁸ If omitted teacher characteristics are correlated with the uncontrollable cost factors, then the estimated index can wind up misinterpreting high spending districts as high cost districts and low spending districts as low cost districts.

One way to address this concern—and the third modeling strategy—is to allow for teacher fixed effects. The fixed-effects methodology removes from the index any variation that might arise from unobservable time-invariant teacher characteristics. Unfortunately, in so doing it also removes much of the variation in that is driven by time-invariant characteristics of school districts. Stable district characteristics—such as geographic remoteness—will only exhibit impact through those teachers who change districts and thereby experience different values of these characteristics over time. If

⁵⁶ See Chambers (1997b) for a comprehensive description of the empirical methods used to derive the geographic cost-of-education index.

⁵⁷ Arguably, we should use random effects estimation to capture the possible correlation among errors for a specific individual. The large number of individuals makes the computational cost of such estimation prohibitive.

⁵⁸ See, for example, Goldhaber (1999).

teachers who change districts are not representative of the teaching population as a whole, the fixed-effects index can be potentially misleading.

The final strategy makes use of information about employee turnover. Turnover may be interpreted as a sign that the existing salary is insufficient from the perspective of the person who quits. Therefore, following the approach suggested in Taylor, Chambers and Robinson (forthcoming), it is assumed that the observed salaries of job leavers are lower than their (unobserved) *desired wage* (i.e., the wage they would have required to remain in their jobs), and estimate the salary relationship using a specialized statistical technique called censored normal regression.⁵⁹ For each individual, an indicator variable is constructed to reflect whether or not the individual held the same job in the district in the subsequent year. Individuals who did not hold the same job in the following year were identified as job leavers. Because no information was available for the 2002-03 school year, it was not possible at the time of this analysis to identify job leavers in the 2001-02 data. Therefore, this modeling strategy relies exclusively on data from the three previous school years to generate coefficient estimates.

The four modeling strategies yield very similar pictures of teacher compensation in New York State. Teacher compensation is an increasing function of age, experience and educational attainment. Teachers with a permanent teaching certificate are more highly paid than other teachers, all other things being equal. Teachers in small districts are paid less than otherwise comparable teachers in larger districts. Teacher compensation increases as the price of land increases and as the distance to the city center increases. Compensation is highest in rapidly growing communities, and those with either large populations or a high population density. Teacher compensation is higher in markets where there is more competition for teachers. The complete set of coefficient estimates and standard errors is presented in Appendix J.

Exhibit 3-2 provides descriptive statistics for the index values that stem from each of our four modeling strategies. In all cases, the models are used to predict salary and benefits demanded from each district by the typical teacher in New York State. The index value is the predicted compensation divided by the pupil-weighted average of the predicted salaries of all districts.⁶⁰ Thus, an index value of 1.00 indicates that the typical teacher in the given district would demand the state average compensation from the district, an index of 0.90 indicates that the typical teacher in the district under scrutiny would accept 10 percent less than the state average to work in the district, and an index value of 1.10 indicates that the district's typical teacher would require 10 percent more than the statewide average to work in the district.

⁵⁹ The term *censored* in this context is a technical term that refers to the fact that we are unable to observe the *higher wage* that the individual is assumed to require to remain in the job.

⁶⁰ Pupil-weighted averages are used so the index values are neutral with respect to any revenues that might be generated through the use of a geographic cost index in a state aid formula. The geographic index is primarily used to reflect relative differences in the costs of education and should not, in and of itself, generate additional needs for education revenues. Centering the index around a pupil-weighted index helps to ensure this neutrality.

Exhibit 3-2 – Descriptive Statistics for Geographic Cost of Education Index*

Model	Mean	Standard Deviation	Minimum	Maximum
Annual	0.93	0.12	0.73	1.15
Pooled	0.92	0.12	0.72	1.14
Fixed-Effects	0.95	0.08	0.80	1.09
Turnover-Adjusted	0.92	0.12	0.70	1.13

*Note: Figures are unweighted so that each district was treated with equal weight in the calculation of these descriptive statistics.

Exhibit reads: Based on the *fixed-effects* model, the teacher cost index for the average district in the state is 0.95, which implies that costs for comparable teachers are about 5 percent lower than the district attended by the average student. The highest cost district pays about 9 percent above the district attended by the average student, while the lowest cost district pays about 20% less.

As Exhibit 3-2 illustrates, we find evidence of substantial variation in the uncontrollable cost of education. The fixed-effects index has a noticeably narrower range than the other three indexes, but it still suggests that the highest-cost New York districts must pay at least 36 percent more than the lowest-cost districts in order to hire the same individual.⁶¹

The index values are remarkably well correlated with one another (Exhibit 3-3). The correlation coefficients all exceed 0.97, and with the exception of the fixed-effects model, they all exceed 0.99.

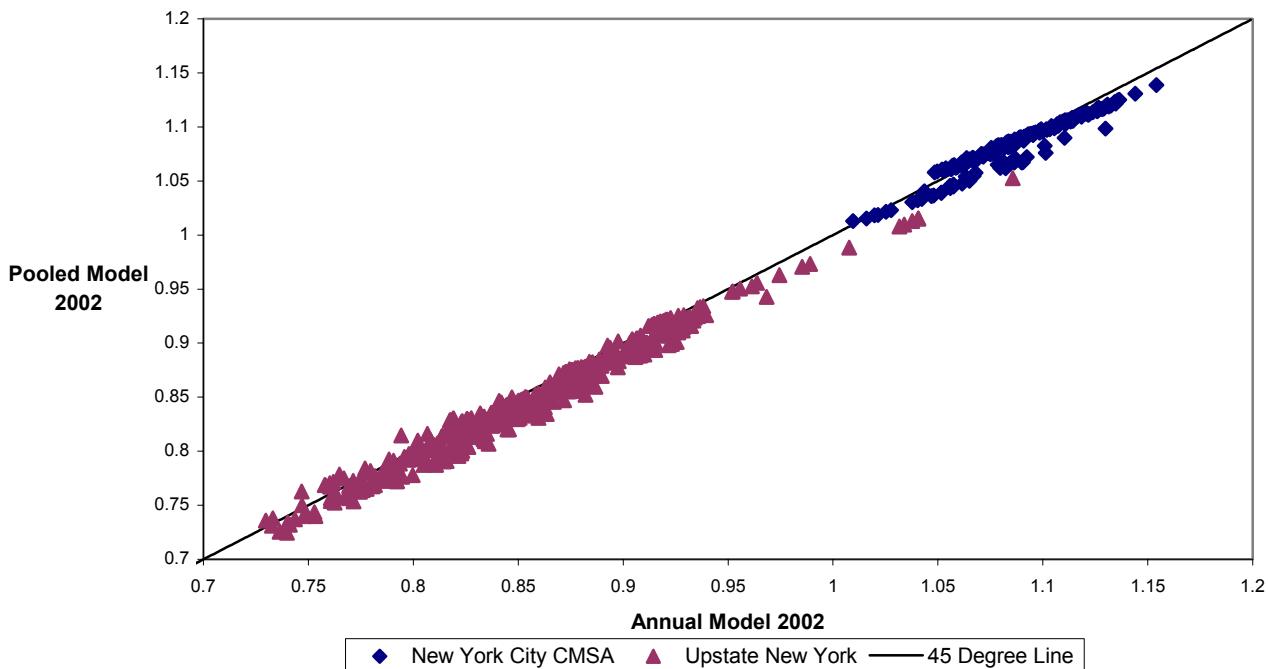
Exhibit 3-3 – The Correlation Across Indexing Strategies

	Annual	Pooled	Fixed-Effects	Turnover-Adjusted
Annual	1			
Pooled	0.9976	1		
Fixed-Effects	0.9751	0.9745	1	
Turnover Adjusted	0.9939	0.9987	0.9752	1

While the indexes are highly correlated, there are significant differences for specific districts. For example, Exhibit 3-4 illustrates the relationship between the Annual and Pooled indices. As the exhibit illustrates, pooling tends to slightly reduce the index values in most parts of the state.

⁶¹ This can be calculated as follows:

(Fixed-Effects_{Max} - Fixed-Effects_{Min}) / Fixed-Effects_{Min} = (1.09 - 0.80) / 0.80 = 0.3625.

Exhibit 3-4 - Pooling the Data Tends to Lower Index Values

The greatest differences across indexes arise from comparisons with the teacher fixed-effects model. Exhibit 3-5 illustrates the relationship between the Pooled and Fixed-Effects Indices. Both models draw on the same four years of data, so any differences in the index values arise because including fixed effects in the model alters the estimated relationship between uncontrollable cost factors and teacher compensation. Differences arise either because there are unobservable aspects of teacher quality that are correlated with the cost factors (so that unobservable quality is higher where index values are revised down) or because the cost factors are essentially fixed in nature (so that estimated costs are dominated by the preferences of teachers who change locations, and those teachers disproportionately favor districts where the index values are revised down). As the exhibit illustrates and on net, the fixed-effects model tends to lower index values for districts in the New York City metropolitan area, and raise them for districts in the rest of the state.

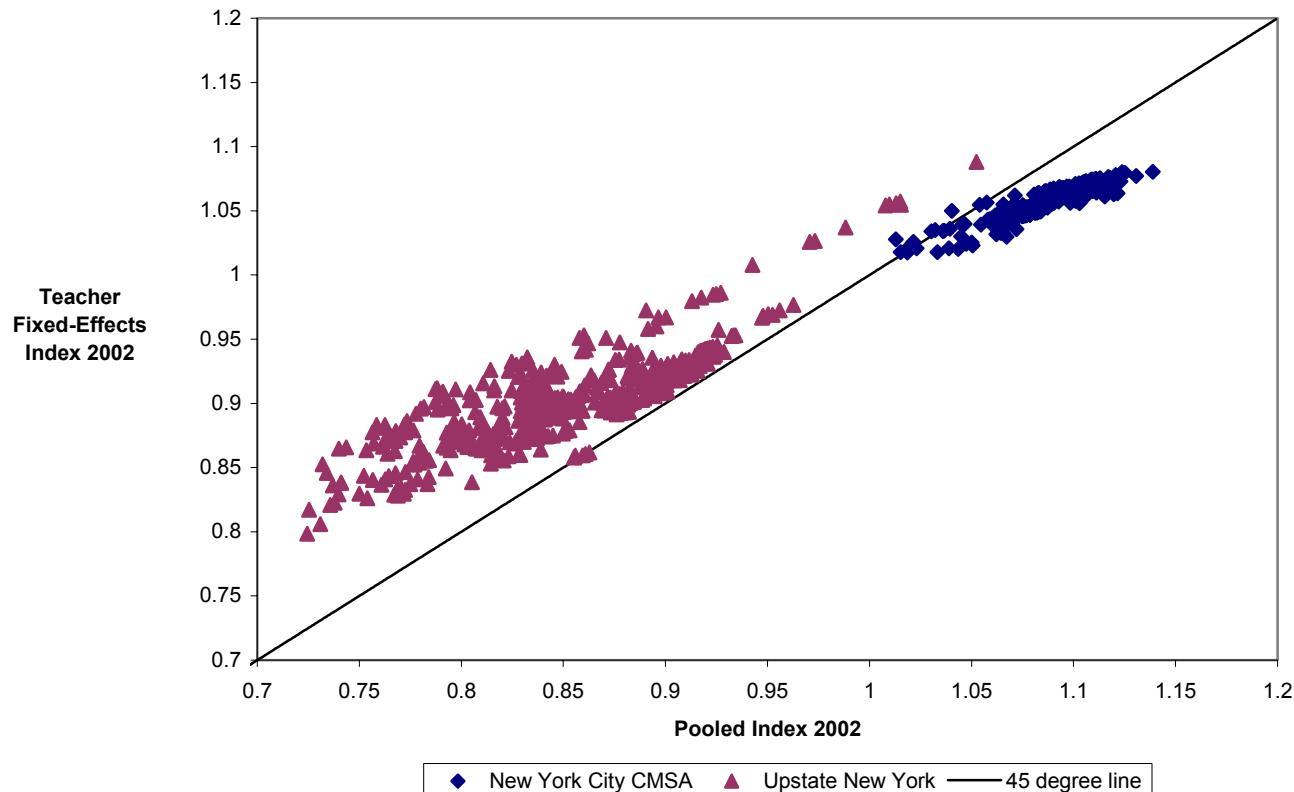
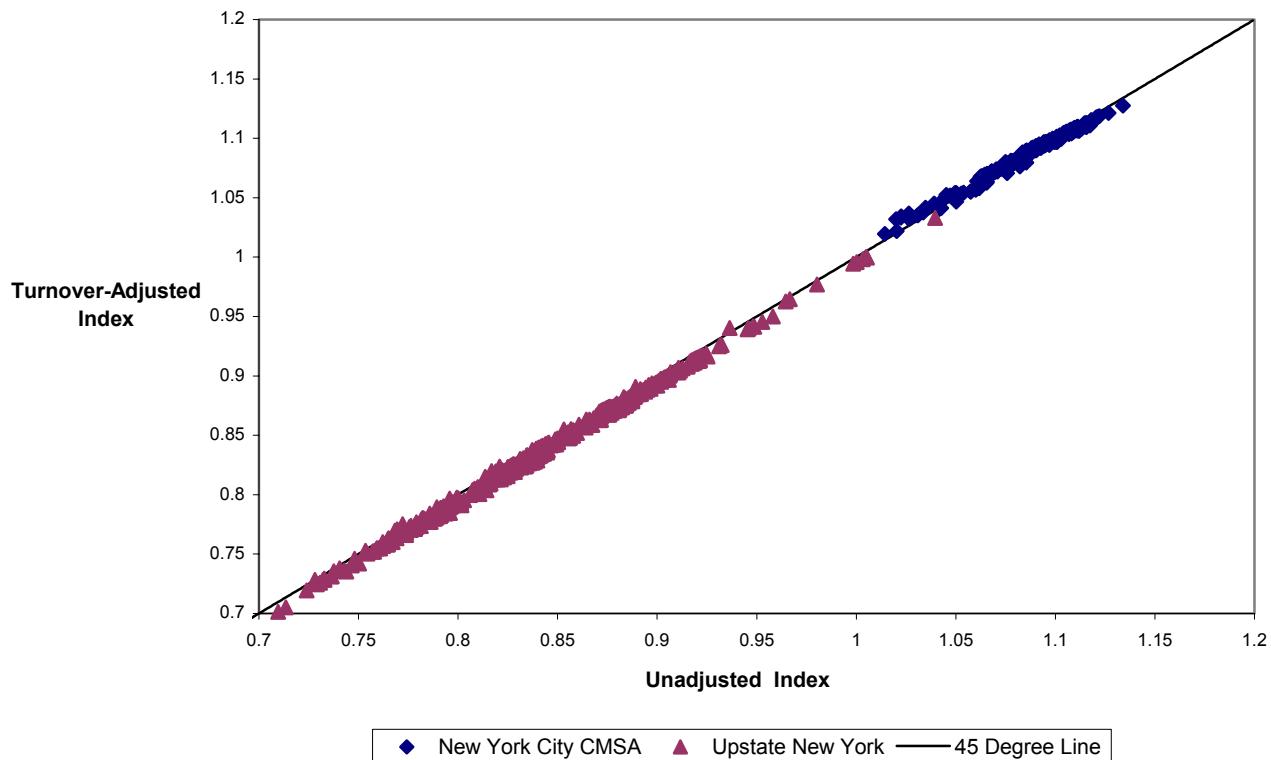
Exhibit 3-5 - The Fixed-Effects Model Compresses Index Values

Exhibit 3-6 illustrates the impact of the turnover-adjusted model. The exhibit compares the turnover-adjusted index with an otherwise comparable index that has not been adjusted for turnover (and thus was estimated using ordinary least squares). Both models draw on identical data, so any differences reflect the estimated impact of uncontrollable cost factors on teacher turnover. As the exhibit illustrates, there is little evidence that differences in teacher turnover across districts are systematically related to differences in uncontrollable costs. The turnover-adjusted index lies virtually on top of the unadjusted index. The only discernable patterns appear to be that turnover-adjustments lower the index values for the least-cost districts and for the smallest districts.

Exhibit 3-6 - Little Evidence that Uncontrollable Cost Factors Explain Turnover**Choosing a Preferred Model of Teacher Compensation**

Arguably, any of the indexing strategies discussed above could generate a viable geographic cost of education index (GCEI) for New York State. Pooling the data—with or without teacher fixed effects—reduces the risks associated with year-specific measurement errors or selection biases. It also generates index values that reflect only persistent relationships between compensation and cost factors. For these reasons, a multi-year model of teacher compensation is preferred.

The turnover-adjusted model draws on multiple years of data, but it cannot incorporate the most recent year (because one cannot determine who quit teaching). More crucially, there appears to be little gain from adopting this methodology. The benefits of this technique do not appear worth the cost in lost data.

The Pooled Index and the Teacher-Fixed-Effects Index both rely on the full four years of available data. However, a comparison between the Pooled index and the Teacher-Fixed-Effects index suggests that the index values are sensitive to the choice of multi-year modeling strategy. Relying on the Teacher Fixed-Effects index rather than the Pooled

Index largely addresses concerns about omitted teacher characteristics, and ensures that the index does not misinterpret high spending districts as high cost districts. It also most closely corresponds with the charge to estimate uncontrollable variations in cost. As such, the Teacher-Fixed-Effects index is the one that will be incorporated into the simulations to determine the costs of adequacy.

The Characteristics of the Geographic Cost Index

Exhibit 3-7 illustrates the average values of the geographic cost index for school personnel across districts classified according to the *Need to Resource Capacity* (NRC) as defined by the NYSED. As the exhibit indicates, the index implies that it would cost approximately 4 percent more than the state average to hire a teacher in New York City. Conversely, hiring instructors in high need rural districts requires offering salaries that are lower than the state average by about 10 percent.

Exhibit 3-7 - Geographic Cost of Education Index, Weighted Averages by Need to Resource Capacity of the Districts

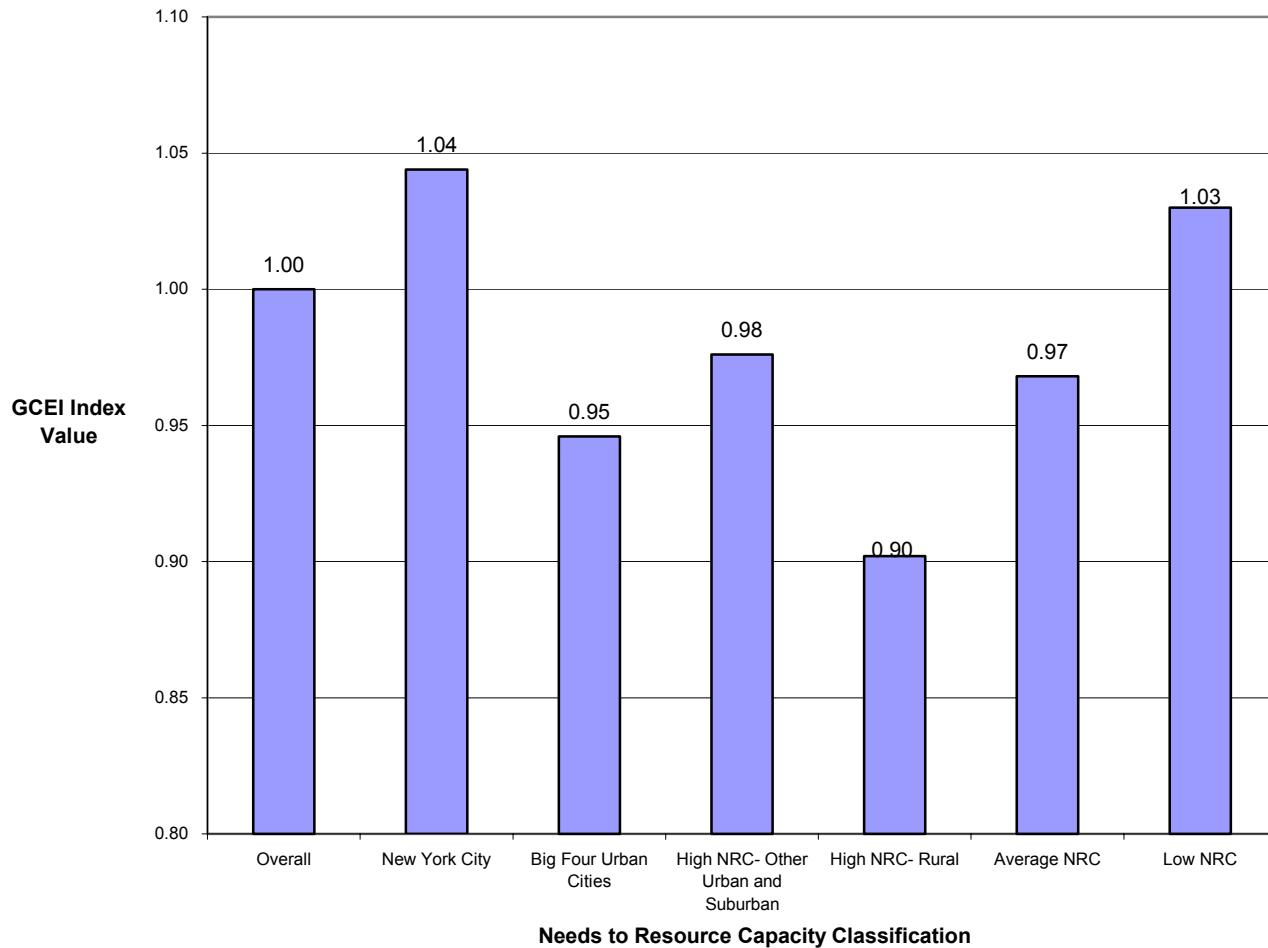
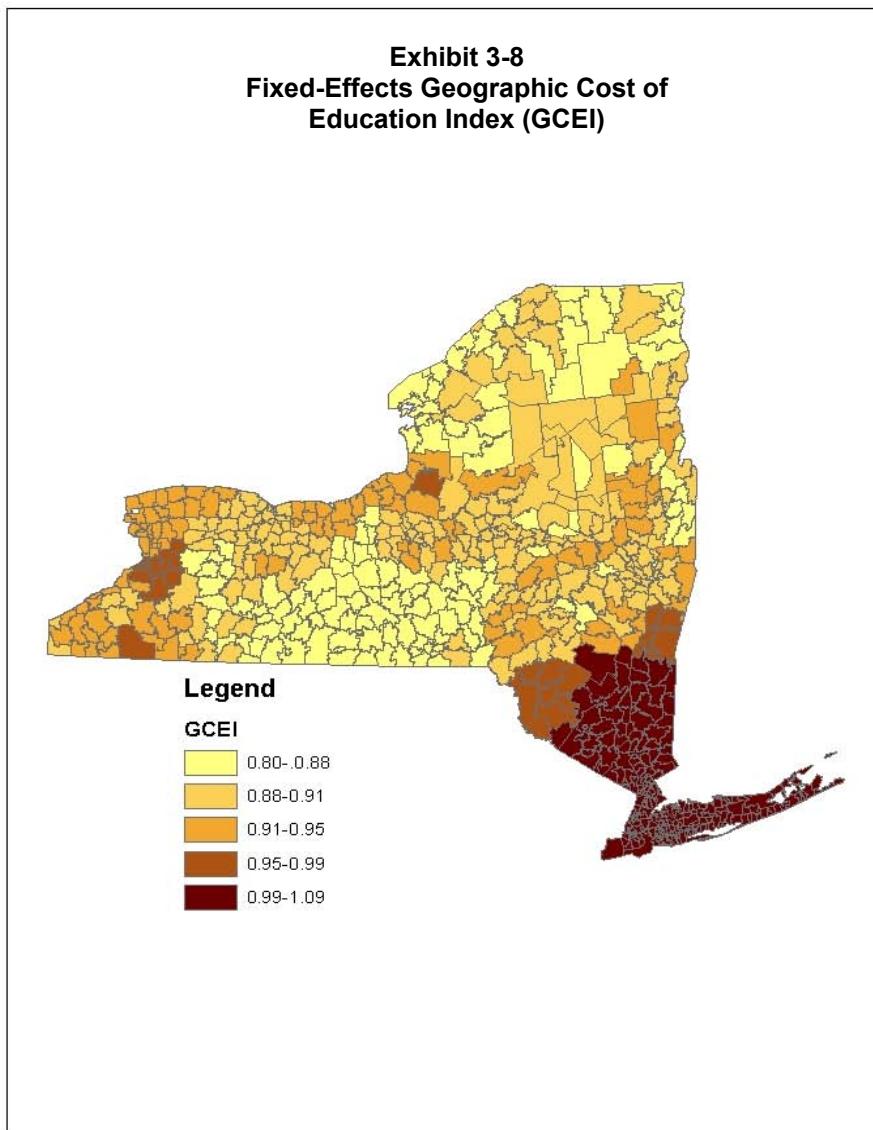


Exhibit reads: The estimated cost of hiring a qualified teacher in New York City is four percent higher than it is to hire a comparable instructor teaching the average student in the state. It is ten percent less costly than the state average to retain a comparable instructor in high NRC rural areas.

Not surprisingly, there is a strong, geographic pattern to the GCEI. As Exhibit 3-8 illustrates, index values are highest in New York City and tend to decline as one moves further away from the state's largest market. Index values are also relatively high along the southern shore of Lake Ontario and in the Buffalo area, perhaps reflecting the need to compensate teachers for the relatively more severe climate.



The geographic pattern in the GCEI is consistent with other estimates of labor market differentials. For example, the National Low Income Housing Coalition (NLIHC) estimates the minimum hourly wage needed to be able to pay the fair market rent on a two-bedroom apartment in each metropolitan area or county. As with the GCEI, they find that this “living wage” is highest in NYC and falls as one moves upstate. However, their exclusive focus on housing costs tends to exaggerate differences across communities. The NLIHC estimates that the living wage in the most expensive New York market (Nassau-Suffolk) is more than 2.5 times the living wage in the least-cost New York market (Utica-Rome).

Using their estimate of the statewide living wage, a Housing Cost Index can be constructed from the NLIHC data. The housing cost index ranges from .53 to 1.34 across the state as a whole, and from 0.87 to 1.34 within the New York City CMSA. A pupil-

weighted average index value for the New York City CMSA as a whole is 1.10. The index value for the New York City PMSA is 1.09.

The correlation between the housing cost index for each district and the GCEI is 0.90, which is remarkably high considering that the GCEI varies within labor markets while the housing cost Index does not. The two indexes diverge most strikingly in Ulster and Orange counties, where predicted teacher wages are higher than one would expect given the housing cost index, and in Ithaca (which has been newly designated a metropolitan area on the basis of the 2000 Census) where predicted teacher wages are lower than one would expect, given the Housing Cost Index.

The much wider range of the housing cost Index is not surprising. The housing cost Index rests on a single dimension of cost-of-living and therefore almost invariably, will show a greater range than total costs of living. In addition, the differential in range is driven almost exclusively by the sharply higher housing costs in the New York City CMSA. Unusually high housing costs signal either the presence of attractive locational amenities or the presence of productivity enhancing factors.⁶² People bid up the price of a house in attractive places, and tolerate higher housing costs because they are offset by cultural and natural amenities. Thus, in amenity-rich communities, the wage workers will accept is lower than you would predict given the price of housing. New York City is well recognized as an amenity-rich community. Furthermore, Brown and Taylor (2003) suggest that New York City has among the most productive urban real estate in the country. Firms are willing to pay high wages and high rents in New York City because it is the center of global economic activity. The productivity effect bids up rents and wages in industries that benefit from the effect, leading to higher land and housing costs than you would expect given the wage level in industries—like education—that do not benefit from the productivity differential.

The 2000 Census tells a similar story. The Individual Public Use Microdata Sample (IPUMS 5-Percent) provides data on the earnings, occupation, place of work and demographic characteristics for New York residents. These Census data are used to estimate a hedonic wage model for non-educators. Provided that the non-educators are similar to teachers in terms of age, educational background and tastes for local amenities, an index based on the non-educator model should yield index values that are similar to the GCEI.

A regression model was estimated that specified annual wage and salary earnings as a function of the individual's age, gender, ethnicity, educational attainment, amount of time worked, occupation and place of work. To ensure that the individuals represented in the Census index are comparable to teachers, the analysis excluded from the estimation self-employed workers, workers without a college degree and those who work less than half time or for less than \$5,000 per year.⁶³ To ensure that the Census-based wage estimate is based completely on factors outside of school district control, the model also excluded anyone who has a teaching occupation or who is employed in the elementary and

⁶² For further discussion, see Brown and Taylor (2003).

⁶³ Individuals who work in one state but live in another are also excluded.

secondary education industry. After these exclusions, the sample retains 78,540 employed, college-educated New Yorkers drawn from 434 occupations.

Unfortunately, in the interests of privacy, the Census provides limited geographic detail. The most appropriate locational information on the individual files is a “place-of-work area.” Most metropolitan areas contain multiple place-of-work areas, but rural counties tend to be clustered together. Once the data are aggregated within each metropolitan area, there are only 26 estimable place-of-work markets in New York State.

Like the models of teacher compensation, the Census model conforms to reasonable expectations about labor markets. Wage and salary earnings increase with the amount of time worked and the age of the worker (a rough proxy for experience). Individuals with advanced degrees earn systematically more than those with a bachelor’s degree. Women of comparable age and educational attainment earn less than men, probably reflecting the tendency of women to have less experience than men because women often spending extended periods out of the labor force during child-rearing years while men do not. Whites earn systematically more than apparently comparable individuals from most other ethnic groups. Appendix J presents the estimated coefficients from the Census model.

The estimated wage level in each place of work captures systematic variations in average labor earnings while controlling for demographics, occupations and amount of time worked.⁶⁴ Dividing the local wage level by the state average wage level yields a Census-based wage index that is directly comparable to the teacher-based GCEI.⁶⁵

Not surprisingly, the Census confirms that New York City has the highest wage level in the state. The Census-based wage index suggests that wages are between 10 percent below and 11 percent above the state average in the New York City CMSA. The wage level for the New York City CMSA as a whole is 8 percent above the state average. All areas outside of the New York City CMSA have wage levels below the state average. Wages are 28 percent below the state average in the least-cost parts of the state (Sullivan and Wyoming Counties).

The correlation between the teacher-based GCEI and the Census-based index is 0.84. Again, the indexes diverge most dramatically in Ulster County, where predicted teacher compensation is well above average and the wage level for non-educators is well below average.

The GCEI is oddly inconsistent with the teacher salary indexes for New York that were developed by William Duncombe (Duncombe, 2002). Duncombe also estimated a hedonic salary model using data on New York teachers. His estimation is similar in spirit

⁶⁴ Formally, the estimated wage level in each market is the least-squares mean for the market fixed effect. The least-squares mean (or population marginal mean) is defined as the expected value of the mean for each effect (in this context, each market) that you would expect for a balanced design holding all covariates at their mean values.

⁶⁵ The state average wage level is a weighted average of the local least squares means, where the weights are the population shares from the regression sample.

to this analysis but diverges significantly in the specifics. For example, Duncombe uses salaries as the dependent variable rather than salaries and benefits. Where the analysis contained in this report uses the Herfindahl index to measure market concentration, Duncombe uses employment shares to measure market power. Duncombe's index incorporates student characteristics as uncontrollable cost factors; the GCEI does not. Where Duncombe uses the population density of the district as a locational amenity, the GCEI uses the population density of the labor market.

The major modeling differences, however, arise from the use of multiple years of data, Duncombe's inclusion of a number of efficiency measures, and differences in the treatment of school district size. Because the AIR/MAP team had access to multiple years of data, it was possible to estimate the teacher fixed-effects model. This model largely addresses concerns about bias arising from omitted teacher characteristics, and ensures that the index reflects only systematic variations in compensation that are independent of school district choices about whom to hire. As such, there was less need to make the adjustments that Duncombe did to address the inefficiencies in the teacher market that might lead the model to confuse high spending districts with high cost districts. Absent those concerns, it is difficult to justify including Duncombe's efficiency measures in a model of teacher compensation.

The other major point of divergence in the modeling is the treatment of school district size. Both models treat enrollment as a potential source of uncontrollable cost variations. However, where the AIR/MAP team focuses on the fact that small districts can be obliged to offer unusually attractive working conditions, Duncombe presumes that size uncontrollably impacts salaries in large as well as small districts. For small districts, the estimated cost differentials are similar. Where Duncombe's model predicts that increasing enrollment from 250 to 500 students implies a 1.27 percent increase in salary, the AIR/MAP model finds an increase of 1.20 percent. However, Duncombe's specification also implies that size alone leads wages in the New York City school district to be 6 percent higher than wages in the Buffalo school district (the next largest district) and 13 percent higher than wages in any district with 1,000 students. In the AIR/MAP model, differences in district size do not drive uncontrollable differences in teacher compensation for districts with more than 1,000 students.

Exhibit 3-9 illustrates the average values of the various indexes according to the *Need to Resource Capacity* classifications. The dissonance between Duncombe's index and the others is readily apparent.

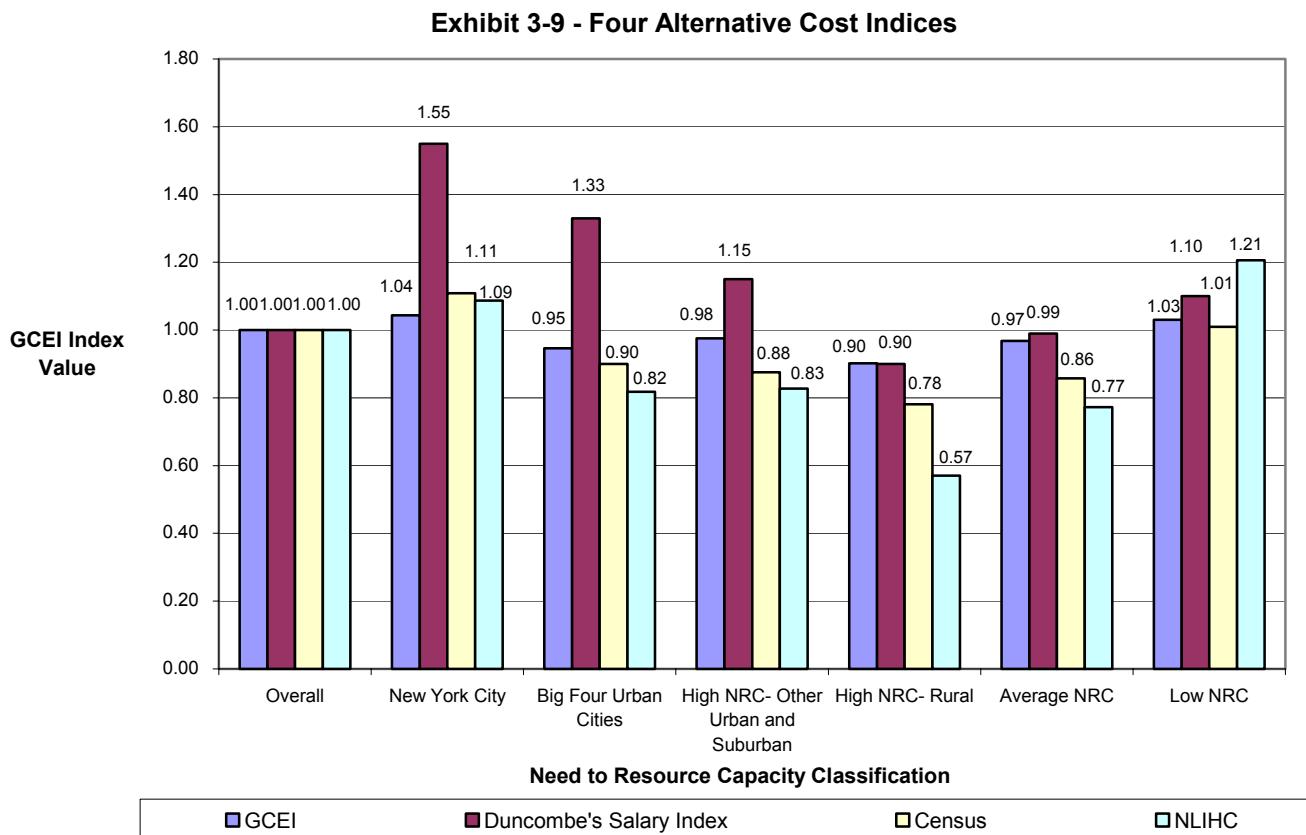


Exhibit reads: The estimated cost of hiring a qualified teacher in New York City relative to a comparable instructor teaching the average student in the state is 4, 55, 11, and 9 percent higher using the Geographic Cost of Education, Duncombe Salary, Census, and National Low Income Housing Coalition indices, respectively.

The Hedonic Model and Highly Qualified Teachers

The provisions of the federal No Child Left Behind Act (NCLB) create strong incentives for school districts to hire highly qualified teachers. However, each state will develop its own definition of “highly qualified” and it is not possible from the existing personnel data files to determine which New York school teachers will be deemed highly qualified.

It appears clear that at a minimum, teachers will be expected to hold advanced degrees and to be certified in the subject matter to which they have been assigned. The coefficients from the teacher compensation models allow one to estimate the differential cost of hiring such personnel.

The impact of hiring individuals with advanced degrees is clear. The teacher fixed-effects model indicates that teachers with a master’s degree earn 8.7 percent more than teachers with a bachelor’s degree, all other things being equal.

The impact of teacher certification is more complex. The model indicates that all other things being equal, a teacher with a permanent teaching certificate earns more than a

teacher with a 5-year provisional certificate, and substantially more than a teacher with a temporary teaching certificate. However, the model also strongly indicates that teachers require a premium to teach outside of their field. The salaries that teachers are willing to accept fall as the share of their time spent teaching in their field of certification rises. Certified teachers who are asked to teach outside of their field earn a substantial premium over other teachers. All other things being equal, a teacher who is certified in subjects other than mathematics earns 19 percent more for teaching this subject than for teaching in her field of certification, and 14 percent more than an uncertified teacher who is teaching math. Somewhat surprisingly, the least expensive person to put in a mathematics classroom is someone who is certified in this subject. Arguably, this is simply because they prefer teaching math; it is their field. A certified math teacher earns 4 percent less than an otherwise equal but completely uncertified math teacher.

The analysis does not imply that math and science teachers are easily retained at relatively low wage levels. A certified math teacher who is teaching math earns nearly one percent more than a certified English teacher who is teaching English, and a certified science teacher who is teaching science earns even more. Rather, the model is consistent with the notion that teaching mathematics and science is challenging work, and that those not trained in the field require additional compensation to accept the challenge.

Taken at face value, the model's implications for the costs of compliance with NCLB are striking. If a teacher must hold a master's degree to be considered highly qualified, then the price of teachers will be substantially higher. On the other hand, if there were sufficient supply, a requirement that teachers be fully certified should require no additional revenues and could even lead to a reduction in average salaries.

Of course, the observation that districts must pay a premium to fill the classroom with non-certified teachers begs the question—why are districts hiring such individuals? Most likely, this is because there are more openings for math and science teachers than there are certified math and science teachers willing to fill them. New York districts responding to the Schools and Staffing Survey were more than twice as likely to report difficulties hiring in mathematics and science as in English or social studies. (See Exhibit 3-8.) Apparently, districts are more willing, or able, to respond to vacancies by paying a premium to staff the classroom on a temporary basis, than by instituting a more substantial pay differential for math and science teachers. A requirement that districts hire only certified teachers may force their hands, leading to differential pay but no increase in average district cost.

**Exhibit 3-10 - Much Greater Difficulties Hiring Math & Science Teachers
(Percent of Districts Reporting Very Difficult or Unable to Fill Vacancy)**

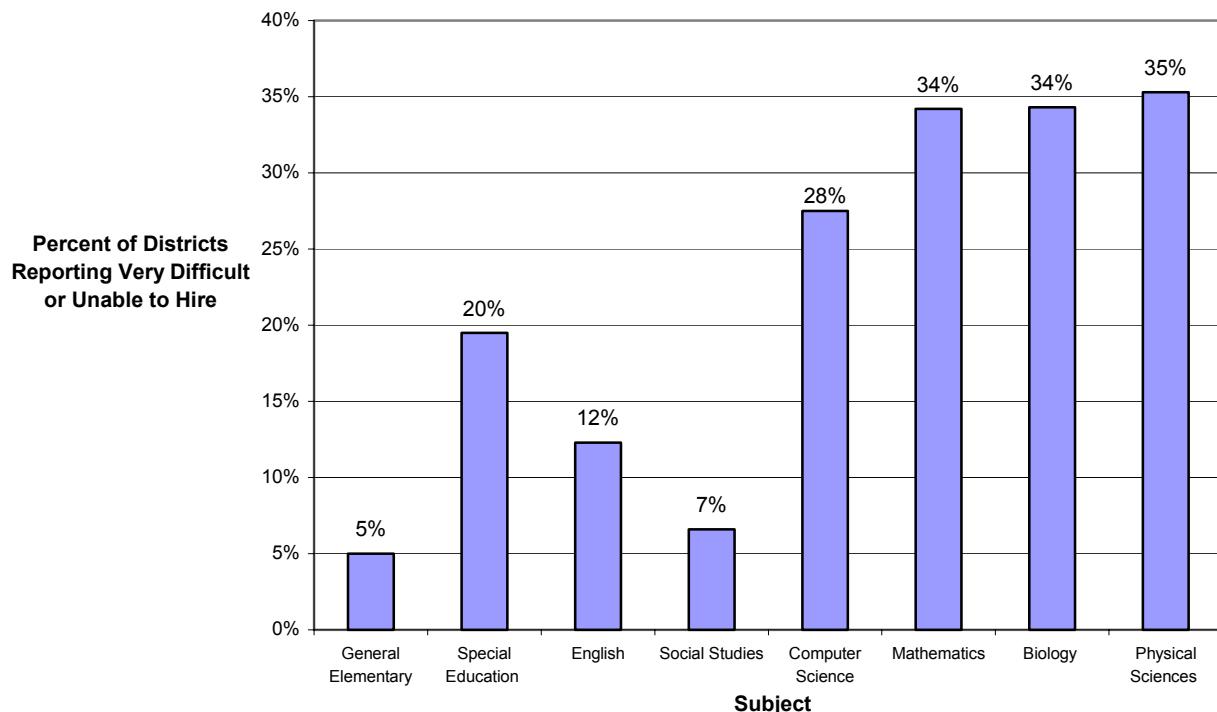


Exhibit reads: The percent of districts reported it was very difficult or they were unable to hiring teachers for mathematics, biology and the physical sciences is 34, 34 and 35 percent, respectively.

Source: Schools and Staffing Survey

Teacher Turnover

Teacher turnover is an issue of considerable concern in New York State. On average over the three-year period from 1999-2001, 14 percent of New York teachers quit their jobs. Across NRC categories, the turnover rate was highest in New York City (at 18 percent) and lowest in the low NRC, average NRC and rural NRC categories (at 11.2, 11.5 and 11.5 percent, respectively).

By the standards of other states, the teacher turnover rates for New York are not unusual. For example, teacher turnover in Texas averaged 15.5 percent during 1999-2001 (1.5 percentage points above the New York State average). At 18 percent, the average turnover rate in the Houston Independent School District (the eighth largest school district in the U.S.) was directly comparable to the rate for the New York City school district.

The New York turnover rates are also not unusual by the standards of other industries. The Bureau of Labor Statistics maintains a survey of Job Openings and Labor Turnover (JOLTS). According to JOLTS, 26 percent of private sector workers quit their jobs in 2001. Twenty-six percent of workers in business and professional services quit

nationwide, as did 20 percent of education and health services workers. Twenty-three percent of total non-farm workers quit. The rate of voluntary separations was somewhat lower than the national average in the Northeast quadrant, but still almost 20 percent of non-farm workers in the Northeast quit their jobs.

The analysis conducted for the present study reveals little evidence that teacher turnover is a function of labor market conditions outside of school district control. Adjusting for turnover in the hedonic salary estimation had little systematic effect on the index values, suggesting that turnover is not a function of compensation factors outside of school district control.

To more thoroughly explore this, the direct relationship between turnover and compensation was estimated. The dependent variable in the logistic analysis takes on only two values—quit or no quit. The explanatory factors are drawn from the teacher and job characteristics used in the hedonic wage model, together with an estimate of the beginning teacher salary scale in the district and the GCEI (see Appendix J).

If turnover is driven by inadequate salaries, then one would expect to see more quits in districts where the pay scale is low given the GCEI. Indeed, such is the case. The analysis suggests that the probability that a teacher quits is significantly higher when the pay scale is lower than predicted by the GCEI.

The magnitude of the effect is small, however. Large changes in pay scale are needed to induce small changes in turnover rates. For example, the model predicts that a female teacher with less than 5 years teaching experience and no teaching certificate has a 20 percent chance of quitting in a district that pays the exact salary predicted by the GCEI. To lower her chance of quitting to 19 percent, the district must pay 7 percent more than predicted by the GCEI; to lower her chance of quitting to 15 percent, the district must pay 40 percent above the GCEI. Even larger changes in relative salary are needed to reduce the turnover rates of more experienced teachers. Evaluated at the mean, each percentage point decrease in teacher turnover requires a 9 percent increase in compensation (holding the GCEI constant). Thus, while the model suggests that turnover is responsive to salaries and that equalizing district purchasing power could reduce teacher turnover, it also suggests that turnover is largely driven by individual choices and by factors within school district control.

Summary

This chapter has presented the analysis conducted for the purpose of accounting for variations in the cost of recruiting and employing comparable school personnel across the districts in New York State. The analysis above focuses, for the most part, on modeling the compensation of public school teachers. Previous work by Chambers (1981b, 1997) in this field has shown there to be a very high correlation between the geographic cost adjustments for teachers and other school personnel. Because of the quantity and quality of the data on teachers available for the New York analysis, it was decided to use the geographic cost adjustments for teachers to adjust the salaries for all school personnel.

A number of alternative models are used to estimate the patterns of teacher compensation, and the advantages and disadvantages of each are evaluated. However, each of these models suggests highly similar patterns of variations (with correlations above 0.97) in geographic costs across the state. Depending on the model, the highest to lowest cost districts pay anywhere from 40 to almost 60 percent more for comparable teachers. The preferred model selected for the adequacy simulations (i.e., with teacher fixed effects) is the most conservative in terms of the range of cost differences. The preference for this model was based on the fact that it controls more effectively than the others for differences across districts in the qualifications of the teacher workforce.

The results of the analysis of teacher cost differences was compared to two other analyses: one on the costs of housing in New York State and one using Census data on non-education wage earners with qualifications and background characteristics similar to the teaching population. For the most part, these two analyses exhibit patterns of variation in costs that were similar to those observed for public school teachers. Correlations between the teacher cost indices and the cost indices derived from these alternative models strategies were well above 0.80.

In thinking about the costs of recruiting highly qualified teachers, the compensation models for teachers used in this analysis indicated that teacher qualifications and job assignments interact with one another. On one hand, there are wage premiums associated with attracting fully certified teachers, while at the same time, teachers appear to accept lower wages to spend more time teaching in subjects for which they are fully qualified.

Chapter 4 - “Costing Out” Adequacy: The Results

Introduction

This chapter presents the AIR/MAP projections of expenditures necessary to achieve “adequacy” in New York State public schools, and compares them to actual levels of expenditure. All data correspond to the 2001-02 school year. As indicated previously, the expenditure figures in this chapter, both the actual and those projected from the PJP models, exclude spending on transportation services and debt service for school facilities.

The AIR/MAP projected expenditures displayed in the following exhibits are derived from the professional judgment process as described in Chapter 2. They reflect allocations of staff and non-personnel expenditures for school operations developed by the professional judgment panels combined with the overhead rates that reflect expenditures on centralized district administration plus maintenance and operations services.

All of these projected expenditures incorporate the following factors:

- **Cost of central administration and maintenance** – estimates of the costs of carrying out central administrative and support functions and the costs of maintenance and operations
- **Resource cost differences** – geographic differences in the costs of school personnel
- **Pupil needs** reflected by the composition of enrollment
 - *Across grade levels* (i.e., elementary, middle and high schools)
 - *By poverty* (represented by the percent of students eligible for free and reduced price lunches)
 - *By English language skills* (represented by the percent of students who are classified as English language learners)
 - *By special education eligibility* (i.e., the percent of students with disabilities who have an individual education program (IEP))

For comparative purposes, the data on actual total current expenditure on public school children in New York State are based on information provided by the NYSED for the 2001-02 school year.⁶⁶ Total current expenditure in this context means total expenditure less transportation and debt service (i.e., for school facilities).⁶⁷ These figures reflect spending on the kindergarten through 12th grade (K-12) instructional program and

⁶⁶ Specifically, we make use of the ST3 and an aggregated form of this data known as the School District Fiscal Profiles. The year 2001-02 is the latest available version of the fiscal data. The School District Fiscal Profile data and reference material is publicly available at <http://www.oms.nysed.gov/faru/>.

⁶⁷ More precisely, the following items are excluded from the calculation of total current expenditure used here: home-to-school transport, district debt service, and facility construction costs. Inter-district tuition payments are also excluded since expenditures to serve transfer students are already reflected in the district of service. This exclusion avoids double counting of expenditures.

expenditures on pre-kindergarten programs provided by public schools in the state during the 2001-02 school year.⁶⁸

Current statewide spending figures for New York are compared with PJP estimates of the costs of resources necessary *to provide a full opportunity to achieve the Regents Learning Standards*. These expenditures include projected spending on the K-12 instructional program plus expenditures on preschool programs, including both pre-kindergarten and early childhood development, that the PJPs deemed necessary to achieve adequacy in New York public schools. The term *projected expenditure* or *cost* is subsequently used to refer to the estimates derived from the deliberations of the PJPs by the AIR/MAP team. In addition to presenting aggregate figures for all districts in the state, each exhibit presents data for collections of public school districts classified by the NYSED Need to Resource Capacity (NRC) categories.

The Foundation for Alternative Cost Estimates for Achieving Adequacy

As with any type of cost analysis, estimating the costs of achieving adequacy in education is not a precise science. Any cost analysis, whether it is focused on education, health issues, environmental policy or some other area of public policy, requires the development of a set of assumptions combined with analytical and statistical techniques. In our case, variation in the PJP-specified resources required to provide an opportunity to achieve the Regents Learning Standards may arise from three sources. First, as explained in Chapter 2, the prototypical schools provided in the PJP exercises varied greatly with respect to size, poverty, and need for special education and English language learner services.

Second, variation in the specified resources may stem from the fact that panel opinions differed, even those from the same type of district (PJP). That is, panels from the same PJP category are likely to arrive at somewhat different program designs and specifications even when faced with identical exercises. In order to account for these sources of variation, the process designed by AIR/MAP for this study engaged multiple panels to obtain alternative resource specifications across different levels of school need. In addition, the methodology made use of a Stakeholder Panel to review the procedures and resource specifications resulting from the PJP process.

Third, AIR/MAP introduced various stages into the professional judgment process, each providing an alternative from which cost estimates could be derived. As described in Chapter 2, the study included three stages in the professional judgment process. These are reiterated below:

⁶⁸ It is worth noting that not all of the spending on preschool programs in New York State for the 2001-02 school year is included in the NYSED fiscal figures reported above. For example, Head Start had enrollments of approximately 49,000 and federal HHS allocations amounted to over \$398 million in 2001-02 according to the *Digest of Education Statistics* published by the National Center for Education Statistics, 2001. Another \$21 million was spent on Even Start programs in 2001-02 according to the New York State Alliance for Family Literacy.

Stage 1. Initial Specifications – meetings in July/August 2003. This stage reflects the synthesis of the initial specifications presented to the AIR/MAP team by the original ten general and special education PJP following the summer meetings.

Stage 2. Summary PJP Revisions #1 – December 10th, 2003 meeting. This stage reflects revised specifications from the December meetings of the *Summary PJP Team*.

Stage 3. Summary PJP Revisions #2 – January 14th, 2004 meeting. This stage reflects further revisions from the January meetings of the *Summary PJP Team* that were held, in part, to respond to comments of the full Stakeholder Panel meeting of December 11th, 2003.

The following provides further details on what transpired at each stage of this process and what changes were made that might affect the estimates.

Stage 1. The Summer Meetings

Deriving a final result for this study required the AIR/MAP research team to synthesize several prototype specifications of service delivery systems developed by the initial ten PJP (Stage 1). That is, it required aggregation of the results into some meaningful representative resource profiles across various levels of need that did not precisely reflect the judgment of any single panel. For this reason, AIR/MAP asked members of the original professional judgment panels (i.e., the *Summary PJP Team*) to meet on subsequent occasions to review the final staffing and resource allocation patterns that underlie the cost estimates in this report. As indicated above, one of those meetings occurred in mid-December of 2003 and another one in mid-January of 2004.

Stage 2. The December Meeting of the Summary PJP Team

The December meeting was focused on a review of the estimated resource levels that were derived from the synthesis of the Stage 1 specifications. The following is a summary of the changes in resource specifications that were made by the Summary PJP Team as a result of this meeting.

- **Preschool enrollments** – Greater specificity was necessary to refine the patterns of enrollment in preschool programs following the initial summer meetings of the PJP. Not all panels had specified preschool programs in the first stage of the PJP meetings. Seven out of eight of the original general education PJP specified some level of resources for pre-kindergarten programs, and five of the eight panels specified some level of resources devoted to early childhood development (ECD) programs. The Summary PJP Team provided greater specificity and precision as to the percentage of potential enrollments to which the pre-kindergarten and ECD programs should be targeted. These enrollment levels were associated with the poverty level of the students served in the school to

- reflect the greater need for early intervention programs of children from poorer families.
- **Extended year and extended day programs** – Similarly, the Summary PJP Team provided greater specificity and precision to the percent of potential enrollments for whom the summer school and the before- and after-school programs should be targeted. As with preschool programs, these enrollment levels were associated with the poverty level of the students served in the school to reflect the greater need for extended time programs for children from higher poverty schools. During Stage 1 of the PJP meetings, six out of eight panels specified resources devoted to extended day programs, and seven of the eight panels specified some resources for extended year programs.
 - **Professional development** – The Summary PJP Team recommended that additional dollars be allocated to professional development expenditures in middle and high schools with higher proportions of ELL students.
 - **Miscellaneous staffing changes** – The Summary PJP Team also recommended an increased allocation of full-time equivalent social workers, assistant principals and security personnel in those high schools with average and above-average poverty levels. For high schools with relatively large numbers of special education students and those with a large proportion of ELL, the team also increased the amount of personnel devoted to social work and security. In addition, extra guidance counselors were recommended for those high schools serving higher proportions of special education students.
 - **Miscellaneous non-personnel expenditures** – Recommendations were made by the Summary PJP Team to increase (decrease) the amount of non-personnel expenditures earmarked for student activities for those middle schools at relatively high (low) levels of poverty. In addition, the team recommended an increase in expenditures devoted to professional development for schools with a high proportion of ELLs.

Stage 3. The January Meeting of the Summary PJP Team

Immediately following the Stage 2 meeting of the Summary PJP Team, AIR/MAP convened a meeting of the *Stakeholder Panel*. This Stakeholder Panel, which included members of the Summary PJP Team, had the opportunity to review all of the program specifications and the patterns of variation within the school prototypes. In addition to the members of the Summary PJP Team, the Stakeholder Panel consisted of representatives of the professional judgment panels along with representatives of various constituency groups, business leaders and policy makers involved with the reform of school finance. As indicated previously, these additional stakeholder panel members included representatives of parents, school board members, taxpayers, legislators, the New York State Education Department, the Governor, and the Commission appointed by the Governor to review school funding alternatives.

The stakeholder committee was provided with all of the data available to the AIR/MAP team to develop the final cost estimates. The non-educator members of the stakeholder panel had the opportunity to query the members of the Summary PJP Team about their

program designs and specifications and to provide input to the AIR/MAP team prior to the final processing and analysis of the data.

One of the issues discussed during the Stakeholder Panel meeting related to the patterns of variation in school program costs with respect to ELL students. The patterns that were reflected at that time suggested a very small impact of changes in the percent of ELL students on the school-level programmatic costs. Specifically, the question was put forth of whether this was a reasonable result given the perceived complexity of addressing the needs of additional ELL children, holding other need related factors (i.e., enrollment size, poverty and special education) constant. At the same time, at least one of the narratives developed by the PJP in Stage 1 suggested that ELL students did not necessarily require additional teachers or other resources as much as the need for teachers and other personnel with different qualifications.⁶⁹

The following provides a list of the accomplishments and changes in resource specifications that were made by the Summary PJP during the Stage 3 meeting in January 2004.

- **Review of program design and staff utilization** – The Stage 3 meeting of the Summary PJP Team held in January served as a final review of the school prototypes and an opportunity to help the AIR/MAP team understand the significant aspects of the programs designed by the professional judgment panels.
- **ELL staffing** – After reviewing the specifications and thinking about the assumptions under which the prototypes were developed, the Summary PJP Team recommended some changes in ELL staffing to address the concerns expressed during the Stakeholder Panel meeting in December. To provide some context on this issue, the Stage 1 panels did specify resources for ELL, but they were not statistically significant, and one PJP from New York City specifically stated that the nature of resources needed to be changed, but that the amount specified was adequate. It may be argued that, under this rationale, the specifications developed by Stage 3 may be perceived as an overstatement of the need for ELL services and should be viewed as an upper bound. However, one problem with this rationale observed by the ELL expert advisor for the project, Kenji Hakuta, and picked up by the Summary PJP in the Stage 3 meeting is that while this may be true for a school with high percentages of ELLs of the same language (e.g. those requiring teachers that only speak one other language than English), it does not pertain to high percentage ELL schools with a multitude of different languages being spoken, where some form of English as Second Language (ESL) approach will be needed. Overall, the notion that a high poverty school with high percentages of ELLs can make due with the same amount of resources as schools at the same levels of poverty and special education, but with no ELLs, was questioned by the stakeholders. Accordingly, the Summary PJP Team decided to increase the resource allocation of “other” teachers in addition to supplies and materials at all three schooling levels. Finally, in response to the increase of

⁶⁹ The reader is referred to the notes from the PJP deliberations, which are included in Appendix B.

- ELLs, the team recommended raising non-personnel expenditures for the professional development of high school teachers.
- **Small school projections** – During the January meeting, the Summary PJP Team reviewed the projections of resources specified for very small schools that had been developed by AIR/MAP. Projections had been done using the multivariate regression analysis of the Stage 1 data points, and the Summary PJP Team was requested to review the projections and make any necessary changes that would be appropriate to achieve the desired results. However, only a very limited amount of time was available to review the resource specifications for these atypically small schools (i.e., schools well below the enrollment levels specified in the original PJP exercises). After subsequent discussions among the members of the AIR/MAP team, it was decided that estimating the effects of school size outside the original enrollment ranges had the potential of distorting cost estimates. It is for this reason that all of the cost simulations were done using estimated effects only within the original ranges of enrollment reflected across the PJP exercises.⁷⁰ Schools with enrollment below the minimum or above the maximum were assigned cost projections based on the corresponding extreme value for enrollment (i.e., those elementary schools below 414 and above 774 had projections based on 414 and 774, respectively). Actual enrollments were used to project costs for schools within the limits of the minimum and maximum enrollment levels provided during the original PJP exercises.
 - **Properly identifying district-level functions** – As described in Chapter 2, the AIR/MAP team needed to divide current spending into items that were included versus excluded from the school prototypes specified by the PJP specifications. In the Stage 3 meeting the Summary PJP Team provided assistance to AIR/MAP in appropriately dividing current spending into that which was already included in the school prototypes versus that which was excluded.⁷¹

Estimating District-Level Functions

Finally, as described in Chapter 2, AIR/MAP used two alternative methods of accounting for expenditures on district-level functions: the lump-sum approach and an approach that combined lump-sum amounts with an overhead ratio for certain district-level functions. The first of these does not account for any possible growth in expenditures on district-level functions to support changes that might occur in instructional program expenditures and therefore represents a lower bound. Conversely, the second approach allows for the possibility that a change in instructional program expenditures could be associated with an increase in expenditures on district-level functions. In turn, this second approach can be viewed as an upper bound on the potential change in expenditures on district-level functions. Reality probably lies somewhere in between these two estimates.

⁷⁰ The enrollment ranges are 414 to 774, 543 to 951 and 576 to 1,184 for the elementary, middle and high school levels, respectively.

⁷¹ A more detailed discussion of this can be found in Chapter 2.

The Geographic Cost of Education Index

It is important to point out that modeling a teacher labor market is an incredibly complex endeavor to undertake. To this end, the geographic cost of education index itself is based on a statistical model that intends to greatly simplify the underlying mechanism that makes up the labor market for school personnel. In reality the teacher labor market is far more complex than can easily be represented in econometric models of the type used in this analysis. Therefore, it must be noted that such models provide a best estimate of the major differences in the costs of recruiting and employing comparable personnel across local jurisdictions, but as with all estimates, they are subject to some degree of error. Moreover, while variations in teacher costs are likely to be highly correlated with variations in costs for other types of personnel (in addition to non-personnel costs), the fact is that there are some possible differences in the factors that affect these different markets.

Glossary of Terms

Before proceeding to the estimates, it is useful to establish a few terms that will be used in the subsequent narrative about the results.

Lump-sum model – This refers to the first method used to add on the expenditures for district-level functions. The lump-sum model simply adds on what was previously spent on district-level functions.

Combined lump-sum/ratio model – This refers to the alternative method of adding on expenditures for district-level functions that involves adjusting expenditures to reflect some growth in spending on these functions in response to a change in the size of the instructional program.

Geographic cost of education index (GCEI) – This term refers to the direct measure of the school personnel cost differences derived from the statistical models in discussed in Chapter 3.

Standardized projected expenditures – This term refers to the expenditures estimated by AIR/MAP through the PJP process that are necessary to achieve adequacy (i.e., expenditures deemed necessary to achieve the goal put forth to the PJPs – see Exhibit 1 in Chapter 2) unadjusted for geographic cost variations. Personnel compensation levels used to estimate total costs are set to statewide pupil-weighted averages. To accomplish this, the GCEI based on the analysis described in Chapter 3 is set to 1.00 for all districts. Again, it is important to note that the expenditures derived from this simulation reflect only the variations in pupil needs and the scale of school and district operations. No differences in the geographic cost differences are reflected in these numbers.

Implicit geographic cost of education index (IGCEI)⁷² – This term refers to the ratio of GCEI-adjusted projected expenditures to standardized (unadjusted) projected expenditures for a given district. The only difference between the GCEI and IGCEI is the variation in the geographic costs of school personnel weighted by the projected budget share attributed to personnel. That is, the difference between the implicit cost index and the geographic personnel cost index introduced in Chapter 3 is that the IGCEI reflects the impact of the GCEI with the appropriate budgetary weights applied for the share of total expenditures attributable to personnel within each district, where the weights are based on the prototype models.

Need/scale index – This term refers to the ratio of standardized projected expenditures in any given district to the pupil-weighted average of the standardized projected expenditures across all districts. This index reflects both variations in the degree to which districts must provide educational services to students with special needs (i.e., those in poverty, classified as ELLs, and/or in special education) as well as in the scale of school and district operations.

Need index – This term refers to the relative variation in projected standardized expenditures associated only with variations in pupil needs.

Scale index – This term refers to the relative variation in projected standardized expenditures associated only with variations in the scale of school and district operations.

Need to resource capacity (NRC) – This is simply a method devised by NYSED to classify districts according to the ratio of pupil needs to the capacity of the district to generate resources. NRC will be used to abbreviate this in the titles of tables.

Preschool programs – Preschool refers to pre-kindergarten and ECD programs.

Projected expenditures/spending/costs – This refers to the expenditures developed by AIR/MAP through the PJP process that are necessary to achieve adequacy (i.e., expenditures deemed necessary to achieve the goal put forth to the PJPs – see Exhibit 1 in Chapter 2). This figure reflects variations in pupil needs, the scale of school and district operations, and geographic cost differences for the school personnel based on the analysis in Chapter 3.

Stages 1, 2, 3 – This indicates the PJP stage on which the projected expenditures are based. Stage 1 refers to the estimates based on the PJP specifications immediately following the Summer 2003 meetings. Stage 2 refers to the estimates immediately following the December 2003 meetings of the Summary

⁷² Formal definitions of how the IGCEI and Needs/Scale index are calculated can be found in the section “Understanding the Components of Educational Cost Differences”, below.

PJP Team. Stage 3 refers to the estimates obtained immediately following the January 2004 meetings of the Summary PJP Team.

The Cost of an Adequate Education

The initial adequacy cost estimates presented below reflect the resource specifications at Stage 3 of the PJP process as described above. These cost projections use what was referred to above as the *lump-sum* approach to estimating the costs of district-level functions.

Stage 3 of the PJP process represents the culmination of the professional judgment process as applied in this study. This process encompasses a series of meetings with the original PJPs, the Summary PJP Team, and the Stakeholder Panel.

However, the cost projections developed at Stage 3 represent only one possible basis from which to derive an estimate of the cost of adequacy. To understand the basis for this Stage 3 cost estimate, it is important to note how the cost projections changed during each phase of the process. As will be shown later in this chapter, there is in fact a range of reasonable estimates developed at the different stages of this professional judgment process, and there are also estimates derived using differing assumptions about various components of the simulation model (e.g., how district-level costs are treated and how school size is represented).⁷³

Stage 3 Cost Estimates

Exhibit 4-1 compares the AIR/MAP projected expenditures per pupil derived from the program specifications designed by the PJPs at Stage 3 to the actual current per pupil expenditures reported in the NYSED fiscal files.⁷⁴ These figures represent per pupil expenditures for the district attended by an average student within each district category (e.g., the overall average reflects the average student in the state while the figure for the Big 4 Urban Cities reflects the average student attending one of those districts). It is important to note that these per pupil figures correspond to the average projected spending assuming every district spent no more and no less than what was necessary to achieve adequacy as defined by the resource specifications derived from Stage 3 of the professional judgment process.

⁷³ This first set of estimates presented here are based on a similar set of assumptions on which the estimates presented in the Preliminary Report released in January 2004 were based. As was indicated in the Preliminary Report, these original numbers were subject to change and indeed have changed somewhat since the release of that report.

⁷⁴ It is understood that both projected and “current” expenditures refer to 2001-02 dollars, which corresponds to the year of the most recent data available for use in this study.

Exhibit 4-1 - Comparison of Adequate Versus Actual Per Pupil Expenditures by Need to Resource Category (Including Preschool Programs)

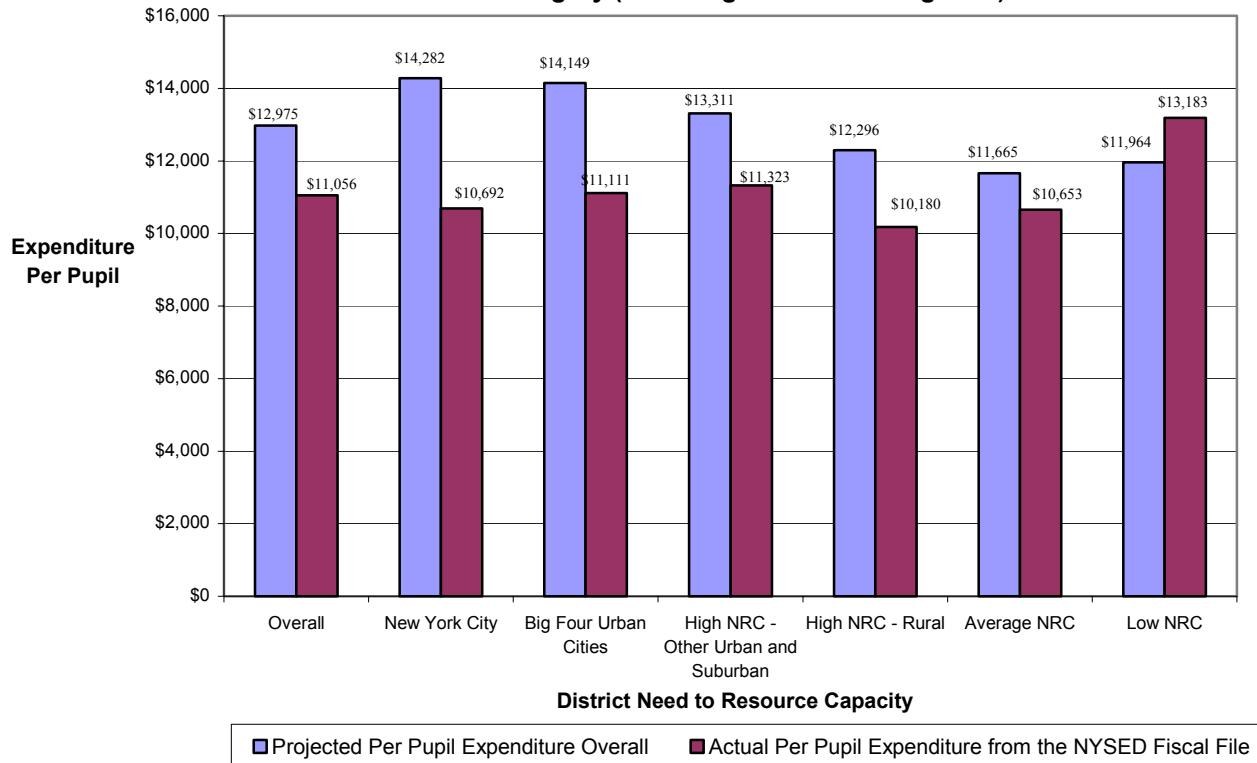


Exhibit reads: Average per pupil expenditure in New York State for 2001-02 was \$11,056. AIR/MAP projects that an average per pupil expenditure of \$12,975 would have been necessary to achieve adequacy statewide. Note, figures assume all districts spend exactly at their projected levels.

It is important to note that the students counted under the “adequacy”-based model are substantially higher than current state enrollments.⁷⁵ This is because the “adequacy”-based expenditures include wider preschool enrollments than the current statewide practice within New York State public schools. As noted earlier, approximately \$399 million in Head Start Programs serving about 49,000 students and \$21 million of Even Start programs are not included in the NYSED fiscal data.

Exhibit 4-2 presents a stacked bar chart that shows how actual total current expenditures in New York State compare to total projected expenditures, based on the AIR/MAP analysis, necessary to raise all districts to “adequate” levels of spending. The bottom portion of each bar displays the actual total current spending by New York public school districts. The top portion of the bar displays the incremental expenditure necessary to achieve adequacy in districts not currently spending at levels deemed adequate as defined

⁷⁵ Total actual enrollment in New York State across the NRC categories are as follows (in parentheses): New York City (1,049,831), Big Four Urban (130,327), High NRC-Other Urban and Suburban (221,250), High NRC-Rural (179,001), Average NRC (872,785), and Low NRC (392,762). Total enrollment necessary to achieve adequacy predicted by AIR/MAP across the NRC categories are: New York City (1,111,498), Big Four Urban (135,658), High NRC-Other Urban and Suburban (230,293), High NRC-Rural (185,793), Average NRC (888,113), and Low NRC (394,669).

by the resource specifications derived from Stage 3 of the professional judgment process. The total of these two figures provides an estimate of total expenditures from all sources (federal, state and local) necessary to bring those districts to “adequate” levels of spending, with no change in current levels of spending for those districts at or above “adequate”.

Exhibit 4-2 - Total Expenditure Required to Bring All Districts to "Adequate" Spending Levels (Total Expenditure in Bold)

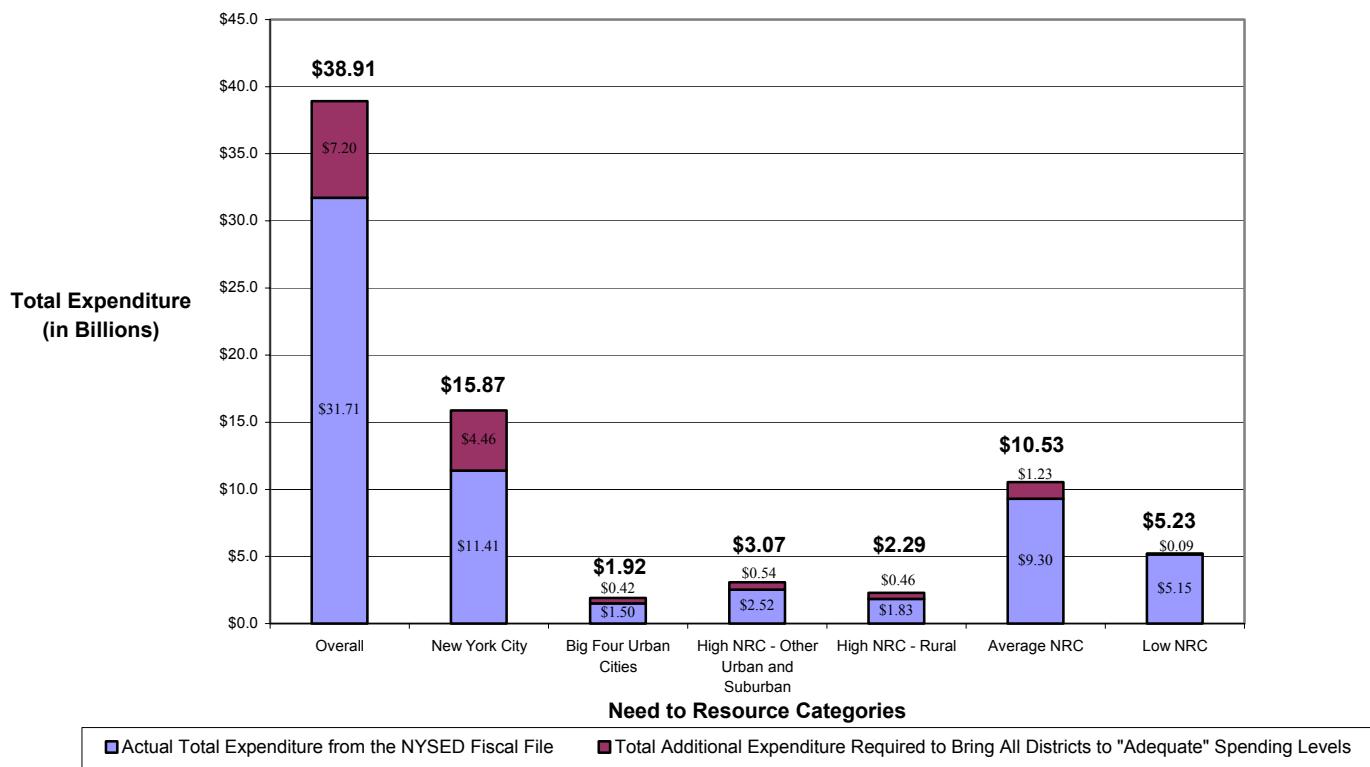


Exhibit reads: Total expenditure in 2001-02 was \$31.71 billion. An additional \$7.20 billion would have been necessary to bring all districts spending at less than adequate levels up to adequacy. Note, actual and additional expenditures may not add up exactly to totals (in bold) due to rounding errors.

While the figures in Exhibit 4-1 compare projected to actual expenditures for all students, Exhibit 4-2 presents data from a slightly different perspective. The figures in Exhibit 4-1 reflect what would happen if each public school district in New York State spent the Stage 3 projected levels on every student, while figures in Exhibit 4-2 emphasize the incremental expenditures necessary to achieve adequacy only for those students enrolled in districts not currently spending at an adequate level. Exhibit 4-2 maintains current spending for districts spending at or above adequate levels.

New York State

The AIR/MAP analysis projects that an average per pupil expenditure of \$12,975 would be required to provide adequate resources to each and every student in New York State (Exhibit 4-1). Actual current spending on public school students in New York State amounts to \$11,056.

Exhibit 4-2 shows total current spending in New York State for the 2001-02 school year to be \$31.71 billion. However, the investment necessary to bring those districts that are currently spending less than adequate amounts up to adequate levels without reducing the spending in those districts at or above adequate spending levels would require a total expenditure of \$38.91 billion, a 22.7 percent increase in total spending.⁷⁶ These statewide estimates have varying implications across divergent types of districts.

New York City

The AIR/MAP projections for New York City public schools show “adequate” spending at \$14,282 per child, compared to an actual current expenditure of \$10,692. This would require a total budget of \$15.87 billion, a 39.1 percent increase over the current spending level of \$11.41 billion.

The Big Four Urban Cities

The AIR/MAP projections for the other urban districts show an average of \$14,149 per child, versus a current expenditure of \$11,111. This would require a total budget of \$1.92 billion, a 27.8 percent increase over the current spending level of \$1.50 billion.⁷⁷

Other Categories of Districts

Comparing the AIR/MAP projections to actual spending (Exhibit 4-1) for students attending districts classified as *High NRC–Other Urban and Suburban* implies an increase on a per pupil basis of 17.6 percent (i.e., \$13,311 versus \$11,323 per pupil) to achieve adequacy, while those attending districts classified as *High NRC–Rural* require an increase of 20.8 percent (i.e., \$12,296 versus \$10,180 per pupil). The incremental total expenditure necessary to ensure all students in the high need districts, *High NRC–Other Urban and Suburban* and *High NRC–Rural*, have access to “adequate” resources would require additional investments of \$0.54 and \$0.46 billion representing increases of 21.4 and 24.9 percent, respectively.

Actual expenditures for students in the *Average NRC* districts are also below the AIR/MAP projections. The projection for average per pupil expenditure is \$11,665, while the current expenditure per pupil is \$10,653. To raise funding levels for these students to “adequate”, an additional \$1.23 billion is necessary, 13.3 percent above current spending of \$9.30 billion in this category.

On the other hand, for students enrolled in districts classified as *Low NRC*, the AIR/MAP average per pupil projection is lower than actual per pupil spending. The AIR/MAP projections reveal an average per pupil expenditure for low-need districts (Exhibit 4-1) of \$11,964, while the actual average per pupil expenditure is \$13,183. However, some

⁷⁶ The findings show 517 districts currently spending below the adequacy standard estimated by this study, with 163 districts spending at or above this level. If every district were to spend exactly what was necessary to achieve “adequacy” as estimated by the AIR/MAP model, total spending in New York State would amount to \$38.23 billion. It is important to point out that all of these spending figures are intended to reflect a combination of all federal, state and local resources.

⁷⁷ Due to rounding of the reported expenditures, calculation of percent changes using the dollar figures in the text will not always be precise. The percent changes reported are, however, correct.

within the *Low NRC* category are spending below “adequate”. Exhibit 4-2 shows that an additional \$0.09 billion would be necessary to provide “adequate” resources for students enrolled in *Low NRC* districts currently spending below “adequate” levels.

What Adjustment Is Required to Ensure All Districts Have Adequate Resources?

As seen in the exhibits above, the Stage 3 spending projections suggest that not all New York districts need additional revenues to reach “adequate” levels of spending. This does not necessarily suggest that these districts are spending too much. They may reflect community determinations of local needs or preferences beyond the “adequacy” standard specified for this study.

The 517 New York school districts that presently spend less than the AIR/MAP projections include all of the Big Five districts, 29 of the *Low NRC* districts, and over 480 of the remaining districts in the state. To bring these districts up to the projected spending levels, without redistributing revenues from other districts would require an additional \$7.20 billion (see Exhibit 4-2) in federal, state, and/or local revenues.

As indicated previously, these projections reflect an increase in the number of students receiving preschool services. Currently (2001-02 school year), 37,868 students are served in state pre-kindergarten programs. The AIR/MAP projections based on the specifications of the PJP's allow preschool enrollments of 137,936 (i.e., that include both ECD and pre-kindergarten for three- and four-year-old students, respectively). Note that the Head Start and Even Start programs serve at least another 49,000 children in early education programs outside of the state's public schools.

Alternative Cost Estimates

As suggested above, different assumptions as to the types and quantities of resources necessary to achieve “adequacy” will lead to different cost estimates. This section shows how these cost projections changed at different stages of the analysis and how they differ with alternative assumptions. The importance of these alternative estimates is that it makes the professional judgment process more transparent to the reader and leaves some of the judgment about the final numbers in the hands of policy makers.⁷⁸

Exhibit 4-3 below presents overall differences in the estimated cost of adequacy at the different stages (1, 2, and 3) of the professional judgment process. In addition, it also displays the impact of using the combined lump-sum/ratio approach to account for

⁷⁸ In addition to the alternative cost analyses contained in this section, AIR/MAP has also done some sensitivity analysis of the impact of alternative resource configurations (e.g., such as differences in class size specifications) to show the cost impact of these differences in resource utilization. This analysis is presented in Appendix L.

district-level functions applied to the Stage 3 estimates.⁷⁹ For the sake of simplicity, this last alternative is referred to as the *Modified Stage 3* estimate. Note that the modified approach to estimating the cost of district-level functions could easily have been applied to the cost estimates at any of the stages. The proportionate impact would have been similar to the impact at Stage 3.

All of the figures presented in Exhibit 4-3 are based on the total expenditure required to bring those districts currently spending below the AIR/MAP projections up to adequate levels of spending. That is, the figures in Exhibit 4-3 are directly comparable to those in Exhibit 4-2 above.

Exhibit 4-3 - Total Actual and Projected Expenditures by Simulation Model

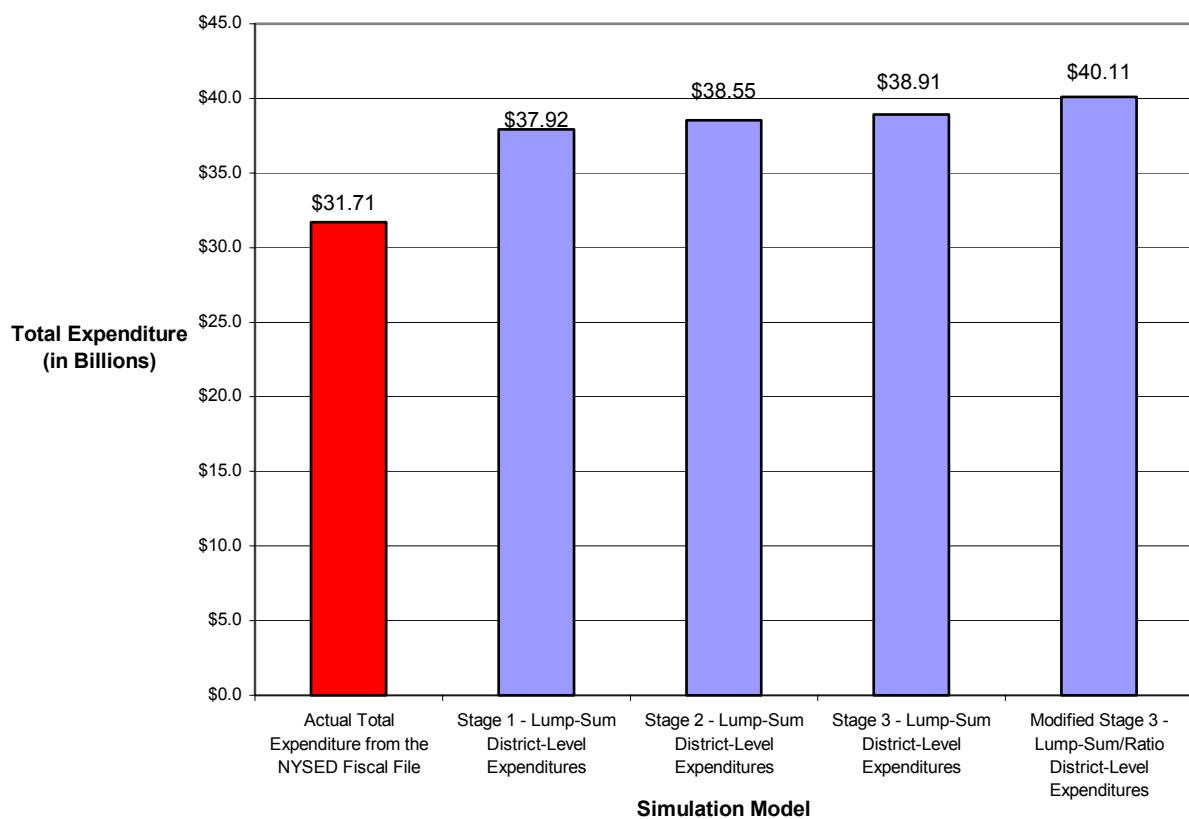


Exhibit reads: Total expenditure in 2001-02 was \$31.71 billion. Using the Stage 1 resource specifications an additional \$6.21 billion would have been necessary to bring all districts spending at less than adequate levels up to adequacy, making a total expenditure of \$37.92 billion.

Stage 1 exhibits the lowest cost estimate to achieve adequacy. Based on the Stage 1 specifications, an additional \$6.21 billion would be necessary to achieve adequacy. At Stage 2, which reflects a revised estimate of the projections of targeted enrollments in the

⁷⁹ Appendix K of this report presents district level projections of the per pupil costs of achieving adequacy at each of the stages 1, 2, and 3 as well as the modified stage 3, which uses the lump-sum/ratio calculation of district-level expenditures. In addition, actual spending levels for the 2001-02 school year are presented for each district along side the projected expenditures from the adequacy model. All figures correspond to total current expenditures and therefore exclude any spending on transportation and debt service (see footnote 57, above).

preschool and extended time programs, in addition to modest changes in the middle and high school configurations, the estimate increases to \$6.84 billion.⁸⁰ The Stage 3 estimates (i.e., \$38.91 billion total, \$7.20 billion additional) are the same as those presented in Exhibit 4-2 and reflect an increase in the resources specified for ELL students that were considered during the January meeting of the Summary PJP Team. The resource adjustments with respect to ELL were carried out in response to comments made at the end of the December 2003 meeting of the Stakeholder Panel.

Finally, the Modified Stage 3 estimate of \$40.11 billion, necessitating an additional \$8.40 billion, is the highest estimate of the cost of adequacy and simply reflects alternative assumptions about how AIR/MAP estimated the district-level functions. This alternative estimate is based on the combined lump-sum/ratio approach, which allows for part of the expenditures on district-level functions to change proportionately with changes in spending on the instructional program as specified by the professional judgment panels.

Thus, the adequacy estimates range from a low of \$37.92 billion to a high of \$40.11 billion. Using current (i.e., 2001-02) spending as a base, these estimates suggest that the additional investment required to achieve “adequacy” in New York State public schools ranges 19.6 to 26.5 percent.

Exhibit 4-4 shows how differences in resource specifications at the various stages of the professional judgment process affect different types of districts. For the purposes of simplicity, New York City is combined with the other urban districts (from the four next largest cities) with the remaining districts forming the second group. Since poverty and the percent of ELL students are primary drivers of the differences in costs between the stages, it appears as though the urban districts would benefit most from the changes that have occurred between Stages 1 to 3 of the process. The additional expenditures to bring all districts up to adequate spending without any impact on those districts at or above adequate spending levels increase from \$4.02 to \$5.67 billion in the most urban districts (i.e., New York City plus those in the other four largest cities), which represents over a 40 percent increase in total projected spending. For all other districts combined, the additional expenditures increase from \$2.19 to \$2.74 billion, which represents about a 25 percent increase.

⁸⁰ There were no changes in the resource configurations in the preschool and elementary extended time programs. The only change was in the projected number of students who would be enrolled in the preschool programs and the extended time programs.

Exhibit 4-4 - Additional Expenditures Required to Achieve Adequacy for New York City/Big Four Versus Other Districts by Simulation Model

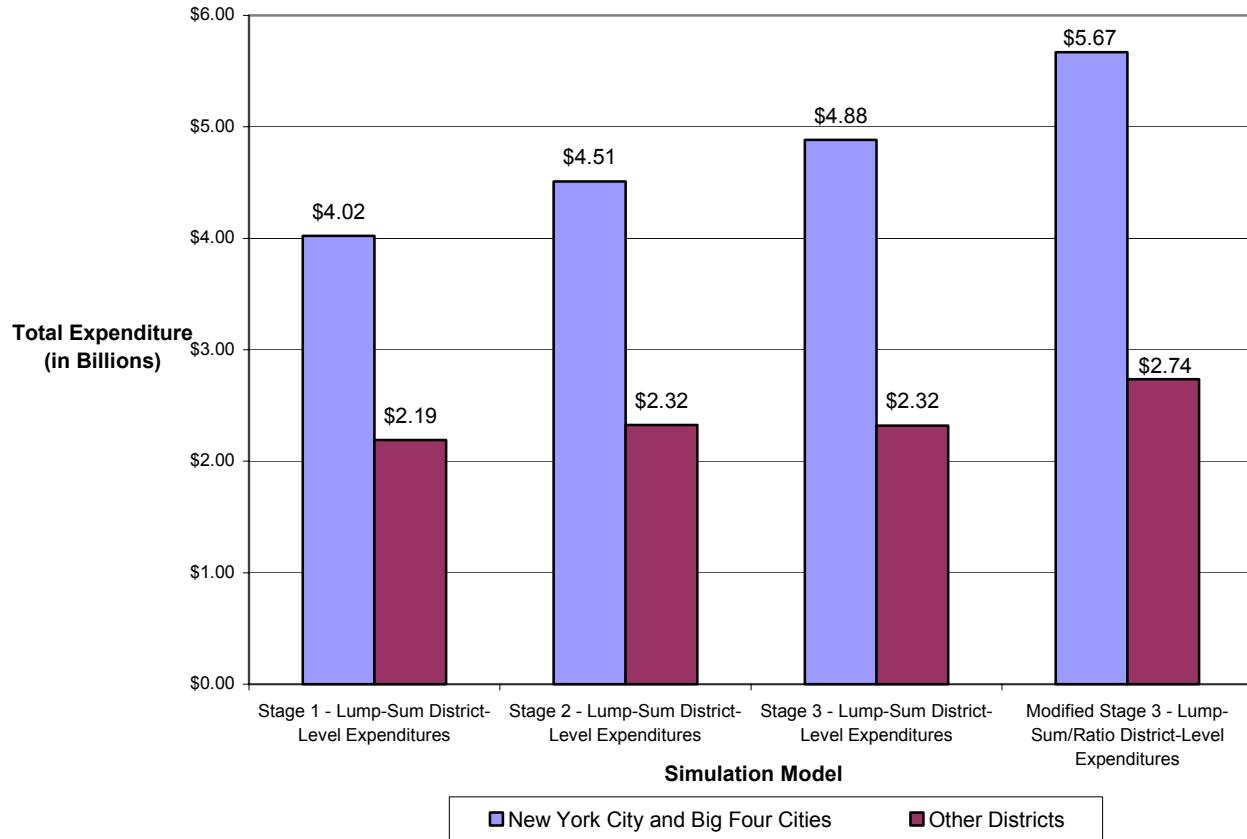


Exhibit reads: Using the Stage 1 resource specifications and lump-sum district-level expenditures an additional \$4.02 billion would have been necessary to bring all districts in the largest five cities up to adequate spending levels. The corresponding additional expenditure to bring all other districts not spending at adequate levels up to adequacy would have been \$2.19 billion.

While the dollar increases are substantial across the three stages, Exhibit 4-5 shows that the number of districts spending less than their projected expenditure is not all that different. The number of districts spending less than the projected expenditures ranges from a low of 516 at Stage 1 to a high of 520 for the modified Stage 3.

Exhibit 4-5 - Numbers of Districts Spending at Below-Adequate Levels by Simulation Model

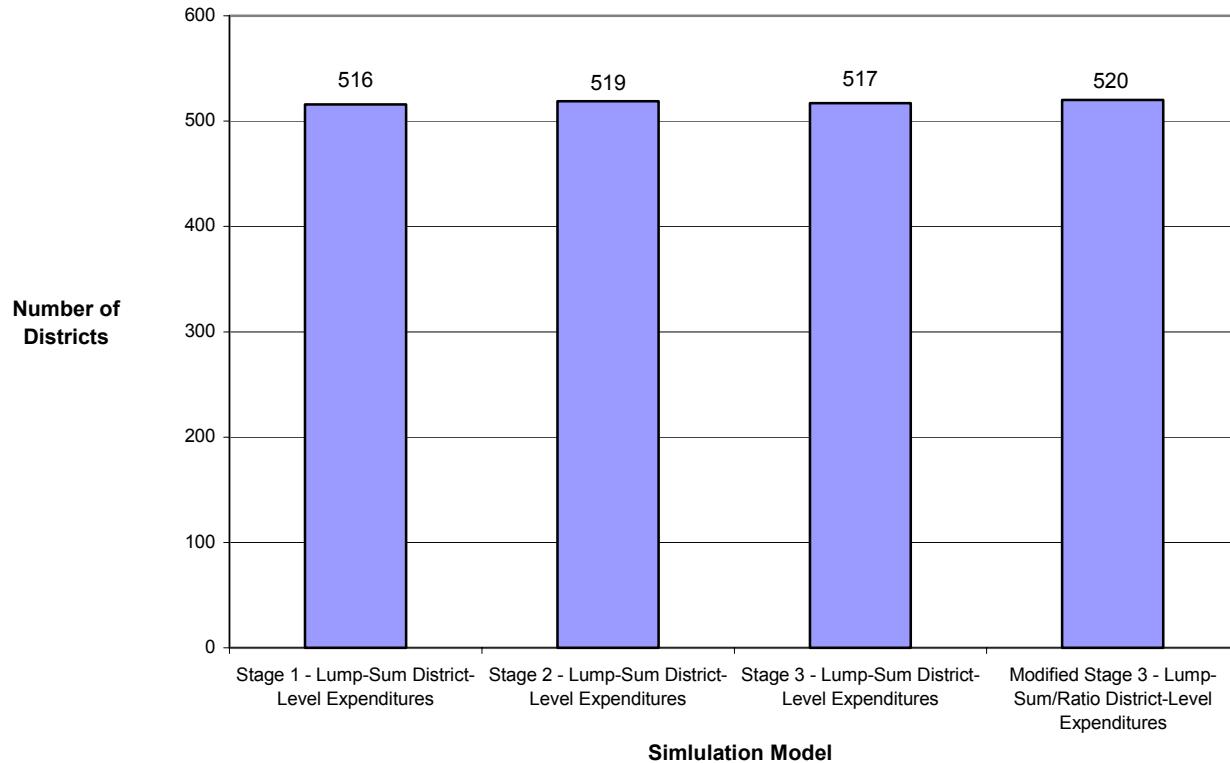


Exhibit reads: Using the Stage 1 resource specifications and lump-sum district-level expenditures 516 districts were deemed as spending at less than adequate levels.

The Role of Preschool

As previously indicated, preschool programs consisting of both pre-kindergarten for four year olds and ECD programs for three year olds, are included in the estimates for the total costs of adequacy. Exhibit 4-6 shows the total expenditure projected for preschool programs at each of the stages of the professional judgment process. The total expenditure on preschool ranges from a low of \$1.01 billion to a high of \$1.17 billion, which indicates relatively small proportionate changes across the four models. Because there were significant changes in the program specified for school aged students (i.e., those in kindergarten through the 12th grade), preschool projections are a smaller percentage of total expenditures at the later stages, ranging from a high of 16.3 percent at Stage 1 to 13.9 percent at the Modified Stage 3 (see Exhibit 4.7)

Exhibit 4-6 - Total Preschool Expenditures Required to Achieve Adequacy

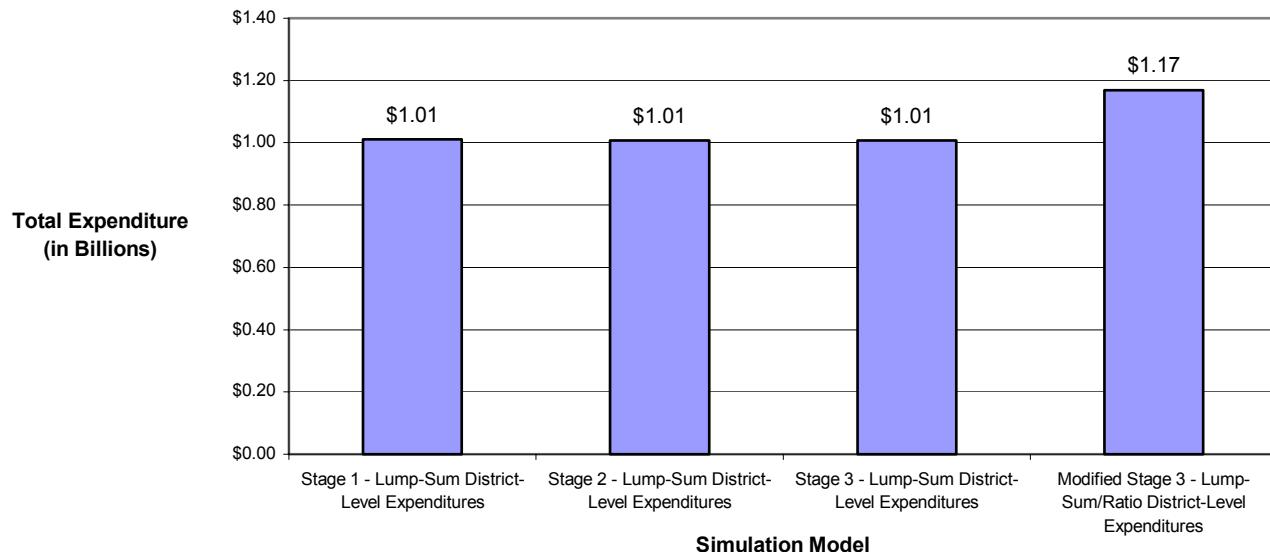


Exhibit reads: Using the Stage 1 resource specifications and lump-sum district-level expenditures an additional \$1.01 for preschool education would be necessary to achieve "adequacy".

Exhibit 4-7 - Total Preschool Expenditures as Percent of Additional Required Expenditure by Simulation Model

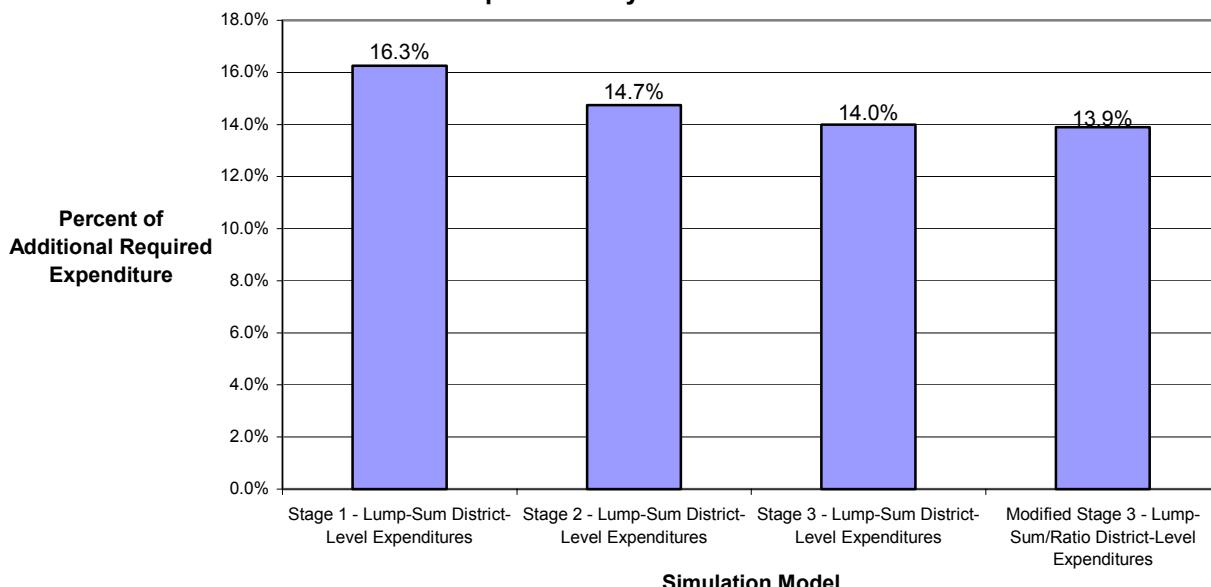


Exhibit reads: Using the Stage 1 resource specifications and lump-sum district-level expenditures 16.3 percent of the additional spending necessary to achieve adequacy was attributable to expenditures on preschool education.

Understanding the Components of Educational Costs

Underlying the total cost projections presented in the exhibits above are specific dollar amounts assigned to each district. These dollar amounts reflect variations in geographic

cost differences, pupil need, and in the scale of district operations. The following discussion shows how these pieces of the puzzle may be separated out to illustrate the role that each component plays for different kinds of districts.

Developing the Need-Scale Index

The analysis carried out in this report was primarily designed to develop “adequate” expenditure estimates by district given the configurations of schools, pupil needs, and teacher markets within which they operate.

Four critical pieces of data are used to separate these cost components:

- (1) Implicit geographic cost of education index (IGCEI)
- (2) Base expenditure level (BASE_EXP)
- (3) Need index (NEED)
- (4) Scale index (SCALE)

To calculate each of these components, one needs two numbers: the AIR/MAP projected expenditure levels (PROJ_EXP) and the standardized projected expenditure levels (STD_EXP) from one of the stages described above. The following formulas are used to calculate each of the four critical numbers:

$$(eq. 1) \quad IGCEI(i) = PROJ_EXP(i) / STD_EXP(i).$$

The *implicit geographic cost index* (IGCEI) for district i is defined as the ratio of the projected expenditures for district i to the standardized projected expenditures for district i .⁸¹ The reader is reminded that projected expenditures reflect variations in the cost of providing adequate educational services across districts in New York State, and it includes the variations in scale, pupil needs, and the costs of comparable school personnel. The standardized projected expenditures include variations for scale and pupil need, but do not reflect any geographic variations in personnel costs. Thus, the only difference in costs between the numerator and denominator are the geographic variations in costs of school personnel. Equation (1) extracts that component in the form of the IGCEI.

The base expenditure level is calculated by taking the pupil-weighted average of the projected expenditures.

$$(eq. 2) \quad BASE_EXP = \sum_{i=1}^I w(i) \times PROJ_EXP(i)$$

where $w(i)$ is the pupil-weight (i.e., the proportion of New York State enrollment in district i).⁸²

⁸¹ Remember that the average compensation rates in the standardized model reflect the compensation paid to school personnel in the districts attended by the average student (i.e., they are pupil-weighted average compensation rates).

⁸² If ENR = district enrollment, $w(i) = ENR(i) / \sum_{i=1}^I ENR(i)$.

Finally, the need-scale index for district i is calculated as follows:

$$(eq. 3) \quad NEEDSCALE(i) = STD_EXP(i) / BASE_EXP$$

That is, the need-scale index is simply the ratio of the standardized projected expenditures to the pupil-weighted average expenditures. It reflects variations in projected costs associated with scale of school and district operations and the composition of pupil needs.

Based on this collection of formulas, it can be shown that, for any given district i , the projected expenditure can be calculated as the product of the base expenditure (i.e., the pupil-weighted average of the standardized projected expenditure for all districts), the district-specific IGCEI, and need-scale index.

$$(eq. 4) \quad PROJ_EXP(i) = BASE_EXP \times IGCEI(i) \times NEEDSCALE(i)$$

It is important to recognize that one of the components implicit in the need-scale index above is the inclusion of actual data on spending to reflect district-level functions.⁸³ Thus, using the need-scale index could potentially create incentives for districts to inflate spending on district-level functions since actual data are used in one form or another. Avoiding this incentive would require a multivariate regression approach that includes factors reflecting the components of the need-scale index and generates a predicted value. To understand these patterns of variation, the AIR/MAP team has used multivariate regression analysis to sort out the variations in the need-scale index using the following independent variables to estimate a model capable of yielding a predicted need-scale index:⁸⁴

Need

- District type to capture the composition of enrollments and schools by grade level which affects the types of schools included in the projected costs for each district
- Percent of students eligible for free and reduced lunch
- Percent of students identified as ELL
- Percent of students identified as special education

Scale

- District size in various functional forms and sparsity of district population.⁸⁵

⁸³ Whether the projections use the lump-sum or combined lump-sum/ratio approach to calculate spending on district-level functions, these figures still represent values that vary by district.

⁸⁴ See Appendix C for details of the regression analysis on the need-scale index. The analysis presented in the text reflects a model that divided the sample into different enrollment groupings from the smallest districts (i.e., less than one thousand pupils enrolled) to the largest districts (i.e., greater than 10,000 students enrolled).

⁸⁵ Often linear and squared terms are used for enrollment to reflect the curvilinear relationship between spending and district size. AIR/MAP initially followed that convention. Moreover, because there are complex patterns of spending with respect to some of the district-level functions across the state, AIR/MAP also experimented with higher powers of enrollment and other variables such as sparsity of population to pick up the effects of school and district size on both instructional and non-instructional spending. However, rather than relying solely on the results where a functional form is imposed via estimation of a quadratic or some higher order polynomial, the relationship between the need/scale index and district enrollment was ultimately estimated with separate enrollment category-specific equations.

Separating the Need and Scale Components

With this formulation, it is informative to break the need/scale index into its two components: one reflecting just pupil need and the other reflecting the impact of scale of operations. That is, while the need/scale index reflects both components, each may show different patterns of variation across districts.

Exhibit 4-8 - Relative Scale and Need Indices and Implicit GCEI by Need to Resource Capacity Category Based on Model Using Actual School Enrollment

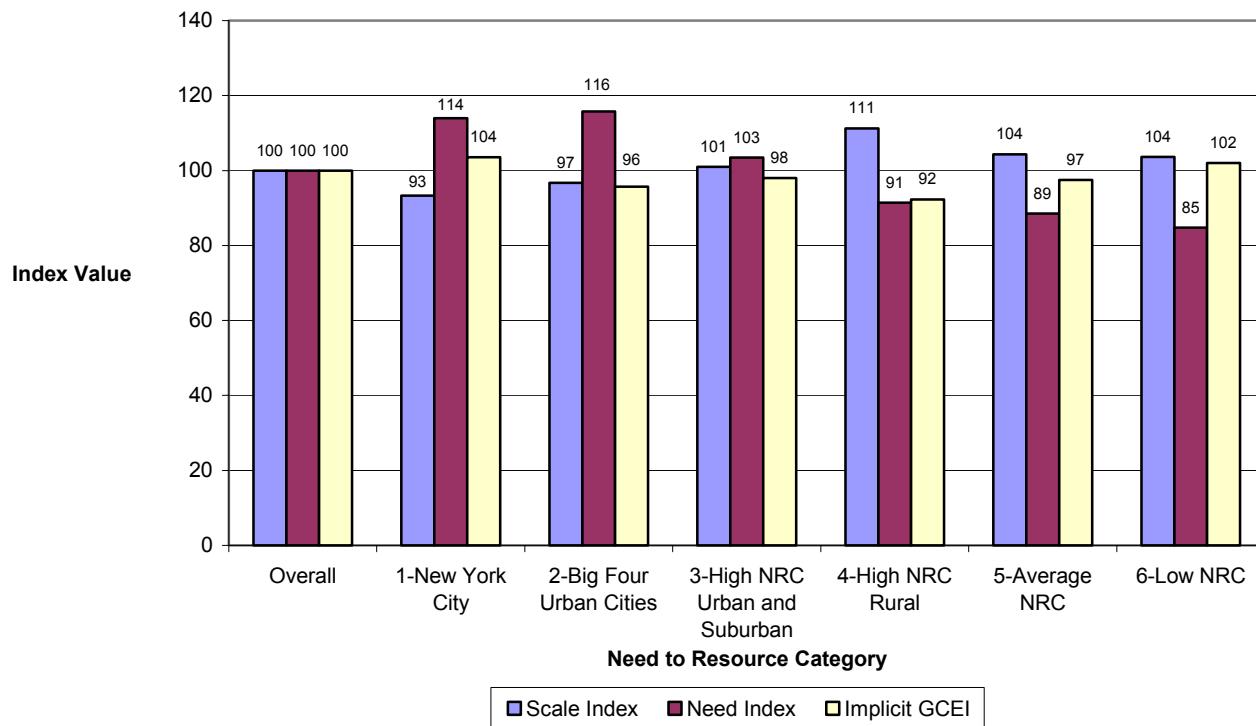


Exhibit reads: It costs approximately 4 percent more to hire a qualified teacher in New York City relative to a comparable teacher that instructs the average student in the state. Pupil needs in New York City are 14 percent higher than the statewide pupil-weighted average.

Exhibit 4-8 breaks up the pattern of variation in projected expenditures into three separate components: a scale index (i.e., reflecting district size), a need index (i.e., an index of pupil need), and the IGCEI (i.e., reflecting the impact of personnel cost differences on the projected expenditures). The mean value for each of these indices (i.e., the IGCEI, the scale index, and the need index) is scaled so that the value 100 represents the pupil-weighted average value of the index. An index value of 110 reflects a district that is 10% above the statewide (pupil-weighted) average, while a value of 90 represents a district that is 10% below the statewide (pupil-weighted) average on the respective index.

One pattern clearly seen when looking across the averages by NRC is that New York City shows similar pupil needs to the other large urban districts, while at the same time exhibiting a significant difference in the scale index. The scale index for New York City is low relative to the scale indices for districts in most of the other NRCs. The needs

component of the index is comparable to the value for the other four large urban districts. All exhibit high need indices relative to districts in the other NRC categories.

These patterns result from a combination of factors. One relates to the variations in overhead ratios. The proportion of total actual spending in New York City devoted to district-level functions and maintenance and operations services is among the smallest in the state. The percentage of total spending devoted to these categories is approximately 14.7 percent. Some of this difference reflects “economies of scale”.

However, there is another significant dimension to this that is derived from the work of the PJP_s. That is, in reviewing the relationship between school program costs and school size (see Exhibit 2-6 in chapter 2), one observes that the panels specified resources in such a way that there were somewhat lower per pupil costs associated with larger schools. To some degree, these lower costs result from the fixed costs of school administration being spread over a larger population of students. This negative relationship between projected expenditure and school size is observed at each school level, elementary, middle, and high school.

It turns out that New York City maintains elementary, middle and high schools that are, on average, larger than schools in any of the other NRC groupings of districts. For example, if one compares the average school sizes by PJP category, the average elementary school in New York City (PJP 1) enrolls 774 students, while the average school at the same level in PJP 2 (the other urban districts) enrolls 504 students. Average elementary schools in the other two PJP categories are both well below 500 students. Similarly, the average middle school in New York City is about 950 students compared to 798, 774, and 593 for districts in PJP categories 2 (other urban districts), 3 (suburban communities) and 4 (rural communities). High schools in New York City enroll about 1,180 students, while high schools in the PJP_s 2, 3, and 4 enroll 1,156, 992, and 576, respectively. These patterns follow those found nationwide in which school size tends to be positively correlated with district size (see, for example, Chambers (1981) for a discussion of this issue).

Thus, the larger than average schools in New York City combined with the low overhead ratio has the effect of reducing the projected costs of implementing the models specified by the PJP_s.

On the other end of that spectrum are the small rural school districts that tend to have relatively smaller schools at each level and somewhat higher overhead ratios associated with the costs of district administrative, maintenance, and operations functions. These two factors tend to have the impact of raising the costs for implementing adequate programs.

Do these patterns simply reflect economies of scale in schools and districts? The answer to this question is complex. There is likely some element of scale economies at both levels. However, to measure scale economies, one really needs to control for overall quality of educational outcomes. One could argue on this point that quality is controlled

for by the goals established for the PJP exercises. While this argument may hold for schools, to some degree, it does not necessarily hold for the spending on district-level functions since they were derived based on actual spending levels. But even at the school level, it would be difficult to argue that the work of the PJPs fully controls for “quality” of services.

Moreover, the issue of choice must be considered as part of the analysis. Small rural school districts in remote regions of the state may be operating very small schools and incurring diseconomies associated with small scale out of necessity. School consolidation may simply not a viable option. However, due to the nature of the exercises provided to the original PJPs, the diseconomies of very small schools may not be fully reflected in the data shown in Exhibit 4-8.

However, in most districts, school size is more of a choice in the long run. School districts make decisions about the size of the schools they operate at each level. These decisions may have implications for the quality of the school environment and, ultimately, implications for student achievement, participation in extra curricular activities, and safety.⁸⁶ Indeed, discussions with some officials from New York City during the course of this project suggest that the district is moving toward policies to reduce school size.

While there has been some research on school size, there is nothing definitive on what optimal school sizes are at each level. As a result, the costs of adequacy shown in this report are based on average school sizes.⁸⁷ What this does is remove the impact of variations in school size from the adequacy cost estimates and leaves only the scale effects based on the overhead costs used to account for central district administrative functions. The resulting cost estimates provide greater resources to districts operating larger than average size schools than they would otherwise need, and it provides fewer resources to districts operating smaller than average size schools.

Exhibit 4-9 compares the Stage 3 model with the lump-sum/ratio approach to estimating district-level costs with actual school enrollment levels to the same model using mean

⁸⁶ Several studies assert that the optimum size for elementary schools is 300-600 and for secondary schools is 600-900 (Andrews, Duncombe & Yinger, 2002; Lee & Smith, 1997; Raywid, 1997/1998). School size differences may be achieved through introduction of new school sites and separate school buildings, or it may mean creating several independent “schools” within existing buildings, each with a separate student body, separate principal, etc. (Murphy, Beck, Crawford, Hodges & McGaughy, 2001). For secondary schools, research also finds that curriculum offerings should emphasize a large core of academic classes for all students (Bryk, Lee & Holland, 1993; Lee, Smith & Croninger, 1997; Newman, 1997).

⁸⁷ Average school sizes for elementary, middle, and high schools were 558, 792, 943, respectively. This simulation also uses the model that incorporates the combined lump-sum/ratio approach to estimating district administrative and maintenance costs. The appendix presents the same simulation using only the lump-sum approach for estimating the cost of these district level functions. As the reader will see, there is virtually no difference in the patterns.

enrollment levels for the each school.⁸⁸ That is, Exhibits 4-8 and 4-9 are based on identical simulations with the exception of one aspect: 4-7 is based on actual school enrollments (within the limits of the school sizes from the PJP exercises), while 4-9 is based on mean school enrollments by level.

Exhibit 4-9 - Relative Scale and Need Indices and Implicit GCEI by Need to Resource Capacity Category Based on Model Using Mean School Enrollment

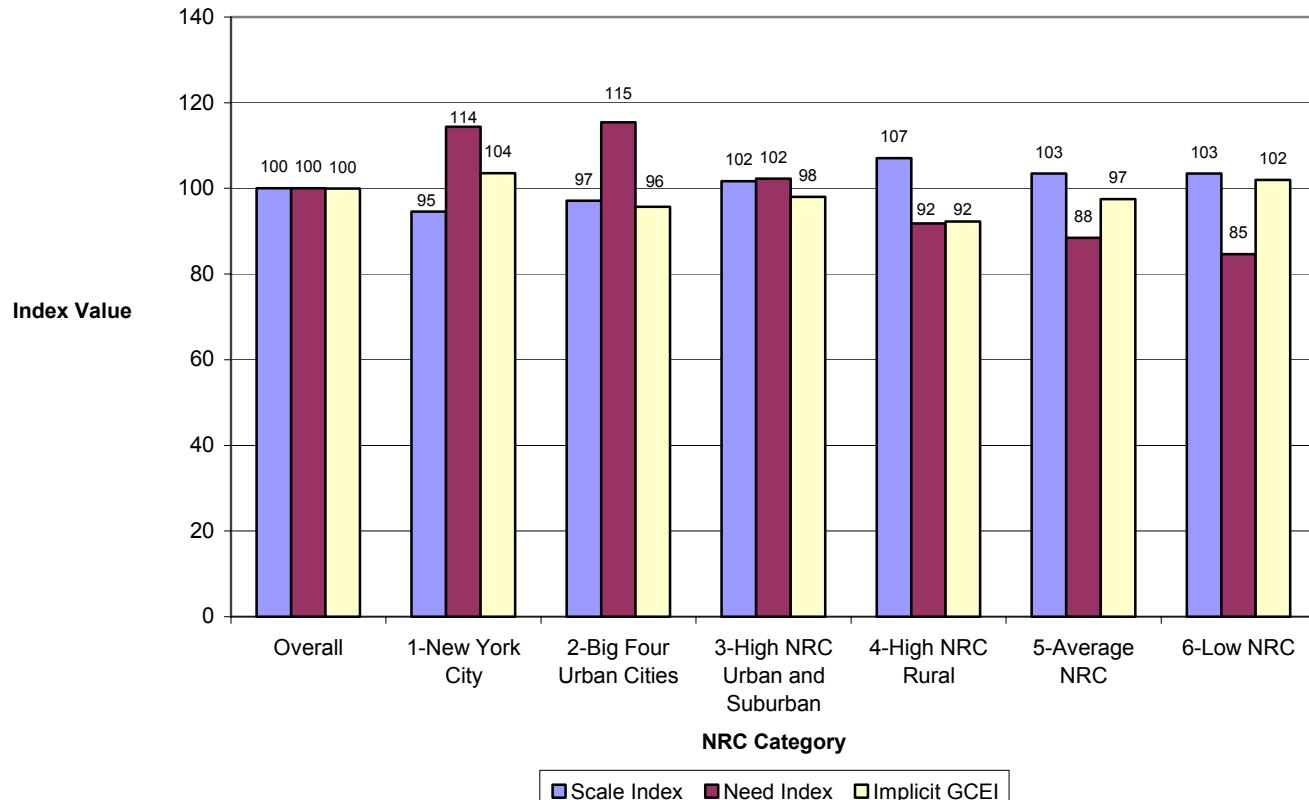


Exhibit reads: It costs approximately 4 percent more to hire a qualified teacher in New York City relative to a comparable teacher that instructs the average student in the state. Pupil needs in New York City are 14 percent higher than the statewide pupil-weighted average.

One can see that the scale indices tend to even out across the NRCs suggesting that at least some of the scale effects in 4-8 are attributable to the lower costs projected for operating schools with adequate resources. The differences in the need indices between the two exhibits are negligible. For example, New York City exhibits no change in the

⁸⁸ AIR/MAP established limits on the range of school enrollments for the purposes of the simulation. Schools with enrollment levels within the original range of the Stage 1 exercises were assigned the corresponding projected expenditure levels, while schools with enrollment levels outside the lower and upper limits of this range were constrained to be at the minimum or maximum enrollment levels, respectively. In other words, an elementary school with an enrollment of less than 414 students, which was the minimum enrollment level specified in the original PJP exercises, was assigned the projected cost for a school of 414 students. Similarly, an elementary school with an enrollment greater than 774 (the maximum elementary school size specified in the PJP exercises) was assigned a projected cost corresponding to the 774 cost estimate. Elementary schools with enrollment between 414 and 774 were assigned cost projections based on their actual enrollments. The middle and high schools were treated in the same way, but using the appropriate enrollment ranges for these grade levels.

relative need index between exhibit 4-8 and 4-9, while the next largest four urban districts move from 116 to 115.

Exhibit 4-10 - Relative Scale and Need Indices and Implicit GCEI by Enrollment Category Based on Model Using Actual School Enrollment

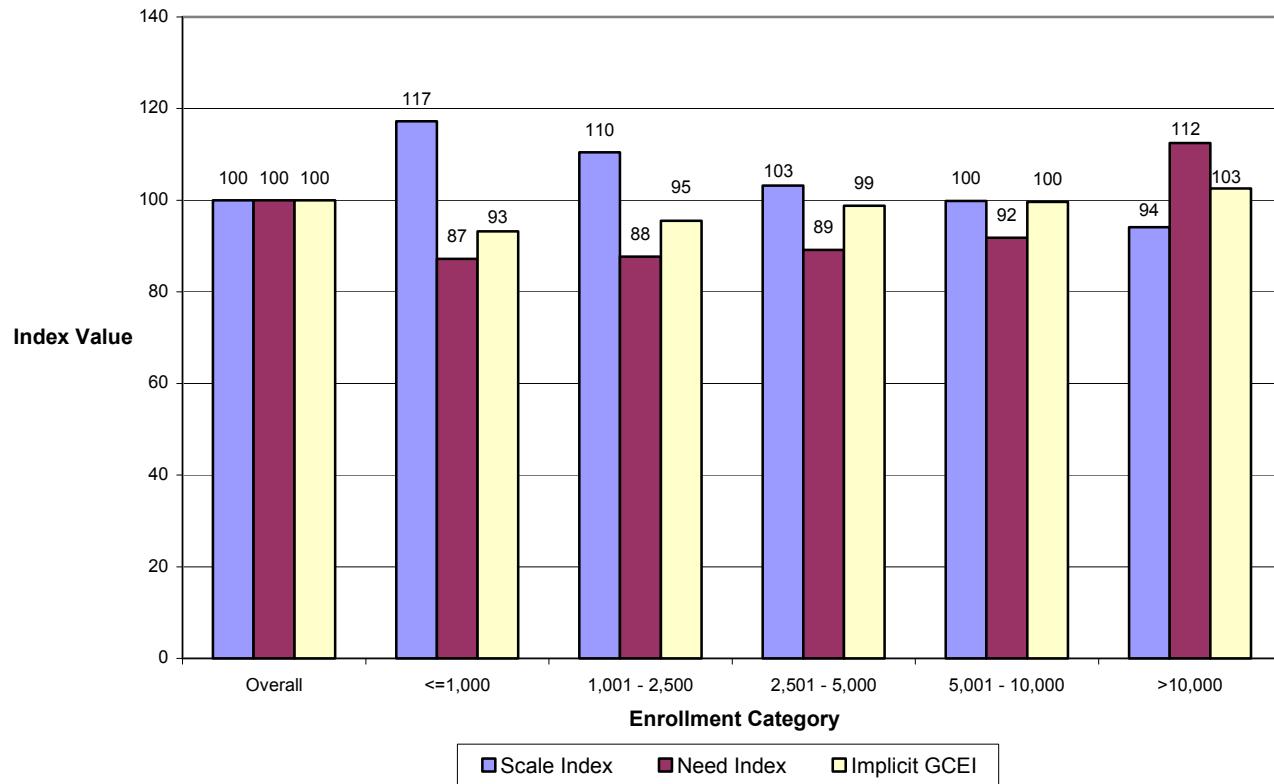


Exhibit reads: It costs approximately 7 percent less to hire a qualified teacher in districts with less than 1,000 students relative to a comparable teacher that instructs the average student in the state. Scale effects in these small districts are 17 percent higher than the statewide pupil-weighted average.

Exhibit 4-10 offers another way of looking at the same collection of indices displayed in Exhibit 4-8. It arrays the pupil-weighted average index values from the smallest to largest categories of districts in New York State. The smallest districts (i.e., those under 1,000 enrollment) have the highest relative costs associated with the scale of operations (117), while having the lowest relative pupil need (87) and geographic cost differences (93). The largest districts (i.e., with enrollments larger than 10,000) have the lowest relative costs associated with the scale of operations (94), while having the highest relative pupil need (112) and geographic cost differences (103).

The total projected expenditure for the state tends to be higher using the simulation that applies the mean as opposed to the actual school size. One can see (in Exhibit 4-11) that using the mean enrollment levels increases the total estimated costs of adequacy over the model using actual enrollments by \$0.15 billion. It increases the cost estimates for New York City by eliminating the lower cost estimates associated with the larger schools in the city. In contrast, it reduces to some degree the cost estimates for the districts in the smaller rural communities.

Exhibit 4-11 - Total Expenditure Required to Bring All Districts to "Adequate" Spending Levels for Actual and Mean Enrollment Simulation Models by Need to Resource Capacity Category

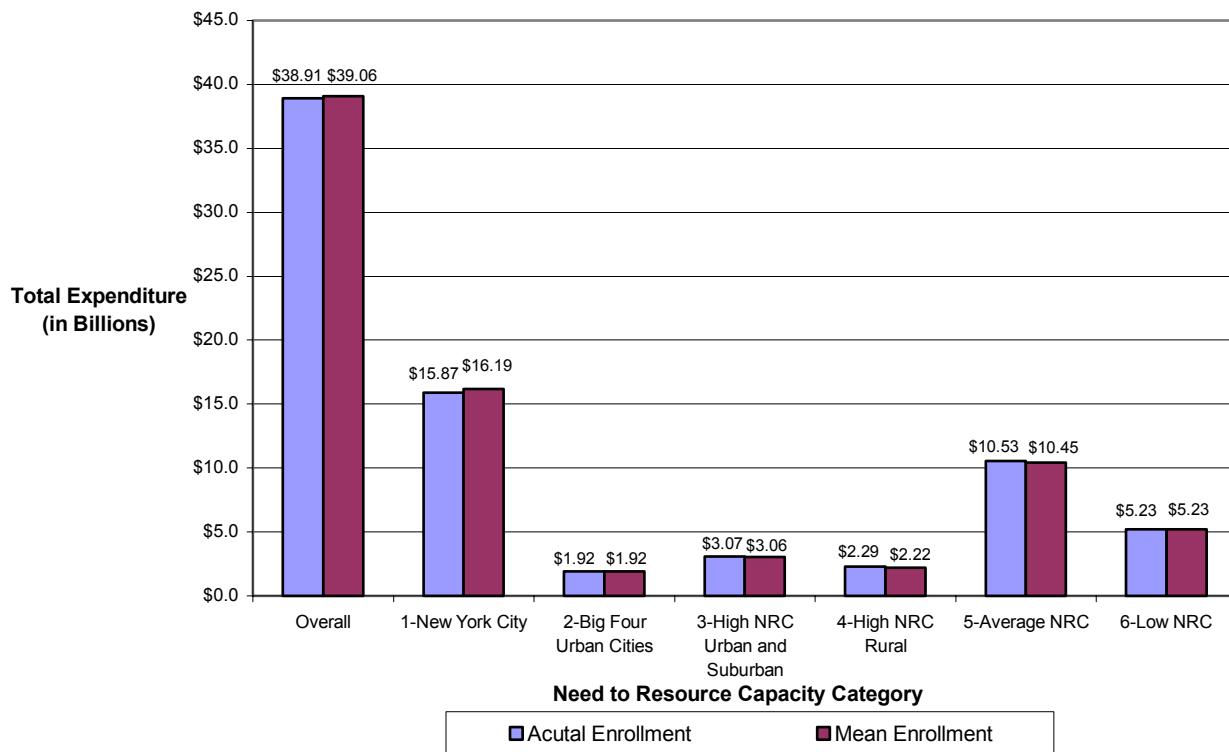


Exhibit reads: Using the Stage 3 resource specifications with lump-sum district-level expenditures and actual enrollment the total projected expenditure necessary to achieve adequacy is \$38.91 billion. Assuming that all schools face scale effects identical to those with mean enrollment, the total projected expenditure increases to \$39.06 billion.

The key question that one has to address in deciding how to use these models is to determine what is an optimal school size. If it is believed that school size adversely affects student outcomes, then it may be necessary to use some combination of the alternative simulation models presented in this report to provide an appropriate representation of pupil needs and scale of school and district operations.

Adjustments in the Numbers Over Time

As indicated previously, all of the above estimates are based on data for the 2001-02 school year. Use of the predicted need index in future years would require adjusting the base expenditure figure (BASE_EXP) for each district by a statewide index to reflect the appropriately reflect inflation. The need and implicit geographic cost indices are not likely to change dramatically over time. The current numbers used to estimate geographic costs for this study use four years of data, with the correlations from one year to the next being well above 0.9. Moreover, previous research on this topic has shown remarkable stability in these indices over time (see, for example, Chambers, 1981, 1997b, and Taylor, Chambers, and Robinson, forthcoming).

For the most part, the need/scale index reflects variations in district size, the percentage of students in poverty, ELL and special education. Major changes from one year to the next in these characteristics are unusual. Moreover, the need/scale index as calculated in this study is not a precise calculation. Rather, it is intended to reflect major differences across districts in the relative needs of the students served and the effects of district size.

With this in mind, one could consider simply using the predicted need/scale index itself as a constant for the immediate future. That is, one could simply assign a value of the need/scale index to each district and retain that value for a period of three to five years. Changes in allocations to the district over time would be impacted only by inflation and a measure of inflation would be applied to the base expenditure level.

Every three to five years, the adequacy study should be updated with new need index numbers. Subsequent studies could include updated analyses of teacher costs and meetings of a select group of educators to review the standards and resource specifications upon which the current estimates are built.

An advantage to using the need/scale index rather than a pupil-weighted system is that it is simpler in concept and reduces the incentives for districts to increase enrollments of selected populations (e.g., special education or ELL) in order to increase funding. Moreover, marginal changes in these categories of students are not likely to have a significant impact on the actual costs of serving the students.

Summary

This chapter has presented an overview of the results of this study and an examination of the disaggregated components of the cost projections: geographic cost variations, pupil need, and scale of operations. Alternative estimates of the investment required to achieve educational adequacy were presented based on the PJP specifications derived from Stages 1, 2, and 3 of the process, which correspond to the various meetings of the professional judgment panels. In addition, AIR/MAP presented an estimate that used Stage 3 specifications in combination with an alternative method for estimating the expenditure on district-level functions. This alternative method reflected the likelihood that spending on some district-level functions would grow in proportion to projected changes in spending on instructional programs. However, there are no data at present showing how much these central administrative and maintenance expenditures are likely to change. Therefore, the alternative projection produced by the Modified Stage 3 simulation probably represents an upper bound expenditure estimate.

The projected additional dollars necessary to realize “adequate” spending throughout the state range from \$6.21 to \$8.40 billion. These figures represent the additional investment to bring all districts that, in 2001-02, were spending less than projected levels up to a spending level that would achieve adequacy. While the absolute values of the overall investment vary under different assumptions or at different stages, the patterns of variation across the state as reflected by the distribution of projected versus actual spending do not vary significantly.

Preschool programs, including pre-kindergarten and early childhood education programs, play a significant role in the additional expenditures required to achieve adequacy, amounting to more than one billion dollars.

Scale of district operations and pupil need also play roles in accounting for variations in the bottom-line expenditures required to achieve adequacy. Analysis of the variations in the patterns of scale and need revealed that the five large urban districts tended to exhibit relatively high projected expenditures based on pupil needs and geographic cost differences, and relatively lower projected expenditures associated with scale of operations, all else equal.

Chapter 5 – Conclusion

This chapter offers reflections resulting from fifteen months of wrestling with defining issues and affixing dollars to dimensions of educational adequacy. AIR/MAP has organized a cadre of more than 50 highly qualified educators to develop the design and resource specifications necessary to deliver an “adequate” program of educational services. In this context, “adequacy” was defined in terms of a set of desired outcome goals and learning standards for the public school students in New York State. The process involved a series of meetings with ten professional judgment panels with follow-up meetings of a subset of the original panel members to review the AIR/MAP synthesis of the specifications. The details of the professional judgment process and the results of their deliberations are presented in Chapter 2 of this report.

During the course of this process, AIR/MAP introduced a review of the educational research and analyses of “successful schools,” and the geographic variations in the costs of school personnel. Chapter 3 presents the detailed analysis of the costs of school personnel and the resulting geographic cost of education index.

For the sake of transparency, this report has presented “adequacy” cost estimates at the various stages of the process so individuals reviewing this work would be able to track each component and what was changed over the course of the analysis. The additional dollars required to bring those districts currently spending below “adequate” levels up to “adequacy” required anywhere from \$6.21 to \$8.40 billion depending on the stage in the process and assumptions made pertaining to district-level expenditures. Each of these cost estimates is presented and compared in Chapter 4.

The remainder of this chapter focuses on four areas: (1) a discussion of some implementation issues, (2) additional research that would further refine these cost estimates of “adequate” educational services, (3) suggestions for using these data as a basis for education finance distribution formulas, (4) comments regarding the role of analysis in relation to the ultimate responsibility of policymakers, and (5) a concluding set of caveats.

Implementation Issues

Implementation of the “adequacy” models presented in this report implies a significant expansion of the instructional program for both school-aged as well as preschool children. In addition to bolstered K-12 programs, the “adequacy” cost model includes preschool programs for 3 and 4 year olds. While there are a number of programs already in existence within the state, the model projects a significant increase in the number of participating children. In many districts, full implementation of the model will require hiring more school personnel. As a surplus of all these categories of needed personnel is unlikely, successful implementation will require significant planning. For example, more university students will need to be encouraged to become teachers, and the teacher training capacity of the state will need to be enhanced. In the short run, increased salaries

may be needed to attract those already holding credentials but working elsewhere back into the teaching profession and to reduce turnover among those already employed as teachers. In addition, additional funding will be needed for facilities, which are not currently accounted for in the AIR/MAP projections.

The state needs to work in concert with local school district decision makers to make this process as smooth as possible. New York does not want to replicate the California experience with the Class Size Reduction Program (see Bohrnstedt and Stecher, 2002). School districts were not able to recruit and employ enough qualified teachers in the short period of time they were given. In turn, the quality of teachers suffered and the program failed to deliver hoped for improvements in student outcomes.

At the same time, the additional education resources included in these “adequacy” models may make education a more attractive field in which to work. More resources will mean more professional development, better instructional materials, and smaller class sizes. If hiring is done in a deliberate way and teachers are assigned to positions for which they are certified, the resulting jobs will be more attractive making it easier to attract and retain teachers. The results of the present study of teacher labor markets, as described in Chapter 3, support this conclusion.

Remaining Research

Central administration and facility maintenance account for approximately 20 percent of total current spending in New York schools.⁸⁹ While it is possible to make informed estimates of these costs, they remain unverified, partially undermining the precision of any estimate of “adequacy.”

School and Central Office Administrative Costs

While the direct costs of educational programs specified through the PJP process can be derived with reasonable accuracy, consideration of their impact on central administrative services was not included in this study. For example, at what juncture does the addition of new school buildings or an increase in the size of instructional staff at existing schools create a burden necessitating additional central office staff?

Maintenance and Operations

Maintenance typically accounts for 10 to 15 percent of a school or district budget. When projected for a state the size of New York, the amount of money involved is in the billions. This is another area of inquiry requiring further investigation within an adequacy framework.

⁸⁹ Additional expenditures are allocated to transportation services and debt service for facilities acquisition and construction, but these items were excluded from the analysis in this report. Total spending less transportation and debt service is referred to as total current expenditure.

Summary

AIR/MAP has had to rely on assumptions regarding the impact of central administration and maintenance on the cost of adequacy for the state. In the future, both areas could benefit from further research and the development of more detailed bases for deriving adequacy expenditure estimates.

Converting “Costs” of Adequacy to Funding Formulas

The purpose of this study was to determine cost estimates of “adequate” education services for the state. It does not attempt to determine sources of revenues to meet these costs, or formulas by which those revenues should be distributed. However, further consideration of this question may benefit by distinguishing between pupil and district characteristics.

Pupil Characteristics

The professional judgment process used for this study delineated several “at risk” conditions that seem reasonably associated with a need for added resources. These included poverty, special education, and English language learners. Measures of the percentage of students in these conditions seem reasonable components of a distribution formula.

School and District Characteristics

Funding formulas also generally recognize conditions with cost implications that are beyond the immediate control of school districts. Among these are distances involved in transporting students, the necessity for operating small schools, and regional differences in purchasing goods and services related to schooling.

Indices of Pupil Needs and Scale of Operations

Chapter 4 illustrates methods for developing indices of differences in costs associated with pupil need and the scale of district operations. As an alternative to developing individual weights for various categories of pupils, AIR/MAP suggested that policy makers might consider simply employing the overall indices or the bottom line expenditure estimates to provide a foundation for a distribution formula. Using this type of approach as the basis for a “foundation” school funding formula requires calculation of the implicit geographic cost of education index, an index of pupil needs, an index of scale, and a basic per pupil dollar amount necessary to purchase the designated resources. This use of an overall set of indices reduces incentives for districts to identify more pupils at the margin for special education or English language learner services. These kind of need-scale indices could be applied for some period of time, say three to five years, after which a new study could be commissioned to update the “adequacy” specifications and to review the factors underlying the foundation formula. In the interim, the only adjustments necessary to fund education annually would be an

appropriate estimate of inflation to be applied to the basic per pupil dollar amount necessary to achieve “adequacy.”

In the process of dividing the overall adequacy cost estimates into the pupil need and scale components, some interesting patterns were revealed. The initial adequacy cost estimates developed by AIR/MAP used actual school enrollments to apply the school program prototypes developed by the PJP. As an alternative to using actual school enrollments, AIR/MAP ran another simulation that was based on an assumption of operating all schools at the state mean size for each school type. This analysis suggested a slightly higher total cost of achieving adequacy and resulted in another \$0.15 billion being added to the original estimates.

While, in reality, nobody expects all schools to be operated at the same size, there is a body of research suggesting that school size may be an important dimension of school success. With this in mind, New York State may or may not choose to build incentives into the foundation formula that would encourage districts currently operating relatively large schools to move toward operating smaller schools and vice versa for districts currently operating very small schools. What may be necessary is some kind of hybrid that reflects the reality that small school sizes may not be a choice, but a necessity, in some small remote rural districts in the state.

“Costing Out” Analytic and Policy Roles

Results presented in this report are in the form of a range of dollar figures, each based upon a specific set of procedures or assumptions. The report has concentrated on providing information regarding the analytic components of each “adequacy” determination. If policy makers in the state are dissatisfied with an assumption, then they can substitute others and determine the resulting costs. This striving for transparency is a crucial component of a “costing out” process.

“Costing out” adequate opportunity is not an exact science, but rather an ongoing process of estimation. To be sure, sophisticated analytic tools can be brought to bear upon the process, but the estimation of the costs of an “adequate” opportunity is more of a quest than an end point. Thus, it is inappropriate for courts or policy makers to seize upon any particular estimate as the only one that is worthy of being “adequate.” Instead, those who formulate policies should use discretion and take into account the range of estimates and the underlying assumptions upon which they are based before deciding on what policy action might be best.

Concluding Recommendations

Scale of operations and the distribution of special student needs (poverty, ELL, and special education) are the two major factors underlying the cost variations shown in this study. Policy makers should consider the relative weights they choose to place on each of these factors. Due to the highly integrated fashion by which each of them was treated

within the model, however, they may be best suited to block grant, as opposed to categorical, funding approaches. For example, categorical funding mechanisms such as special education funding weights will not be easily derived from this approach.

Also, although the Professional Judgment Panels derived instructional designs by which schools could construct an adequate opportunity to meet the Regents Learning Standards, this theoretical design does not include, or recommend, that the specific components of these models become mandates for local practice. However insightful the instructional designs created by Professional Judgment Panels or persuasive the case for their effectiveness, education continues to be more of an art than a science. Harnessing creativity and commitment, and taking advantage of the experience of local educators, necessitates providing them with discretion to determine exactly how funds should be used.

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The New York Adequacy Study:

“Determining the Cost of Providing All Children in New York an Adequate Education”

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**PUBLIC ENGAGEMENT FORUM: ADEQUATE
FUNDING FOR NEW YORK'S SCHOOLS**

**COMMUNITIES SPEAK OUT ON WHAT STUDENTS REALLY
NEED TO SUCCEED**

A WORKING DRAFT

MAY 16, 2003

NEW YORK COUNCIL ON COSTING OUT

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**PUBLIC ENGAGEMENT FORUM – ADEQUATE FUNDING FOR NEW YORK’S
SCHOOLS:
COMMUNITIES SPEAK OUT ON WHAT STUDENTS REALLY NEED TO SUCCEED
A WORKING DRAFT
MAY 16, 2003**

Introduction

This spring, hundreds of citizens from dozens of communities around New York State came together to lend their ideas on a critical topic: what New York’s public schools need to succeed. At thirteen public forums statewide, parents, teachers, administrators, school board members, and other community members addressed the now-crucial question: What do schools really need in order to offer all their students the opportunity to meet the Regents Learning Standards and to ensure that all groups of students are making adequate progress toward the goals now set by the federal No Child Left Behind Act?

Their answers are instructive and, at the same time, disturbing. With a great deal of consensus, participants articulate the programs and practices required to ensure that high-needs as well as average-needs students have the opportunity to meet standards. To reach this goal, they stress that it is essential that schools be able to ensure early childhood education, parent involvement, small class size, programs that provide more time on task for at-risk students, and relevant, ongoing professional development for teachers. However, they suggest that, in many communities around the state, schools are not able to meet the education requirements of their students, particularly the most needy and most vulnerable children. In these communities, in spite of state and federal legal requirements, many students must go without the programs and services they need and, as a result, never receive a fair opportunity to meet the Regents Learning Standards.

The findings and conclusions in this report represent a synthesis of the input gathered in the forums, “Adequate Funding for New York’s Schools: A Community Conversation on What Students Really Need to Succeed,” which were sponsored by the Campaign for Fiscal Equity (CFE), the New York State School Boards Association (NYSSBA), and the 30 other member organizations of the New York Council on Costing Out (CCO). The forums were undertaken as the first phase of an independent research project to assess the true costs of an adequate education in each school district in New York State.

This report also describes the history and context for New York’s costing-out study, some background on the concept of costing out, and details about the methodology being used in the present study. The present report is a draft presented for feedback from representatives from each of the forums and representatives of the CCO who will gather at a meeting in Albany on May 16th. A final report, prepared considering the input gathered at that time, will be presented to the costing-out research team and will provide important foundation for the next phases of the study.

The “costing-out” study and its associated public engagement series are an important step toward the goal of reforming New York State’s education finance system to ensure fair and adequate funding for all school districts around the state. The New York Council on Costing Out thanks all those who participated in the forums for their time and their thoughts.

What Is Costing Out?

In his landmark 2001 decision in the case of *Campaign for Fiscal Equity, Inc. (CFE) v. the State of New York*, New York State Supreme Court Justice Leland DeGrasse held that the core problem with our state education funding is that “the State’s school funding mechanism has failed for more than a decade to align funding with need and thus failed to provide a sound basic education . . . ” (emphasis added). Despite its 40-some-odd formulas, the state’s current system for allocating state education aid has no means for analyzing the actual costs or needs of students in any given school district. It has been unable to match funding with need, with the result that hundreds of thousands of students around the state are denied their constitutional right to a fair opportunity for a sound basic education.

To remedy this injustice, Justice DeGrasse ordered a number of reforms. As a first, “threshold task,” he charged the state with assessing “the actual costs of providing a sound basic education in districts around the State.” In June 2002, an intermediate appeals court, the Appellate Division, First Department, reversed Justice DeGrasse’s decision. Plaintiffs appealed that ruling to the Court of Appeals, New York’s highest court, which is likely to render a final decision in the case early in the summer of 2003. However, while the appeals process has been pursued, Justice DeGrasse’s order for a costing-out study has been put on hold, and the state has not begun this fundamental task, which is the basis for all further school-funding reform in New York.

The urgent need for this costing-out study has, nevertheless, been well established. In its brief to the Court of Appeals, the state’s highest court, CFE asks the court to mandate a costing-out study, as does the New York State School Boards Association (NYSSBA) in its amicus brief in the case. Bills calling for such a study have been introduced in the legislature. There has also been widespread support for the concept in the press. As the Westchester Journal News writes, “such logical analysis has been sorely missing in a state whose school funding is distributed through a Byzantine formula manipulated by political deal-making.”

Consequently, 32 organizations from throughout the state came together to initiate a one-year, cutting-edge costing-out study—supported by grants from several major national foundations—that will determine the actual amount of funding needed in each school district to provide an adequate education to all students throughout the state. The governor and legislative leaders have expressed interest in the results of the study. So, whatever the final outcome in the Court, the importance of the costing out study to provide a resource base that will ensure that all school districts have the funds they need to allow all their students a reasonable opportunity to meet the Regents Learning Standards has become widely recognized throughout the state.

Costing Out: A New York Adequacy Study is being led by an independent panel of national experts who have successfully undertaken large-scale costing-out studies in Wyoming, Maryland, Illinois, and a number of other states. Heading the panel is Jay Chambers, President of the American Education Finance Association and Senior Research Fellow at the American Institutes for Research (AIR). AIR and Management Analysis & Planning, Inc., (MAP), the joint contractors for this study, have also recruited other education finance experts from New York

and throughout the country—including expert witnesses who testified for both the plaintiffs and the defendants at the CFE trial.

This independent, unbiased study will determine the level of funding each district needs for its operations, by first, identifying the specific resources and conditions necessary for students to meet state standards and then systematically calculating the amounts needed to fund each of those prerequisites. The study's findings will be presented to the governor and the state legislature in 2004.

An important part of the costing-out process involved gathering input from local communities around the state through public forums, the results of which are synthesized in this report. These community conversations, open to the general public, took place around the state from March to May 2003. Through these forums, the citizens of New York contributed their knowledge, experience, and expertise on the specific challenges for their schools in their communities in providing a decent education to all students and in meeting the new state and federal requirements. Participants also spoke out on the programs and practices that best served high-needs students. The addition of this invaluable information from people with firsthand knowledge of the state's diverse schools will make New York's costing-out study the most ambitious and most comprehensive costs analysis undertaken to date.

How Is Costing Out Done?

A costing-out study determines the actual amount of money needed to provide every child a reasonable opportunity to meet state education standards by, first, identifying the specific resources and conditions necessary and, then, systematically calculating the amounts necessary to fund each of these prerequisites.* In recent years, many states have undertaken costing-out studies, including Alaska, Illinois, Maryland, Ohio, Oregon, Kentucky, Kansas, Montana, New Hampshire, and Wyoming—in some cases as part of the development of a new funding system ordered by a state court.

Although a variety of methodologies have been devised in the states that have already performed cost-based funding studies, these approaches tend to fall into two main categories: “successful schools” and “professional judgment.” The successful schools approach identifies school districts that have actually achieved a specified level of student performance, such as meeting state standards. The average level of expenditures in these districts is then used to estimate the level of expenditure that would be required to achieve a similar level of student performance in other districts across the state. Typically, differences in cost of living and in the numbers of students who are low-income, disabled, or English language learners are also taken into account in these calculations.

The professional judgment approach accepts as its premise that the determination of an adequate cost basis involves a large number of judgments; it seeks to establish a process to review the

* Though the adequacy of facilities can have a significant impact on schools' ability to provide all students with a reasonable opportunity to meet Regents Learning Standards, facilities costs are not within the scope of the present study. They may be handled in a future study.

range of judgmental factors involved and ensure that those judgments are made openly, fairly, and independently. Usually this is done by assembling panels of educators to identify the specific instructional components deemed necessary to meet state standards and then having economists determine the price of each of the identified components.

The New York Adequacy Study

Purpose

The New York Adequacy Study, perhaps the most comprehensive costing-out study undertaken to date, will estimate the cost of an adequate education for all public school students in New York State. The study is the first to tackle the costs of education for a large industrial state; it is also the first to attempt a thorough reckoning of the costs of educating at-risk, special education, and limited-English-proficient students. The outcome of the study will be an estimate of the expenditure required to provide students within each district the opportunity to meet the Regents Learning Standards and graduate from high school. A final report containing figures for each district will be presented to the governor and the state legislature.

Methods

This yearlong study has four major components: public engagement forums, a “successful schools” analysis, professional judgment panels, and a cost analysis.

Public Engagement Meetings. The AIR/MAP research team, CFE, NYSSBA, and the other members of the New York Council on Costing Out worked together to develop, organize, and run a statewide public engagement campaign designed to gather broad public input for the costing-out study. The series of thirteen public engagement forums provided the opportunity for teachers, administrators, school board members, parents, business leaders, policy makers, and other members of the community to share their knowledge, experience, and experience about the unique challenges facing New York's geographically and demographically diverse school districts in getting students to meet the Regents Learning Standards and the requirements of the federal No Child Left Behind Act. CFE and NYSSBA collected the notes from these forums and have synthesized them in the present draft report. The final version of this report will be passed onto the research team. The research team will include the public engagement input in the information they provide to the professional judgment panels (see below).

Successful Schools Analysis. The AIR/MAP team will use statistical methods to identify schools in New York State with extraordinary records of success in serving different student populations across the range of school poverty levels. Staffing distributions and instructional practices will be examined to identify factors that may contribute to high achievement.

Professional Judgment Panels (PJP). These panels represent the core of the approach to defining adequacy of school resources. Groups of highly qualified educators will convene to determine the resources necessary to deliver specified outcomes under carefully structured conditions. Using information gathered from the public engagement forums, the successful schools analysis, and a literature review of effective practices, the AIR/MAP team will supply the PJP with assumptions regarding desired student outcomes, student demographics, and other context variables. The PJP will be asked to work together to develop instructional programs and to specify the nature and quantity of resources they believe are necessary to implement these programs.

Cost Analysis: The AIR/MAP team will then estimate the total costs of the instructional programs recommended by the panels. Cost estimates will be based on enrollment data from the New York State Education Department (NYSED) and findings of three supporting studies:

- Examination of the geographic variations in the cost of comparable resources in different districts,
- Analysis of the competitiveness of teacher labor markets and the issues surrounding current levels of teacher compensation, and
- Analysis of the NYSED fiscal data to estimate current expenditures on district administration, home-to-school transportation, and capital facilities for each district.

Independent, Unbiased Research

The costing-out study is being conducted and managed by the AIR/MAP research team, whose members are listed below. CFE and NYSSBA helped organize the project. Together with the other education, civic, and business groups that make up the New York Council on Costing Out, CFE and NYSSBA organized the public engagement forums. The final report, and the judgments and recommendations it contains, will be based on the independent judgment of the research team, informed by the recommendations of the panels, the expert advisers, and public input through the various public engagement processes. The recommendations will not be governed by the litigation or policy positions of CFE, NYSSBA, or any of the other participating groups or individuals.

The Costing-Out Research Team

The study is a collaboration between the American Institutes for Research (AIR) and Management Analysis & Planning (MAP), Inc. The research team is headed the following four researchers who will pool their collective knowledge and experience to ensure a successful, well-designed, and well-executed collaboration.

Dr. Jay G. Chambers, who is a Senior Research Fellow and Director of the Business Development Committee in Economic Indicators and Education Finance at AIR, is a Co-Project Director. Dr. Chambers is a nationally recognized scholar in the economics of education and school finance. He has conducted numerous large-scale studies focused on the estimation of educational cost differences across public schools in the U.S. Dr. Chambers has also directed a number of large-scale studies on resource allocation in Title I and special education programs for the U.S. Department of Education. Dr. Chambers is the past president of the American Education Finance Association and is serving on President Bush's Commission on Excellence in Special Education.

Dr. James R. Smith, President and Chief Executive Officer of MAP, holds an MBA and Ph.D. Dr. Smith is a Co-Project Director. He has been a public school teacher and high-level executive in both public and private sectors. He has served as Deputy Superintendent of the California Department of Education and Senior Vice President of the National Board of Professional Teaching Standards. Dr. Smith specializes in school finance, governance, organizational dynamics, teacher and student assessment, and curriculum and instructional policy. He has directed MAP projects for state agencies and school districts in 15 states and has served as an expert witness and provided litigation support in school finance cases in Arkansas, Colorado, Minnesota, New York and Wyoming.

Dr. Thomas B. Parrish, the Deputy Director of the Education Program at AIR, is a Principal Task Leader for this project. As a researcher, Dr. Parrish's major area of expertise is fiscal policy in public education, with an emphasis on special education. He has directed and participated in numerous cost analysis, education policy, and evaluation projects for federal, state, and local agencies over the past 25 years. He also directs the Center for Special Education Finance (CSEF), which is funded by the U.S. Department of Education, at AIR. In addition, he has directed numerous projects in the areas of education reform, evaluation, cost analysis, and finance. In addition, Drs. Parrish and Chambers have jointly published a number of papers on the application and use of professional judgment and cost analyses to address questions of education adequacy.

Dr. James W. Guthrie, who founded MAP in 1985, is also a Principal Task Leader for this project. He has been a public school teacher, state education department official, federal government cabinet special assistant, education specialist for the United States Senate, and an elected local school board member. He has been a professor for the past 27 years and is the founding director of the Peabody Center for Education Policy at Vanderbilt University. He has published ten books, hundreds of professional and scholarly articles, and has garnered numerous

academic distinctions. He specializes in school finance, education administration and leadership, policy analysis, and education and government. Dr. Guthrie has personally served as a consultant to the governments of Armenia, Chile, Hong Kong, Pakistan, Romania, and South Africa, as well as international organizations such as AID, The World Bank, OECD, and OAS.

The Members of the New York State Council on Costing Out

The New York Council on Costing Out (CCO) provides advice to the expert panel that will be determining the cost of providing a sound basic education to all students in New York. The CCO also organizes public engagement forums throughout the state to promote input from parents, teachers, business leaders, taxpayers and other citizens in the costing-out process. CCO members need not agree with the final report of the expert panel or with any positions that have been or will be taken by CFE or NYSSBA. The member organizations of the CCO are:

- | | |
|--|--|
| Advocates for Children of New York, Inc. | New Visions for Public Schools |
| Alliance for Quality Education | New York Immigration Coalition |
| Americans for Democratic Action - NYC | New York State Association of School Business Officials |
| ASPIRA of New York, Inc. | New York State Association of Small City School Districts |
| Business Council of New York State | New York State Council of School Superintendents |
| Campaign for Fiscal Equity, Inc. | New York State Parent Teacher Association |
| Citizen Action of New York | New York State School Boards Association |
| Class Size Matters Campaign | New York State United Teachers |
| Coalition of Asian American Children & Families | NYU Institute for Education & Social Policy |
| Education Fund for Greater Buffalo | P.E.N.C.I.L. |
| Fiscal Policy Institute | R.E.F.I.T. |
| Goddard Riverside Community Center | Resources for Children with Special Needs, Inc. |
| Healthy Schools Network | Rural Schools Program |
| Hispanic Federation of New York | Statewide Youth Advocates |
| League of Women Voters of New York State | Schuyler Center for Analysis and Advocacy |
| Midstate School Finance Consortium, National Center for Schools and Communities | Teachers Network |
| National Education Association of NY | United Parents Associations of New York |

The Public Engagement Forums

Purpose

The public engagement forums contribute importantly to making the New York Adequacy Study a comprehensive analysis of the costs of providing New York's students the opportunity to meet Regents Learning Standards. While the study makes great use of state and national education and finance experts, it recognizes that experts do not corner the market on knowledge and expertise about the schools. Important local information needs to be gathered from those with experience, knowledge, and interest in educational programs in New York State. In light of the challenge of undertaking a costing-out study for a large industrial state like New York, it was especially critical to create a way for parents, community members, school board members as well as educators to contribute their thoughts to the study and to capture both the demographic and geographic diversity of the state.

Public engagement also broadens and deepens the study in another significant way. To simplify their tasks, other costing-out studies have made certain assumptions about important matters of policy. These assumptions, in turn, affect the studies' outcomes. Through public engagement, the present study attempts to bring out into the open the many policy assumptions that have normally gone into costing-out studies and that need to be openly explored rather than taken for granted.

Finally, as has already been mentioned, this study is the first to take seriously the cost implications of the No Child Left Behind Act. Under this new federal law, schools must ensure that, by the 2013-14 school year, students are meeting Regents Learning Standards, and they must make adequate yearly progress toward that goal. Moreover, to ensure that schools work toward closing any existing achievement gaps, school test scores will be disaggregated so that the performance of subgroups of students can be scrutinized. Adequate yearly progress will be calculated not only for the performance of all students at a school on a particular measure, but also for separate subgroups of students. The disaggregated groups are the major racial/ethnic groups (Asian, black, Hispanic, Native American, and white), and economically disadvantaged, limited English proficient and special education students.

The practical effect of the NCLB Act for any study of education costs is that schools can no longer purport to be successful if they are educating most of their students, and "only" failing certain subgroups. Now, high-needs students cannot be left by the wayside but instead must be brought along academically with the other students. Therefore, in designing and costing out any educational program, our experts must make use of programs and practices that work for students at risk of or not meeting standards, English language learners, and special education students. In taking this seriously, our study is exploring uncharted territory. The public engagement input in these areas is useful information to start the thinking about costing out a concrete program for meeting the needs of these high needs students, for whose education—under current state and federal laws—the real cost implications can no longer be neglected.

Method

Public engagement forums took place in Greece/Rochester, Buffalo, Brooklyn, Lake Placid, Ellicottville, Horseheads, Valhalla, Queens, Farmingdale, Cicero, the Bronx, Manhattan, and Albany. The CCO chose sites that were well distributed around the state and accessible to people from rural, suburban, small city, and large urban school districts. To attract participants, CCO members did outreach to all stakeholders in the school community.

The forums themselves began with an opening plenary that introduced the costing out study and the evening's tasks. Participants then took part in small-group discussions, aided by a trained moderator and written materials that included a discussion guide and background book. All groups considered the same set of questions that centered on two topics: (1) the specific challenges for local schools in meeting federal requirements that all students meet Regents Learning Standards in twelve years and make adequate yearly progress toward that goal; and (2) the programs and practices that work for students at risk of or not meeting standards, including special education students and English language learners.

Findings and Recommendations

Areas of Consensus Found Statewide

A summary of the findings from the 13 community forums statewide is presented in Appendices A-D at the end of this report. What follows is a synthesis of these findings.

There was strong consensus among public engagement participants from around the state that if we take seriously the need to provide a real opportunity for *all* students to meet the Regents Learning Standards, then it is essential that schools be able to ensure the programs and practices meet the educational needs of students at risk of or not meeting standards. Participants statewide agreed that these included early childhood programs, parent involvement, small classes, and ongoing collaborative professional development.

Participants agreed nearly unanimously that early childhood education was essential, and the more the better. They recommended Head Start, full day pre-kindergarten and full day kindergarten.

Many thought it essential that schools adopt early childhood programs with parent education components, to ensure that parents learned the skills they needed to support their children's education both at home and in school. They also recommended that schools have many more means to foster parent involvement, for example, through outreach, structured in-school activities, extracurricular activities, and more effective school-home communication.

They said that small class sizes are critical for younger students and all students with special needs. Most groups recommended class sizes between 10 and 20 for the elementary grades, depending on the level of student need in the classroom. Most groups agreed that high school classes should not get much bigger than 25 students and should be smaller if there were a number of high-needs students in the class.

Finally, participants all around the state emphasized the importance of good instruction in meeting the needs of students who are currently not meeting standards. They recommended professional development to improve teachers' skills. Specifically, participants from around the state strongly supported the need for effective, ongoing training for both new and experienced teachers and administrators. They stressed that this training be relevant to the school's particular learning environment and focused on the instructional needs of the students. Many groups recommended mentoring by knowledgeable supervisors and other collaborative learning opportunities.

Statewide, groups also clearly said that programs and practices designed to provide extra time on task for low-performing students—especially small-group literacy programs to get children reading by the third grade—must be available to all students who need them, not just to those that districts can afford to support. There was a candid acknowledgement in nearly every community forum that many students are not getting the academic intervention services to which they are entitled by law. School districts simply cannot afford to provide them at adequate levels. As a result, districts are often forced to choose which students to serve. Some districts provide a

small amount of extra help to all needy students; others give services to those who need it most, while students who are not failing quite as badly receive nothing; still other districts provide services to students who are closest to passing statewide tests.

The great majority of forum groups indicated that the same held true for special education inclusion: despite legal requirements, many special education students are not getting the supports and services they need to succeed in inclusion setting, especially in urban and rural areas. Schools do not have sufficient or sufficiently qualified staff to ensure these students a fair opportunity for success. In addition to teacher qualification and staffing issues, participants also expressed great concern about the lack of training in special education for general education teachers and about the lack time for consultation between general education teachers and related service providers. Many classroom teachers, we learned, have no idea which of their students are receiving special education services, much less what those services are and how they could be supported in the classroom.

Furthermore, there was widespread consensus that, for academic success, it is essential for students to have adequate access to guidance counselors, social workers, and other sources of social and psychological support, particularly in middle and high school. Without the reliable support of these professionals, many students wrestle with serious problems that leave them unable to attend to their academic work.

Stability of funding for these necessary programs and practices is a great concern in many districts. Public engagement participants around the state explained that some districts are unwilling to initiate programs, like pre-kindergarten, even if state aid is available because of the likelihood that future budget cuts will put the funding responsibility back on the district.

Finally, and on a more optimistic note, many participants discussed the cost-savings aspect of providing all students with the programs and practices they need. They acknowledged that doing this right will be expensive—but they argued that it is perhaps not as expensive as it seems. Students currently require additional programs and services to compensate for previous and current deficiencies in their educational programs. With full services, this may not be necessary. So, for example, if students receive additional services in general education, they require fewer special education expenses. If they receive quality pre-kindergarten and early literacy programs, they have a smaller need for academic intervention services in the later grades. And if, throughout students' academic careers, time is allocated for coordinating the services they receive—for example, academic intervention services, guidance, and regular education—as well as for consultation between special education and general education teachers, students may have a significantly diminished need for additional services.

Findings by Type of District

It is clear from the input collected through public engagement that New York public schools face a common challenge: providing the personnel, practices, and programs to ensure that all students

have the opportunity to meet Regents Learning Standards, as is now required by both state and federal law.

The findings of public engagement also reveal variation in the specific requirements of different communities in meeting this challenge and in ensuring that students make sufficient progress toward that goal from year to year. The many and varied needs of New York's students and the schools that serve them in diverse settings are well represented in the public engagement input (*see Appendices A-D for a review of the findings by type of district*). From these we have synthesized some general conclusions about the design of education programs to meet the needs of these students and schools.

Rural Schools

We have learned from public engagement that New York's rural schools contend with the challenges of small numbers of students, many with special educational needs, who are spread out over great distances. They also contend with staffing challenges, the difficulties of attracting and keeping experienced teachers in rural areas and of finding specialists. Students' family circumstances and responsibilities, as well as transportation time and costs, discourage extending the school day to provide students with needed extra services.

Our findings suggest that, in rural areas, students' needs must be met as efficiently as possible within the school day. They also suggest that it is important for such schools to be able to invest significantly in school staff—in administrators, teachers, guidance counselors, and social workers—so people come and stay, and so that instructional expertise and support services within the school buildings grow.

Full-day pre-kindergarten and kindergarten must be offered to provide a good foundation for learning. Early childhood programs facilitate early intervention, meet families' childcare needs, and take advantage of learning time when children do not have competing responsibilities. These programs also need a strong parent education component to foster parent involvement. All such programs, as well as all after-school or weekend programs offered, must budget for transportation.

New and experienced teachers and administrators should receive ongoing classroom-based professional development focused on the needs of their specific students. Professional development should also focus on building the capacity for teaching practices (for example, team teaching, interdisciplinary studies, and blended classrooms) that should be employed to make the best use of limited time to meet diverse needs. Since space and facilities are not a problem, small classes and small-group instruction should also be maximized. In order to ensure that all students have the opportunity to meet standards, rural schools require the resources to provide learning-intensive experiences during the school day for students at risk of or not meeting standards.

For special education students in rural areas, it is especially important to provide the supports and services needed to make inclusion work. General education teachers must receive the training they need to provide quality instruction to special education students; team teaching, partnering general and special education teachers, should be utilized. Sufficient related services

such as counseling, hearing, vision, and speech, orientation and mobility, physical therapy, health, occupational therapy, and behavior management also provide critical support.

BOCES are invaluable for providing services to students with needs that cannot be met locally, even with the increased capacity described above, as well as for providing professional development resources for teachers.

Suburban Schools

As we learned from public engagement, not all of New York's suburban schools have the same needs. Many suburban schools are serving increasing numbers of high-needs students—students who are at risk of or already not meeting standards, need special education, or are English language learners. Many schools have the extra challenge of trying to meet the needs of dichotomous populations—where children who have plenty and children who have little attend the same class or school. In suburban schools, underserved students are often a minority. Often they do not have the vocal advocates that other students do. As a result, their needs are not fully met.

With the new federal mandates for disaggregating of test results in the No Child Left Behind Act, schools' service to many of these students will receive increased scrutiny. Achievement gaps will have to be closed. Suburban schools will therefore need to be able to devote the necessary resources to meeting the needs of all their students and ensuring that each of them has the opportunity to meet the Regents Learning Standards.

Findings from public engagement suggest that, in many suburban schools, this requires a significant increase in the use of programs and practices designed to meet the needs of low-performing students so that there are sufficient extra services to meet the needs of all students who can benefit. Schools need sufficient resources to ensure that providing additional services for students who need extra help to meet standards does not detract from the education of children who are already meeting or exceeding standards.

Services needed include Head Start, full-day pre-kindergarten, and full-day kindergarten. Such programs should have a parent education component, teaching the skills parents need to support their children's education at school and in the home.

Class sizes for at risk students and English language learners should be kept small. Though suburban schools often have programs and practices that help low-performing students—intensive small-group literacy and math instruction, academic after-school programs, and summer school. However, they must ensure enough of such services to meet the needs of all students who are at risk of or not meeting standards. Schools must also employ a sufficient number of social workers, guidance counselors, speech teachers, and other support staff to meet the needs of these students and their families.

New and experienced teachers and administrators should receive ongoing, classroom-based professional development to ensure they have the skills and strategies to handle successfully with the educational needs of the full range of students found in their schools, including ELL, special

education, diverse populations, students from poverty, and students at risk). These learning experiences should include mentoring from master teachers and opportunities to collaborate with colleagues.

Small City and Other Urban Schools

We learned from public engagement that New York's small city and other urban schools contend with the same issues as most urban schools around the country. Their challenges come from having to meet the educational requirements of a diverse body of high-needs students. The student population of these city schools often includes large numbers of English language learners, large numbers of students from poverty, transient students, and large numbers of students with disabilities needing special education services. Many of these students are at risk of or already not meeting standards. Many of these students have families who are unable to provide them with needed supports. Racism and racial segregation both within and among schools increases the challenges.

Many schools are overcrowded, understaffed, and limited in their capacity to offer the programs and practices necessary to ensure large numbers of students with extra educational needs the opportunity to meet Regents Learning Standards. Our findings from public engagement suggest that, to provide all their students with the learning environments appropriate to their needs, small city and other urban schools in New York State should provide their students with education-intensive experiences from an early age.

Findings from public engagement in small city and other urban school districts suggest that Head Start, full-day pre-kindergarten, and full-day kindergarten must be available to all students. Teachers in these programs must be fully qualified to provide early intervention and to work with high-needs children. Early childhood programs should also provide parents with training in the skills they need for lifelong involvement in their children's education.

To further facilitate parent involvement, schools must employ staff dedicated to parent outreach and advocacy, provide parent education, and train teachers to engage parents, and provide better tools for communicating with parents, especially ones that do not rely on family literacy. Extracurricular activities—sports, arts, and music—must be offered as a means of involving parents, as well as vital educational and social experiences for at-risk students.

School systems need the resources to work continually to build the instructional capacity to meet the needs of their diverse and high needs student populations. Ongoing, classroom-based professional development for new and experienced teachers and administrators should include opportunities for consultation and collaboration with colleagues, mentoring from master teachers, and training for dealing with diverse populations of students, including at-risk, special education, and ELLs.

Class sizes should be kept small, especially in the early grades and for classes that include high-needs and special education students. All students who can benefit should take part in intensive early literacy programs like Reading Recovery. Schools must also be provided with the resources to offer additional support services and academic supports, like small-group literacy and other

academic instruction, before, during, and after the school day, as well as on weekends and in the summer, sufficient to the needs of all their students. These supports and services should include adequate access to guidance counselors, school psychologists, speech teachers, and social workers.

Sufficient social workers and related services are also key to ensure that special education students' needs are met in inclusion settings. Professional development in special education for general education teachers and trained aides are vital for building in-district capacity and minimize the need for students to travel for services.

New York City Schools

We learned from public engagement that New York City schools face immense challenges when it comes to ensuring all students an opportunity to meet Regents Learning Standards. Many of their students come from and attend schools in areas of concentrated poverty. Many of their students come from immigrant families who speak little or no English. Numerous students are homeless or transient. As a result, students come to school with enormous educational needs; they also bring significant social, emotional, and health issues.

These demographic issues are compounded by schooling failures. Many students come to elementary school with little or no early childhood education. While in school, they have attended overcrowded, ill-equipped schools in classrooms with teachers who are inadequately qualified or experienced to meet students' special needs. Many students who are at-risk of or already not meeting standards have received few extra services to help their learning accelerate. Their schools offer few or no extracurricular opportunities for art, music, or athletics. They have rarely, if ever, had the benefit of help from guidance counselors, school psychologists, or social workers. Their families are not equipped to support or supplement their education.

The findings from public engagement suggest that it is crucial that New York City students be provided with extensive early childhood programs, that they get Head Start, full-day pre-kindergarten and full-day kindergarten. They suggest that these programs should include a parent education component to start teaching parents the skills they need to support their children's education at home and in school. These programs need to be staffed by well-trained teachers and other support personnel to provide early intervention services, like speech therapy.

Findings also suggest that, to ensure all children are on track to meet standards, schools need to be able to provide students in the early grades with well-trained teachers, small class sizes, and sufficient support services and extra programs to ensure that they are all reading by third grade. Illiteracy in the later grades and secondary school increases demands on both students and schools.

Our findings suggest that throughout school, students with extra needs require small classes, and all students need reasonable class sizes. (In addition to having more time for each student, teachers with fewer students have a greater opportunity to involve parents in children's schooling.) All students need well-trained teachers, and students with special needs require teachers with special skills to design instruction to meet their needs. Schools must be able to

offer students not meeting standards the extra services—tutoring, small-group instruction, and after school programs, to which they are entitled by law. Students must also have adequate access to guidance counselors, therapists, and social workers to meet their needs.

To compensate for and try to stem the huge turnover of teachers and administrators, schools must be able to provide ongoing professional development for both new and experienced school staff. This training should be provided by talented supervisors, be classroom-based, and relevant to the particular instructional environment and needs of the students in a given school or classroom. Teachers must also be provided with mentoring and other collaborative opportunities.

General education teachers also need training to help them work effectively with the special education students in their classrooms. In addition, schools must provide time for classroom teachers and related service providers to consult so that their work can best complement the others'. Schools must be able to provide students with the supports and services they are entitled to by law in order to succeed in inclusion settings.

Finally, many of New York City's students suffer from a lack of family support in their education, yet such support can make all the difference. Many children have only one parent. Many families don't speak English. Many families are intimidated by school settings. Schools must be able to dedicate staff and space to parent outreach, information, and education. They must be able to provide extended hours, varied meeting times, and childcare to accommodate working parents. Teachers and administrators must receive professional development in strategies for engaging parents. Schools must also be able to offer the extracurricular activities, like sports, drama, and music that traditionally draw parents into schools.

Responses from Rural Districts

Challenges

Participants from rural districts agreed on a number of specific challenges faced by their community schools. The main challenges include:

- Overcoming the effects on students of poverty
 - Lack of student support from sources outside of school
 - Low level of parental education and support for schooling
 - Low expectations of students from parents and teachers
 - Competing responsibilities for students and their families—work, babysitting
- Meeting needs of significant population of high needs students
 - Insufficient early intervention and early childhood education to meet student needs

- Insufficient social services to meet students' needs
- Academic needs
- Special education
- Health needs
- Large occurrence of transient students
- Lack of community support for education and education funding
- Overcoming “sparsity” issues
 - Challenge of meeting the needs of small numbers of diverse students with limited staff, facilities, etc.
 - Meeting needs of special education students especially difficult and resource intensive
 - Special education mandated by law, so resources must be spent, whatever the total amount available to cover all students needs (even if there is insufficient funding for both)
 - Transportation challenges are vast
 - Long travel times
 - Expensive
 - Necessary for all extended-day programming
 - Inability to meet needs of ELLs
 - No teachers available
 - Must be bussed long distances
 - Few services available
 - Inability to offer full range of courses
 - Inability to offer pre K
 - Challenge of staffing to meet needs of all students
 - Hard to retain teachers because “no one wants to live in rural areas any more”
 - Hard to get teachers certified because of lack of accessible masters’ programs
 - Too expensive to hire the teachers qualified to meet specific needs of small numbers of student with special needs
 - Small pool of teacher candidates
 - Challenges of extra costs because of no economies of scale
- Challenges of geographically large districts
- Dependence on BOCES for needed services
 - Inadequate funding for BOCES to provide them.

Programs and Practices that Work to Ensure that All Students Can Meet Standards

Class Size

There was much agreement in rural districts that a reasonable class size was essential. Classes above 25 were considered too big for any grade level. Groups specifically mentioned the need for smaller class sizes for early grades, for certain subject areas, for inclusion classes, and for other classes with high-needs students.

Parent and Community Involvement

There was consensus among participants from rural districts that parental involvement is essential, as well as consensus as to the huge challenge in these districts of providing students and schools with the parent and community support necessary for success. To get that type of involvement, schools need resources and staffing for

- outreach to families including individualized attention and home visits,
- parent information and education designed so working parents can take advantage of it
 - on weekends
 - before or after workday
 - with food and childcare
- social workers in sufficient numbers,
- relevant professional development for teachers and administrators
- teacher-parent communication time and tools.

In addition, active parents must be given meaningful decision-making roles. Finally, students who do not have family support must not be penalized but must get additional support from schools.

Early Childhood Education

Participants from rural districts voiced extremely strong support for early childhood education, agreeing that it was essential to children's later success with standards. Groups agreed that all students needed access to full day kindergarten and at least half-day pre K, though many participants pointed out the need to solve the transportation and child-care difficulties raised by half-day pre-K. A number of participants recommended earlier intervention for high-needs children. Head Start programs were endorsed. Many participants also recommended a parent education component for early childhood programs.

Professional Development

Participants in rural districts supported a number of different approaches to professional development. There was strong support for providing newer teachers with the opportunity to learn from more experienced teachers and administrators who were real instructional leaders. They also particularly supported professional development that was long term, focused specifically for the needs of the students in a particular school or classroom, and minimized the disruption to classroom learning. Resources required for effective professional development included the staffing and compensation for time for planning, implementation, collaboration, and follow up; funding for substitute teachers; BOCES expertise; and staff developers and master teachers.

Programs and Practices That Work for Students Not Meeting Standards

Participants from rural districts acknowledged that many of their schools were unable to provide sufficient services to ensure each student the opportunity to meet standards. Adequate funding would be put toward the following programs and practices that participants agreed were successful:

- Daily small-group academic intervention services.

- Small classes
- Summer school, including early intervention (K-2) summer school programs.
- Providing psychologists and guidance counselors, esp. for 7-12
- Reading Recovery, STAR, HOSTS (a community volunteer program) and other individual and small group literacy support
- Small alternative high schools, with good adult to child ratios
- Providing healthy food at reasonable intervals for students.
- Vocational programs and school to work programs
- Early childhood education
- BOCES
- More individual attention and tutoring during and after school.
- Well trained, experienced teachers
- Writing instruction and other exam preparation
- Literacy support—literacy volunteers, peer and family literacy programs.
- Parenting centers for Pre-K

Programs and Practices That Work for Special Education Students

Participants from rural districts report that special education is a huge challenge. State mandates often require disproportionate expenditures on special education that pose grave hardships for small, poor districts. Districts also incur significant expenses fighting special education lawsuits. Because of the small number of students in these districts, special needs students must often be bussed long distances to get the services they need. BOCES is indispensable in providing such services.

Groups from rural districts recommended the following programs and practices that work in special education:

- Careful, appropriate placement of students
- Collaborative team teaching
- Professional development in inclusion strategies for new and experienced general education teachers
- Coordination time for classroom teachers and related service providers or resource room teachers
- Providing OT, PT, speech therapists, counselors, social workers, aides
- Sensitivity training for general education students
- One-on-one mentoring with emotionally disturbed kids

Programs and Practices That Work for English Language Learners

In rural districts, participants said, there are few ELLs, but there is no capacity at all to meet their needs, especially if children arrive in high school. One participant said that their ESL program consisted of “speaking loudly and slowly.” ELL students are likely to be transient, part of a migrant farming community. In addition, finding qualified teachers is very difficult. When

available, resources for ELL students come from BOCES; for example, BOCES is able to provide some translation services.

Responses from Suburban Districts

Challenges

Participants from suburban districts agreed on a number of specific challenges faced by their community schools. The main challenges include:

- Meeting the needs of dichotomous populations: coexistence of extremes of “haves and have-nots” in same school or classroom
 - (in some schools) To meet mandates, resources go to students at risk of or not meeting standards. With limited resources, resources are taken away from students who are meeting standards.
 - (in other schools) Because of the lack of clout of families of high needs students, “middle class students’ needs drive the school system” and students with special needs don’t get all the extra help they require.
 - Unfed, ill-equipped children
 - Disaggregation reveals pockets of low achieving children
- Segregated communities
- Schools with disproportionate numbers of high-needs students.
- Too many new teachers in some schools and some communities.
- Insufficient resources in some schools and some communities to provide extra services to all students who need them
- Schools that are adequately equipped; some lack computers, books, materials.
- Increasing student mobility
- Increasing number of special education students and associated needs and expenses
- Dependence on BOCES for needed services
 - Inadequate funding for BOCES to provide them.
- Strain of state mandates
 - Negative feelings about and negative consequences of testing requirements.
 - Too much paperwork for state mandates
 - Unfunded mandates
- Demanding middle-class parents who want “the best” for their kids.
- Increasing size of student population
- Lack of community commitment to fund extra services to ensure that all students meet standards
- Inadequate teacher and administrative expertise to ensure that all students meet standards
 - Inadequate expertise with different learning styles and teaching strategies
 - Insufficient professional development for teachers and administrators.
- Insufficient numbers of social workers to meet student and family needs.
- Difficulty meeting standards in middle schools.
- Racism.

Programs and Practices that Work to Ensure that All Students Can Meet Standards

Class Size

There was agreement in suburban districts that small class sizes were essential for students at risk of or not meeting standards, as well as for lower grades, inclusion classes, and ELLs. Lower class sizes also help with teacher recruitment. But some participants felt that teacher quality was more important than class size. A range of numbers was recommended, but most participants agreed that K-6 classes should be under 20; and there should be no more than 25 in higher grades.

Parent and Community Involvement

There was significant agreement among suburban participants that real, not just token, parent involvement is essential to ensure that all students can meet standards. Groups stressed that parent involvement was critical in school and, even more importantly, at home. It was suggested that different models for ensuring parent involvement would work for different schools depending on differing needs. However, groups felt that reaching parents early, in preschool or even earlier, was key; they also felt strongly about insuring collaboration between the school, social workers, and other social services.

Real parent involvement, they stressed, requires resources for parent outreach and education. Some of the resources recommended included school-based parent coordinators and family resource centers, professional development for staff (particularly insuring administrative mastery of Joyce Epstein's 6 keys to parent involvement), and the availability of telephone lines in schools for efficient teacher-parent communication. Teacher load was also said to be a critical factor for parent involvement: if teachers have time to reach out, they can get parents involved in helping their children.

Early Childhood Education

Participants in suburban districts also agreed that early childhood education was essential, and the more the better, especially for poorer children who would not otherwise come to school ready to learn. Nearly all groups recommended full-day pre-K and full-day kindergarten. Head Start programs were endorsed. A number of groups also suggested a parent component to early childhood education, teaching the skills parents need to support their children's education at school and at home.

Professional Development

Participants in suburban districts expressed the belief in continuous professional development for teachers and administrators that imparted the skills and strategies to deal successfully with the educational needs of the full range of students (including ELL, special ed., diverse populations, poverty, students at risk)—and the specific skills and strategies needed to work with the students

in their own classrooms. They specifically endorsed mentoring and collaboration with colleagues, both intra- and inter-district, as essential to provide learning experiences that help teachers use their own data to improve instruction and meet the specific needs of students. Time and expertise are required to provide these professional development experiences, so schools need resources for the requisite staffing. As one participant said, professional development is the “most underfunded aspect of education.”

Programs and Practices That Work for Students Not Meeting Standards

Participants from suburban districts acknowledged that their schools needed to provide more services to their students to ensure each student the opportunity to meet standards. Adequate funding would be put toward the following programs and practices deemed successful:

- Small classes
- Parent involvement
- Professional development
- Reading Recovery and other small-group early-grade literacy instruction
- Small-group, in-school “skills classes” for high school students
- Family literacy programs
- Summer programs
- Homework clubs
- Providing elementary and middle-school guidance counselors and social workers
- Computer literacy and access
- Multicultural education
- Continuing education and extended use of school buildings for community
- Push in and pull out services
- Stretch classes/block scheduling
- Speech teacher
- BOCES

Programs and Practices That Work for Special Education Students

Participants from suburban districts also expressed frustration that providing for the needs of special education students “ate up” the budget for regular education. In addition, school districts incur legal costs of special education lawsuits.

Successful special education programs and practices cited by participants included:

- Extra training for teachers for behavior management
- School health and nutrition
- Counseling for kids with no home support
- Collaborative team teaching
- Consistent support services for students
- Training and support for general education teachers

- OT, PT, speech services
- Smaller class sizes
- Art and music programs

Programs and Practices That Work for English Language Learners

As participants indicated, ELL students present a challenge to suburban districts because they arrive at very different starting points, and, as a result, their needs vary widely. Students with little or no literacy in any language pose a special challenge.

Responses from Small City and Other Urban Districts

Challenges

Participants from small city and other urban districts agreed on a number of specific challenges faced by their community schools. The main challenges include:

- Meeting the needs of large numbers of students with special needs
 - Meeting the needs of transient students
 - Meeting the needs of large numbers of ELL students
 - Meeting the needs of large numbers of student from poverty
 - Meeting the needs of large numbers of at-risk students and students not meeting standards
 - Meeting the needs of large numbers of special education students.
 - Lack of stable funding for programs to meet students' special needs
- Overcrowding
 - Large class sizes
- Ill-equipped schools
 - Lack of materials, equipment, science labs
- Inadequate social and health services of students and the consequences of this.
- Strain of new requirements that all students meet new standards.
- Student conduct issues
 - Discipline problems
 - Inadequate teacher expertise for deal with discipline issues.
 - Violence
 - Gangs
 - Inadequate school security staff
- Student mobility
- Parent involvement issues
 - Low-level of parental education
 - Lack of parent support for students' education
 - Too little home-school communication
 - Too little parent involvement
 - Parents intimidated by school system
 - Lack of parent awareness about early intervention services
- Insufficient push-in services—over-reliance on pull-out because it is cheaper
- Too few early intervention services
- Insufficient literacy support services, esp. for later grades
- Insufficient pre-K and Head Start
- Pre-K and Head Start teachers not sufficiently qualified
- Need for community education programs
- Need for community space and building formula that doesn't reimburse for it
- Lack of sufficiently qualified teachers
- Need for scheduling to allow staff learning time and collaborative planning
- Need for more opportunities for “more time on task” for low-performing students.

- Longer school days, longer school year, extra help
- Racial segregation, both inter and intra school.

Programs and Practices that Work to Ensure that All Students Can Meet Standards

Class Size

Some groups said that small classes were essentials; other groups expressed support for reasonable class sizes but stressed that appropriate class size depended on student need, subject area, and other services available. Many groups recommend 18 for K-2; 20-22 for later grades; and 25-30 for high school.

Parent and Community Involvement

Groups from small city and other urban districts were unanimous in their opinion that parent and community involvement are essential to ensure that all students get a shot at meeting standards. The support and enrichment that middle class kids get makes all the difference. To provide this for all children takes resources. Groups focused on the need for

- staff in each school building devoted to advocating for parents and children, including linking families with social service resources
- parent training and education accessible to working parents, including providing language and literacy instruction and training in the skills parents need to help children at home. (Head Start was held up as an example of a program that's successful in teaching parents skills needed for involvement in their children's education (and doing it early in the child's academic career)).
- professional development for administrators and teachers on how to engage parents, including Joyce Epstein's 6 standards.
- better tools for communication with parents, going beyond newsletters—using TV, telephones, email, or “buddy systems” for sharing information with diverse families, as well as having teachers and other school personnel go out into the community and into students' homes.
- extracurricular activities—sports, arts, music—that have been traditionally successful ways to involve parents

Early Childhood Education

Participants from these districts concurred that early childhood education was essential—“priceless.” They also voiced the opinion of “the more the better,” endorsing Head Start, universal full-day pre K and full day kindergarten.

Professional Development

Participants said that professional development should be long-term, ongoing and classroom based. It should include opportunities for collaboration with colleagues, mentoring from master teachers from within their own schools who serve as mentors full time, and training for dealing with diverse populations of students, including at-risk students, ELLs, and special education

students. Schools need the resources to pay for the needed expertise as well as to pay for teachers' learning and collaboration time.

Programs and Practices That Work for Students Not Meeting Standards

Participants from small city and other urban districts agreed that their schools were unable to provide adequate services to ensure each student the opportunity to meet standards. Adequate funding would be put toward the following programs and practices that participants deemed successful:

- Extended day for academic intervention and after-school literacy programs
- Family literacy programs
- Meals
- Sports
- Multicultural education
- Continuing education and extended use of school buildings
- Push in and pull out services
- Writing instruction
- Stretch classes/block scheduling
- Speech teachers
- Intensive early instruction literacy program, like Reading Recovery
- Pre-kindergarten
- Mentor-oriented professional development
- Summer school programs
- Good ratio of guidance counselors to students, esp. high-risk students
- Alternative schools/programs with smaller classes, specialized teachers and curricula

Programs and Practices That Work for Special Education Students

Participants from small city and other urban districts strongly agreed that special education students were not being given the opportunity to meet standards. Schools are not able to provide the personnel or services that children need to succeed. School districts do not provide all of the services that special education kids need in inclusion programs because to provide them would be very expensive. The participants concurred that the following programs and practices were successful and should be available to ensure students the opportunity to meet standards.

- Early intervention and preventative services, e.g., early screening and intervention for language development
- Sufficient social workers and support services
- Summer school
- Attractive programs at separate location in the high school
- Homework lab
- Middle school literacy support programs

- Team teaching
- Qualified teachers
- Push in services in general education classroom
- Professional development for general education teachers
- Trained aides
- In-district programs designed to minimize student travel.

Programs and Practices That Work for English Language Learners

Participants from small city and other urban school districts said that appropriate services depend on the needs of the particular students and their families. They stressed the need for flexibility to provide needed services for immigrant students and families.

Responses from New York City

Challenges

Participants from New York City agreed on a number of specific challenges faced by their community schools. The main challenges include:

Demographic Issues

- Concentrated poverty
 - Schools overwhelmed by other social problems
- Racial dimension to schooling issues
- Difficulty meeting the needs of immigrant families
 - Language barriers—many languages spoken
 - Students entering later grades and high school without prior school experience.
- Challenge of meeting the needs of homeless and other transient students.
- Large numbers of students not meeting standards
- Large numbers of schools not meeting standards under NCLB
- Students with behavioral problems that schools aren't equipped to address.

Staffing Issues

- Huge teacher and principal turnover
 - Poor salaries and working conditions drive teachers away
- Teachers not sufficiently qualified or committed to work with particular student population, conditions, and challenges
 - Teachers untrained in how best to address the needs of lower performing students
 - Insufficient “really” qualified teachers (that is, teachers who have the skills that that particular environment demands of them)
 - Insufficient teacher classroom management skills.
 - Insufficient teacher buy-in to that purpose—their need to do what is needed to meet the needs of large numbers of students not meeting standards (students who are way behind).
 - Too many new teachers.
- Not enough time or effort or talent available for or devoted to collaboration to coordinate teaching to maximize learning
- Difficulty attracting and retaining good teachers
 - Teachers don't get paid enough to come or to stay in the schools in the community
- Lack of support and professional development for new and experienced teachers and administrators
 - Teachers insufficiently trained to combine high quality, innovative teaching with preparing students for tests.
 - Insufficient instruction geared to all learning modalities

- Decision making does not adequately involve teachers, social workers, guidance counselors, parents (and special ed. decision making also doesn't adequately involve principals)
- Insufficient recognition and respect for teachers within schools
- Large number of teachers not teaching “in license”

Parent and Community Involvement Issues

- Insufficient parent and community involvement to meet huge need
 - in students' education
 - in school improvement and education reform
- Parent-district/school/teacher communication inadequate
 - Language barriers to home-school partnerships
 - Inadequate translation services available
 - Important information often not relayed
 - Parent-teacher conferences allotted no more than 10 minutes
- Families not prepared to meet students' needs
- Challenge of working parents
- Challenges of intimidated parents
- “unhealthy” communities
- Large class sizes hinder parent involvement

Educational Program and Facilities Issues

- Inadequate pre K to accommodate all children who need it
- Class sizes too large
- Not enough services for students not meeting standards, as a result those closest to meeting standards receive them because of pressure on schools to raise test scores
- Many eligible children do not get any programs or services.
- Resources applied in response to testing pressures
- High drop-out rates
- Large number of students inadequately prepared for high school
- Student distrust of schools
- Insufficient services for students at risk of not meeting standards
- Curriculum changes too frequently
- Challenges of the anti-academic or a-academic student culture
 - Manifestations: lack of discipline, lack of respect for others in school, low expectations for themselves, lack of interest in learning
- Inadequacy of school resources, school culture, and school staff to meet the needs of high number of students at risk of and not meeting standards
- Difficulty handling the consequences of the use of test scores as main measure of school success: too much test prep; no time for spontaneous teaching; too much pressure.
- Challenges posed by large number of ELLs, esp. in schools with large number of languages represented.
- Overcrowding, e.g., library cannot be used by all as much as needed.

- Increased overcrowding as a result of NCLB transfers.
- Inadequate facilities,
 - not enough classroom space
 - not enough gym space
 - not enough playground space
- Challenges of too-large schools (less community) and too large classrooms (less writing assignments; less one-on-one attention).
- Test prep. for areas tested (math and reading) squeezes out time for other subjects, esp. in 4th grade.
- Too little time for faculty collaboration and coordination.
- Too little expertise, training and support for good instruction in general.
- Not enough curriculum coordination.
- Students receive too many pull-out services that eat into class time.
- Insufficient coordination between classroom teachers and special service providers.
- Summer school availability not sufficient for all students who need it.
- Not enough funding for Reading Recovery, an effective program, to provide it to all students who could benefit from it.
- Lack of emphasis on conflict resolution, citizenship skills, etc. because standards don't cover them.
- Insufficient AIS programs and other programs to meet needs of large numbers of students not meeting standards
- Potential challenge: uniform curriculum won't meet needs of all students; need district flexibility
- Not enough shop and other vocational training available
- Low expectations for students
- Not enough art, music, drama, or athletics programs.

Administrative Issues

- Inefficient use of resources.
- Too little administrative and scheduled support for more ambitious teaching.
- Insufficient accountability school wide.
- Inadequate oversight and guidance from district office and from principal
- Inadequate relational supervision between principal and teachers
- Insufficient teacher authority
- Student culture not conducive to learning
- Insufficient # of security officers.
- Inadequate discipline policy.
- Insufficient assistant principals to supervise new teachers
- No assistance available until schools sink to SURR level.

Programs and Practices that Work to Ensure that All Students Can Meet Standards

Class Size

In New York City, there was considerable consensus that when it comes to class size, the smaller the better. Small class sizes were considered essential, especially for the lower grades, special education, and schools in areas of concentrated poverty. Recommended numbers included 12-15 in lower grades, and for all classes with large numbers of high needs students; 17-20 for regular elementary classes; 21-25 for high school. Many groups acknowledged, however, that New York City does not have the facilities to accommodate class size reduction.

Parent and Community Involvement

New York City groups were unanimous in calling parent and community involvement absolutely essential to ensure the opportunity for success for all students. It is especially critical to provide this support for students and families who are immigrants, have a low level of parent education, or come from poverty. Groups acknowledged that this required considerable resources, including providing the following:

- Dedicated staff and space for parent outreach, information, and education, including a parent resource center and staff who can provide social service and other resources for families, a neutral space for meetings between parents and school staff, and translation services.
- Sufficient staff and extended hours to provide varied meeting times and places to accommodate working and/or intimidated parents, as well as child care.
- Professional development for administrators and teachers to assure
 - learning time structured to incorporate parents —e.g., Parents as Reading/Math Buddies
 - administrative tone supportive for parent involvement
 - parent/grandparent volunteering opportunities in schools
 - outreach to community –based organizations
 - teaching strategies that help parents become more involved at home
- Tools for better communication between school and families, e.g., cell phones for teachers so they are available to parents after school hours.
- Sufficient staffing and resources for school-community activities to draw parents and community members into the life of the schools: student performances; sports/games. Similarly, school personnel must go out into the community—to church activities, Little League, etc.
- Mandatory parenting classes and parent participation suggested, as well as requirement for employers to provide paid time off to parents for school duties.

Early Childhood Education

There was consensus from New York City groups that early childhood education was essential, that it provided an important training ground for parent involvement, and that Head Start, full day pre-K and full day kindergarten were *all* needed. Most groups cited the child-care difficulties associated with half-day early childhood programs and acknowledged the need to provide additional child care in order to make such programs accessible.

Professional Development

Participants in New York City argued that one-day one-shot workshops are not very effective, that it is better to have ongoing professional development that can be responsive to challenges teachers actually face: “Professional development needs to be tied to the issues of the schools and relevant to the job.” This includes ongoing opportunities for discussion of instructional best practices in content and classroom management with knowledgeable supervising teachers or administrators; ongoing professional development for new and experienced principals so they can be instructional leaders; and ongoing training and support for new and experienced teachers and administrators in teaching that meets the needs of the particular students in their building. There was also consensus that it is particularly important that general education teachers get trained in special education practices. Mentoring was also considered an important tool, particularly well-designed mentor programs that featured master teachers with time dedicated to mentoring new teachers (rather than just adding this duty another teacher’s already too full schedule). Groups suggested that necessary resources included for money for additional assistant principals, for master teachers, for more and ongoing training, and for staffing to free up teachers’ and principals’ time. A number of participants noted that a much greater percentage of a district’s budget could and should be spent of professional development.

Programs and Practices That Work for Students Not Meeting Standards

Participants from New York City strongly confirmed that their schools were unable to provide adequate services to ensure all students the opportunity to meet standards. Adequate funding would be put toward the following programs and practices that participants deemed successful:

- Providing sufficient guidance personnel and social workers.
- Increasing push in and pull out services
- Extended day programs: after school and Saturday instruction
- Personal relationships—showing that someone cares.
- Leadership development and conflict resolution for students
- Qualified teachers who are suited to schools’ particular teaching environment
- Relevant, ongoing training for teachers, including training in attitudes toward and expectations of students
- Art , music, drama, and athletics programs
- Discipline policies with real consequences
- Industrial arts classes and vocational training
- Intensive small group literacy and math instruction
- Good tasting, nutritious food for students
- Smaller instructional environments, both classes and schools
- Early childhood education
- Meaningful hands-on, project based, and interdisciplinary high school instruction
- Family literacy programs
- Summer programs with small classes.
- School as community center: with social services, health care and teachers available late into the evening.

Programs and Practices That Work for Special Education Students

In New York City, participants expressed profound discouragement about special education in the city's schools. They said that students' needs in inclusion programs are not being met, and that programs and practices that work are few and far between. For example, inclusion classes of 30, with 7-8 special ed. students and one teacher, appeared to be the common. There is virtually no training of general education teachers, and, often, general education teachers are unaware that many students in their classrooms have IEPs. The following is a list of the programs and practices that, according to the New York City groups, should be available to all special education students to ensure them the opportunity to meet Regents Learning Standards.

- Inclusion with willing, qualified teachers and sufficient support.
- Ongoing professional development for special education teachers.
- Professional development in special education for general education teachers.
- Consultation time for general education teacher and related service providers.
- Team teaching.
- Parent training in how to participate effectively in making IEP decisions
- Ensuring that the general education member of IEP team is the classroom teacher
- Small class sizes
- District flexibility about how to meet special education needs (especially how to keep kids in neighborhood schools)
- Thorough assessment to prevent incorrect classification and follow up to ensure correct placement.
- Skilled, school-based therapists.
- Multi-sensory reading instruction, such as Orton-Gillingham, for kids with language-based learning disabilities;
- Teacher expertise in students' special needs areas.
- Individualized attention and instruction.
- Teacher belief that all children can learn.
- Good information for parents.
- SES (special education support) services
- Early intervention.
- Good supervision and support for teachers

Programs and Practices That Work for English Language Learners

Participants said the following programs and practices work in the education of English Language Learners:

- Pre-K
- Bilingual instruction.
- Extended day—after school and Saturday instruction.
- Small class size.
- In-class libraries.
- Welcoming environment.
- Self-directed study.
- Portfolios.
- Content-based focus.
- Technology
- Professional development for general education teachers in strategies for working with ELL students
- Dual language programs

APPENDIX B

DISTRICT CATEGORIZATION METHODOLOGY

One of the primary tasks in the New York Adequacy Study was to assemble panels comprised of exceptional educators to provide their professional judgment as to what constitutes an adequate education. A vital point in this process was recognizing that student need combined with the subsequent resources necessary to provide an adequate education are key determinants of educational success. Related to student need, geographic and demographic characteristics of school districts also play an important role in school success. Clearly, student need in addition to regional characteristics vary widely both within and across New York public school districts. This, in turn, begs for a systematic scheme with which to classify districts for the purposes of identifying groups of successful schools that are similar and specification of adequate programs to meet the needs of students by professional judgment panels representing these groups.

With this in mind, the analysis team had two criteria for a system that would classify similar districts with respect to dimensions of student need and region. First, the classification system had to follow simple, clear-cut rules in order to be as transparent as possible to all interested parties (i.e. panelists, policy makers and stakeholders). Second, the system would be based on existing classification codes that were well-known and widely accepted standard measures of student need and region. To this end, the methodology used to categorize districts into similar groups draws heavily on the Needs-to-Resource-Capacity (N/RC) classification devised by the New York State Department of Education (NYSED) and enhances the ability of the index to distinguish average and low N/RC districts with respect to geographic location and population by interacting it with the National Center for Education Statistics (NCES) locale codes. The N/RC for every New York public school district can easily be looked up in the official NYSED *District Report Card*, while the NCES publishes the locale code for the universe of public school districts throughout the country.¹ In the end, districts were assigned to one of the following four Professional Judgement Panels (PJP's):

- PJP 1 - *New York City*
- PJP 2 - *Mid- to Large-Sized Cities, Urban Fringes and Other Districts With High Needs-to-Resource-Capacity* – Districts other than New York City characterized by a high Needs-to-Resource-Capacity index located in the vicinity of any:
 - 1) Mid-size city (i.e. having a population less than 250,000) of a Metropolitan Statistical Area (MSA) or Consolidated Metropolitan Statistical Area (CMSA).
 - 2) Large city (i.e. having a population greater than or equal to 250,000) of a CMSA.
 - 3) Urban fringes of mid-sized and large cities (i.e. including any incorporated or census designated place) or places defined as urban by the Census Bureau.
 - 4) Four select large and small towns (i.e. with populations greater than or equal to 25,000, and between 2,500 and 25,000 inhabitants, respectively) and one rural place (Cortland, Ogdensburg, Olean, Plattsburgh and Watertown).²

¹ The NYSED N/RC for each district for the school year 2001-2002 can be looked up electronically at <http://www.emsc.nysed.gov/repcrd2003/home.html> and the corresponding NCES locale codes can be downloaded at <http://nces.ed.gov/ccd/pubagency.asp>. A more in-depth description of the NYSED Needs-to-Resource-Capacity Index and NCES locale code can be found below.

² Detailed census definitions of CMSA and MSA are included below.

- PJP 3 - *Mid-sized Cities, Urban Fringes and Other Districts With Average or Low Needs-to-Resource-Capacity* – Districts characterized by an average Needs-to-Resource-Capacity index located in:
 - 1) Mid-size cities (same as in PJP 2 definition, above).
 - 2) Urban fringes of mid-sized and large cities (same as in PJP 2 definition, above).
 - 3) Large and small towns (same as in PJP 2 definition, above).
- PJP 4 – *Rural Areas Across All Needs-to-Resource Capacities* – Districts located in:
 - 1) Any place defined as rural by the Census Bureau.
 - 2) Fifteen select places defined as rural according to the N/RC index and as mid-size or large city urban fringe by the NCES locale classification.³

Note that this last PJP group will help us address the potential variations in the cost of an adequate education associated with the potential diseconomies of small scale combined with the range of needs in smaller and more rural communities.

The following matrix provides a simple guide to the mapping of the N/RC and locale combinations to PJP categories. For instance, suppose a given district has an N/RC of 5 (average student need relative to resource capacity), and is located in a locale coded by 6 (denoting a small town).⁴ The number in the corresponding cell shows that the district has been mapped into PJP category 3.

		NCES Locale Code							
		Large City	Mid-size City	Urban Fringe of Large City	Urban Fringe of Mid-size City	Large Town	Small Town	Rural Outside MSA	Rural Inside MSA
N/RC Index	New York City	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Large City	2	2	2	N/A	N/A	N/A	N/A	N/A
	High N/RC Urban or Suburban	N/A	2	2	2	2	2	2	N/A
	High N/RC Rural	N/A	N/A	4	4	N/A	4	4	4
	Average N/RC	N/A	3	3	3	3	3	4	4
	Low N/RC	N/A	N/A	3	3	N/A	N/A	4	4

“N/A” denotes Needs-to-Resource-Capacity/Locale combinations that do not characterize any New York public school districts.

³ In these instances, where the NYSED and NCES classification schemes contradicted each other, the classification rule was determined by the NYSED N/RC index.

⁴ Definitions of the N/RC and locale codes are listed below.

NYSED Need-to-Resource-Capacity Index⁵

The Need-to-Resource-Capacity (N/RC) index is based in the idea that the local success of public education is significantly positively correlated with expenditures in the schools and significantly negatively correlated with the level of poverty found in the school. Combining a measure of resources available in each school district and a measure of district pupil poverty into one statistic is a meaningful shorthand abbreviation. The resulting groupings have two important benefits for State policy purposes; they are easy to explain and they are well supported by statistical research. School districts that spend more locally derived money per pupil tend to have relatively higher levels of pupil performance, and school districts that have a higher proportion of pupils from low-income households tend to have lower levels of pupil performance. School districts across the State of New York are classified by N/RC index as one of the following six types.

- 1) New York City
- 2) Large City (Buffalo, Rochester, Syracuse, or Yonkers)
- 3) High N/RC Urban or Suburban
- 4) High N/RC Rural
- 5) Average N/RC
- 6) Low N/RC

NCES Locale Code

NCES locale code for location of the agency relative to populous areas:	
1)	Large City - A central city of Consolidated Metropolitan Statistical Area (CMSA) with the city having a population greater than or equal to 250,000.
2)	Mid-size City - A central city of a CMSA or Metropolitan Statistical Area (MSA), with the city having a population less than 250,000.
3)	Urban Fringe of Large City - Any incorporated place, Census Designated Place, or non-place territory within a CMSA or MSA of a Large City and defined as urban by the Census Bureau.
4)	Urban Fringe of Mid-size City - Any incorporated place, Census Designated Place, or non-place territory within a CMSA or MSA of a Mid-size City and defined as urban by the Census Bureau.
5)	Large Town - An incorporated place or Census Designated Place with a population greater than or equal to 25,000 and located outside a CMSA or MSA.
6)	Small Town - An incorporated place or Census Designated Place with a population less than 25,000 and greater than 2,500 and located outside a CMSA or MSA.
7)	Rural, outside MSA - Any incorporated place, Census Designated Place, or non-place territory designated as rural by the Census Bureau.
8)	Rural, inside MSA - Any incorporated place, Census Designated Place, or non-place territory within a CMSA or MSA of a Large or Mid-Size City and defined as rural by the Census Bureau.

⁵ This descriptive passage is taken from the NYSED document “What is a Similar School?”, which can be viewed and downloaded in its entirety at <http://www.emsc.nysed.gov/repcrd2003/information/similar-schools/guide.html>.

Census Definitions⁶

- Consolidated metropolitan statistical area (CMSA) - A geographic entity defined by the federal Office of Management and Budget for use by federal statistical agencies. An area becomes a CMSA if it meets the requirements to qualify as a metropolitan statistical area, has a population of 1,000,000 or more, if component parts are recognized as primary metropolitan statistical areas, and local opinion favors the designation.
- Metropolitan statistical area (MSA) - A geographic entity defined by the federal Office of Management and Budget for use by federal statistical agencies, based on the concept of a core area with a large population nucleus, plus adjacent communities having a high degree of economic and social integration with that core. Qualification of an MSA requires the presence of a city with 50,000 or more inhabitants, or the presence of an Urbanized Area (UA) and a total population of at least 100,000 (75,000 in New England). The county or counties containing the largest city and surrounding densely settled territory are central counties of the MSA. Additional outlying counties qualify to be included in the MSA by meeting certain other criteria of metropolitan character, such as a specified minimum population density or percentage of the population that is urban. MSAs in New England are defined in terms of minor civil divisions, following rules concerning commuting and population density.
- Urbanized area (UA) - An area consisting of a central place(s) and adjacent territory with a general population density of at least 1,000 people per square mile of land area that together have a minimum residential population of at least 50,000 people. The Census Bureau uses published criteria to determine the qualification and boundaries of UAs.

⁶ Definitions taken from the glossary of the 2000 Census, which can be found at the US Department of Census website (<http://www.census.gov/main/www/cen2000.html>).

Frequency Tabulation of N/RC Index by NCES Locale Code											
Frequency Percent Row Pct Col Pct	Table of N/RC Index by Locale Code										
	N/RC INDEX	NCES Agency Locale Code									
		1	2	3	4	5	6	7	8	N	Total
		1	0	0	0	0	0	0	0	14	15
	1	0.14	0	0	0	0	0	0	0	1.96	2.1
		6.67	0	0	0	0	0	0	0	93.33	
		50	0	0	0	0	0	0	0	100	
	2	1	2	1	0	0	0	0	0	0	4
		0.14	0.28	0.14	0	0	0	0	0	0	0.56
		25	50	25	0	0	0	0	0	0	
		50	10	0.47	0	0	0	0	0	0	
	3	0	14	15	9	1	3	1	0	0	43
		0	1.96	2.1	1.26	0.14	0.42	0.14	0	0	6.01
		0	32.56	34.88	20.93	2.33	6.98	2.33	0	0	
		0	70	7.04	8.57	50	4.11	0.79	0	0	
	4	0	0	1	14	0	30	75	39	0	159
		0	0	0.14	1.96	0	4.2	10.49	5.45	0	22.24
		0	0	0.63	8.81	0	18.87	47.17	24.53	0	
		0	0	0.47	13.33	0	41.1	59.06	24.53	0	
	5	0	4	93	71	1	40	49	101	0	359
		0	0.56	13.01	9.93	0.14	5.59	6.85	14.13	0	50.21
		0	1.11	25.91	19.78	0.28	11.14	13.65	28.13	0	
		0	20	43.66	67.62	50	54.79	38.58	63.52	0	
	6	0	0	103	11	0	0	2	19	0	135
		0	0	14.41	1.54	0	0	0.28	2.66	0	18.88
		0	0	76.3	8.15	0	0	1.48	14.07	0	
		0	0	48.36	10.48	0	0	1.57	11.95	0	
	Total	2	20	213	105	2	73	127	159	14	715
		0.28	2.8	29.79	14.69	0.28	10.21	17.76	22.24	1.96	100
Frequency Missing = 37											

Notes - The 37 "missing" observations are New York City (NYC). Also, the "N" column is just schools in NYC that (for no apparent reasons) have an N in the LOCALE00 field of the Common Core Data. They are no different from any of the other schools in NYC. Finally, though the count of NYC (or PJP=1) districts appears to be 15 in this frequency, the real count is 52 (hence, the 27 "missing") -- this happened because all districts in NYC without an N have a missing value in the LOCALE00 field.

SUMMER PJP INVITATION LETTER

June 4, 2003

Dear _____,

The purpose of this letter is to determine your interest and availability to participate in a research project conducted by our firm and American Institutes of Research (AIR). You are being asked to apply to participate in this project because your school has demonstrated success with both general education and special education populations. In addition to your application to participate, we ask that you nominate exceptional individuals from your school and district whom you believe have been instrumental in successfully educating children, either general education or special education.

Participants will be chosen from among highly qualified educators from New York who will be selected for their expertise and experience. We are especially interested in educators with demonstrated successful experience educating minority and disadvantaged student populations. Selected educators will work in small groups on a structured activity related to program development and resource allocation. I have enclosed a brochure that briefly describes the project.

Participation will require travel to Albany, New York, currently scheduled for July 21-23 or July 28-30, with the possibility of an additional session on August 26-28. MAP will cover all travel, lodging, and meal expenses and pay each participant an honorarium.

MAP and AIR are independent consulting firms with offices across the United States. For more information about MAP and Air please visit out Web site at www.edconsultants.com or AIR's Web site at www.air.org.

Please complete the enclosed profile sheet if you are interested in participating in this important research project and fax it to me at (530) 753-3270 at your earliest convenience. If you have any questions, please call Rich Seder or me at (530) 753-3130 or e-mail me at jrsmith@edconsultants.com.

I hope that you will be able to participate in what should prove to be a stimulating professional experience.

Sincerely,

James R. Smith
President

NY RESEARCH PROJECT**PROFESSIONAL JUDGMENT PANEL PARTICIPANT
LIST: JULY 21-23, 2003**

1. **Judi Aronson**, ES Principal, District 15, *PJP 1*
2. **Lucinda Barry**, Director of Special Education, Camden Central School District, *PJP 3*
3. **Richard Crandall**, Teacher West Valley Central School District, *PJP 4*
4. **Janet Derby**, HS Principal, Brunswick Central School District, *PJP 3*
5. **Peter Dillon**, HS Principal, New York Public City Schools District, *PJP 1*
6. **Bernie Dolan**, MS Principal and Director of Secondary Schools, Owego Appalachian School District, *PJP 3*
7. **Carmen Farina**, Superintendent, District 15, *PJP 1*
8. **Joe Farmer**, Retired Superintendent, Yonkers City School District, *PJP 2*
9. **Rick Freyman**, Assistant Superintendent for Business and Information Service, Bronxville Union Free School District, *PJP 3*
10. **Lynn Kandrac**, School Improvement Team Member, NYC Department of Education, *PJP 1*
11. **Barry Kaufman**, Teacher, Poughkeepsie City School District, *PJP 2*
12. **Karen Kemp**, Director of Special Programs, Cohoes City School District, *PJP 2*
13. **Irwin Kurz**, Deputy Superintendent, New York City Department of Education, *PJP 1*
14. **Rick Longhurst**, Assistant Superintendent for Support Services, Burnt Hills-Balston Lake Central School District, *PJP 3*
15. **Michael James Mugits**, ES Principal, Schuylerville Central School District, *PJP 4*
16. **Laura Nathanson**, ES Teacher, District 6, *PJP 1*
17. **Karen O'Brien**, Director of Special Education, Sullivan BOCES, *PJP 4*
18. **Sean O'Neill**, Special Education Teacher, Guilderland Central School District, *PJP 3*
19. **L. Oliver Robinson**, Superintendent, Mohonasen Central School District, *PJP 3*
20. **Regina Schlossberg**, MS Principal, New York City Public School District, *PJP 1*
21. **Jane Scura**, ES Principal, Rochester City School District, *PJP 2*
22. **Marlene Siegel**, Director of Linden Place Regional Operations Center, New York City Department of Education, *PJP 1*
23. **Bonnie Smith**, ES/MS Principal, West Valley Central School District, *PJP 4*
24. **Gerry Stuitje**, Assistant Superintendent, Lockport City School District, *PJP 2*
25. **Frederick Tarolli**, Superintendent, Greene Central School District, *PJP 4*
26. **Joe Thoman**, School Business Official, Iroquois School District, *PJP 4*
27. **Carol Tvelia**, IS Principal, Rocky Point School District, *PJP 3*
28. **Mark Wixson**, HS Principal, Sherrill City School District, *PJP 4*

**NY Research Project
Professional Judgment Panel Participant Profiles
July 21-23, 2003**

Judi Aronson

- Principal of a school of 730 students in grades Pre-K through 5 in the New York City area for the past 6 years; 54% of the students in her school are eligible for free or reduced-price meals; 29 years experience in K-12 education
- Holds a Masters of Education in Special Education
- Member of the ASCD, the NYESPA, and the New York Academy of Learning.
- Study Assignment: PJP 1

Lucinda Barry

- Director of Special Education for 420 students with disabilities, 3 years as an elementary school principal, 17 years of experience in education
- Masters in Education and Certificate of Advanced Study
- Member of Empire State Supervisors, Council for Exceptional Children, YMCA, and is a former board member of the Red Cross
- Study Assignment: PJP 3

Richard Crandall

- 31 years of experience as a Math teacher, 20 years as president of the West Valley Teachers' Association
- Member of the West Valley Teachers' Association, New York State United Teachers, American Federation of Teachers, and the Cattaragus Allegany Council of Presidents
- Recipient of the West Valley Teachers' Association Leadership Award and the South Western New York Regional Leadership Award
- Study Assignment: PJP 4

Janet Derby

- Over 14 years experience as a high school principal, 17 years experience as an elementary and high school teacher in both regular and special education classrooms. In addition, she worked as an assistant superintendent of instruction, a grant writer, and a coordinator of special services
- Holds an Ed.D. in Education Administration as well as a Masters Degree in Education.
- Member of ASCD and NASSP
- Study Assignment: PJP 3

Peter Dillon

- Principal of a high school with 300 students, 76.2% eligible for free or reduced price lunch; 6 years experience as a principal and 15 years total experience in K-12 education
- Masters Degree and Ed.D. candidate
- Member of ASCD, Phi Delta Kappa, the Teachers Network and the CSA, the AERA and the NASSP

- Recipient of several awards including three Superintendent's Recognition Award for Supervisors, CSA Effective Schools Award, Campaign for Fiscal Equity Demonstration School Award, the Trachtenberg Award for Union Leadership, and a Charles O. Thompson Scholar
- Study Assignment: PJP 1

Bernie Dolan

- 30 years of experience in education with 14 years experience as a middle school principal, and is currently Director of Secondary Schools for the Owego Appalachian Central School District
- Masters of Education and Certificate of Advanced Study
- Member of NASSP, SANNYS, ASCD
- Recipient of 3 Golden Apple awards and multiple nominations to Who's Who of American School Administrators
- Study Assignment: PJP 3

Carmen Farina

- More than 38 years experience in K-12 education; currently the Superintendent of Community District 15
- Holds two masters degrees
- Recipient of the OTTY Award ("Our Town" Newspaper Outstanding Contributor to Education on the Upper East Side), the UFT "Shining Star" Award, Outstanding New York City Public Servant Award, Distinguished Educator's Award from New York City Association of Supervisors and Curriculum Development, New York City Teacher of the Year Award (Reliance Award), District 15 Teacher of the Year Award and named Supervisor of the Year
- Study Assignment: PJP 1

Joe Farmer

- Recently retired Assistant Superintendent for Administration and Instruction for Yonkers City School District; 22 years experience in K-12 education total
- Holds a Masters Degree
- Study Assignment: PJP 2

Rick Freyman

- Currently the Assistant Superintendent for Business and Information Services for Ossining Public Schools which has 35% of its students eligible for free or reduced price meals; 33 years cumulative experience in K-12 education
- Holds a Masters and a CMBA
- Member of the New York State Association of School business Officials, the Association of School business Officials International, the New York State Government Finance Officers Association, Today's Students Tomorrow's Teachers, and many other associations.

- Recipient of the International Eagle Award from the ASBO International, the Philip B. Fredenburg Memorial Award for Outstanding Service, Westchester Putnam School Boards Association Board of Education Award for Career Service, and other awards.
- Study Assignment: PJP 3

Lynn Kandrac

- Currently the School Improvement Team Member at the New York City Department of Education, with additional experience as a Special Education Director; 15 years total experience in K-12 education
- Masters in Special Education, with 24 additional credits in School Administration and Supervision
- Study Assignment: PJP 1

Barry Kaufman

- 30 years experience as a Health Educator; President of the Poughkeepsie Public School Teachers' Association for the past four years
- Member of the American Association of Health, P.E., Recreation and Dance, New York State United Teachers, and the American Federation of Teachers
- Also a member of the AFT K-12 Program and Policy Council and NYSUT member of the 2003 Task Force on School Funding
- Study Assignment: PJP 2

Karen Kemp

- 24 years of experience in education; Currently the Director of Special Programs for the Cohoes City School District
- Holds a Masters Degree in education
- Member of the Association of for Supervision and Curriculum Development, Council for Exceptional Children, Council for Administrators of Special Education, New York State Alternate Education Association, and Phi Delta Kappa
- Recipient of the Outstanding Teacher Award, presented at the CEC National Association of School Psychologists, and co-authored two books and a character education program
- Study Assignment: PJP 2

Irwin Kurz

- 35 total years experience in K-12 education, with 14 years experience as a principal. Currently the Deputy Superintendent of the Division of Human Resources at the New York City Department of Education. Has past experience as the principal of a K-8 school with 1350 kids, 98% of whom were eligible for free or reduced price meals.
- Masters in Elementary Education and Sixth Year Certificate in Supervision and Administration
- Recipient of the Salvatori Prize for American Citizenship from the Heritage Foundation, Excellence in Education Initiatives Award (Borough President's Award)
- Study Assignment: PJP 1

Rick Longhurst

- 32 years cumulative experience in K-12 education with 22 years as an Assistant Superintendent of Support Services
- Masters in Education and Candidate for PH.D.
- Member of NYSASBO where he is the Education Committee Finance Chair
- Recipient of the Philip B. Fredenburg Memorial Award for Outstanding Service from the NYSASBO
- Study Assignment: PJP 3

Michael James Mugits

- 28 total years experience in K-12 education with 26 years experience as a principal; Currently the principal for an elementary school with an enrollment of 1,850; Has previously worked in an inner city school with up to 97% free/reduced price lunch students
- Holds a Masters of Education with 80 additional credits
- Member of the Harvard Principals' Center, National Elementary Principals' Association, Association for Supervision and Curriculum Development, School Administrators' Association of New York, and is a member of the board of directors for the Capital Area Principals' Center
- Recipient of Principal of the Year Award from the Capital Area School Development Association and the John and Mary O'Brien Award for Excellence in Education
- Study Assignment: PJP 4

Laura Nathanson

- Elementary School Teacher in a K-2 school with 350 students; 82% of the students in her school are eligible for free or reduced price meals; 5 years cumulative experience in K-12 education
- Holds a Masters in Elementary Education
- Chapter Leader of the United Federation of Teachers, Member of Reading Reform, Learning Leaders and School Leadership Team
- Recipient of the Partner in Education Award
- Study Assignment: PJP 1

Karen O'Brien

- Currently the Director of Special Education for Sullivan County BOCES which has 74% of its students eligible for free or reduced price meals; a total of 35 years experience in K-12 education
- Masters of Education and Certificate of Advanced Study
- Member of the Counsel of Administrators of Special Education, Association of Special Education Administrators and SANNYS
- Study Assignment: PJP 4

Sean O'Neill

- Cumulative 34 years experience in K-12 education with 31 years experience as a Special Education teacher

- Holds a Masters Degree
- Member of the Council for Exceptional Children, Council for Learning Disabilities, NYSUT, AFT, the NYSUT Task Force on School Finance and Phi Delta Kappa
- Also served as President of the Guilderland Teachers' Association, board member for the Council for Learning Disabilities, and board member for the NYS CEC Federation
- Study Assignment: PJP 3

L. Oliver Robinson

- Superintendent of Rotterdam-Mohonasen Central School District with 3300 students; 9 years total experience in K-12 education
- Doctorate Degree in Education and Masters Degree
- Member of the New York State Council of School Superintendents and the American Association of School Administration.
- Appointed co-chair of pathways to leadership committee, co-chair of Times Union Scholars Recognition Program Committee
- Study Assignment: PJP 3

Regina Schlossberg

- Principal of a 6-8 school with 636 students, 82% eligible for free or reduced price meals; 30 years total experience in K-12 education
- Masters in Education and Professional Diploma
- Member of ASCD and NASSP
- Selected as Assistant Principal of the Year of Queens High School
- Study Assignment: PJP 1

Jane Scura

- Currently an elementary school principal for a school that has 780 students with 99% eligible for free or reduced price meals; has 29 years experience in education
- Holds a Doctorate in Educational Leadership and Certificate of Advanced Study
- Member of the Council for Exceptional Children, International Reading Association, Administrators and Supervisors in Rochester, Rochester Council of Education Leadership, Association of Supervisors and Curriculum Development
- Recipient of the Paul Harris Fellow Award
- Study Assignment: PJP 2

Marlene Siegel

- Currently the Director of the Linden Place Regional Operations Center; cumulative 30 years experience in K-12 education, with 5 years experience as a Deputy Superintendent
- Holds a Professional Diploma in Educational Administration and a Masters of Science in the Teaching of Mathematics
- Member of Phi Delta Kappa
- Recipient of Supervisor/Administrator Recognition
- Study Assignment: PJP 1

Bonnie Smith

- 25 years in K-12 education with 4 years as an elementary school principal
- Holds a Masters Degree and a Certificate of Advanced Study
- Member of Phi Kappa Gamma and the Cattaraugus County Elementary Principals' Association
- Recipient of the Thanks to Teachers National Award and named 5 time Who's Who American Educators
- Study Assignment: PJP 4

Gerry Stuitje

- 23 total years experience in K-12 education; Currently the Assistant Superintendent for Finance and Management at Lockport City School District; His district has 39% of its 5,838 students eligible for free or reduced price meals.
- Holds a Masters of Science in Educational Administration and Policy Studies and a Certificate of Advanced Study
- Member of the Association of School business Officials International, the New York State Association of School Business Officials, the Western New York Association of School Business Officials, the New York State Association of Management Advocates for School Labor Affairs, the Government Finance Officers Association and the New York Association of Local Government Records Officers
- Study Assignment: PJP 2

Frederick Tarolli

- 28 cumulative years experience in K-12 education and has spent the last 17 years as a superintendent managing student populations from 270 to 1400 and budgets from \$3 million to \$14 million
- Holds a Ph.D. in Educational Administration and Supervision
- Member of New York State Council of School Superintendents, Association for Supervision and Curriculum Development, Phi Delta Kappa, Delaware-Chenango Superintendent's Association, Syracuse University Superintendents Association, and New York State School Boards Association
- Study Assignment: PJP 4

Joe Thoman

- 10 years teaching experience and 23 years as a School Business Official; currently the School Business Official for the Iroquois Central School District
- Masters in Secondary Education and a Certificate of Advanced Studies
- Member of NYS Association of School Business Officials, ASBO International, WNY Chapter of NYS ASO, WNY Association of School Personnel Administrators
- Presenter at the ASBOI 2001 Conference in Maryland, listed in Who's Who in the East, Who's Who in American Education, and the Dictionary of International Biography
- Study Assignment: PJP 4

Carol Tvelia

- Career encompasses 30 years experience in K-12 education including 4 years as a teacher, 5 years as a Curriculum/Instructional Leader, assistant principal, and concurrently an intermediate school principal and a curriculum designer
- Member of the Association for Curriculum and Development, Council for Administration and Supervision, National Association of Elementary Principals, National Association of Secondary Principals, Phi Delta Kappa, National/State/Long Island Social Studies Teachers Association, National Council of Teachers of Mathematics, National/NY Science Educators Leadership Association
- Recipient of Long Island Educator of the Month, Marquis Who's Who of American Women, Marquis Who's Who in American Education, and the Middle Level Science Teacher of the Year Award
- Study Assignment: PJP 3

Mark Wixson

- **Sherrill City School District**
- PJP 4

NY RESEARCH PROJECT**PROFESSIONAL JUDGMENT PANEL PARTICIPANT
LIST: JULY 28-30, 2003**

1. **Selina Ahoklui**, Teacher and Coordinator of Special Programs, Brooklyn School District, *PJP 1*
2. **Donald Benker**, HS Teacher, Kenmore School District, *PJP 3*
3. **Joan Colvin**, Assistant Superintendent for Business Affairs, Jericho Union Free School District, *PJP 3*
4. **Bruce Feig**, Chief Financial Officer, New York City Department of Education, *PJP 1*
5. **Bruce Fraser**, Director of Secondary Education and HS Principal, Lockport City School District, *PJP 2*
6. **Steve Frey**, HS Teacher, Yonkers City School District, *PJP 2*
7. **Michelle Hancock**, ES Principal, Rochester City School District, *PJP 2*
8. **Sandra Hassan**, Chief Educational Officer for MS/HS, Roosevelt School District, *PJP 2*
9. **Pam Hatfield**, School Business Administrator, Averill Park School District, *PJP 4*
10. **Frank Herstek**, Assistant Superintendent, Orleans/Niagara BOCES, *PJP 4*
11. **Gregory Hodge**, HS Principal, New York City #5, *PJP 1*
12. **Virginia Hutchinson**, ES Principal, New York City, *PJP 1*
13. **Mary Kruchinski**, ES Teacher, Salem Central School District, *PJP 4*
14. **Laura Lavine**, Director of Special Education, Liverpool Central School District, *PJP 3*
15. **Peter Litchka**, Superintendent, Kingston City School District, *PJP 3*
16. **Dan Lowengard**, Superintendent, Utica City School District, *PJP 2*
17. **Bertye Martino**, ES Principal, Chittenango Central School District, *PJP 4*
18. **John Metallo**, Superintendent, Middleburgh Central School District, *PJP 4*
19. **Nancy Needle**, District Administrator of Special Education, New York City Department of Education, *PJP 1*
20. **Dianne Olivet**, ES Principal, Vestal Central School District, *PJP 3*
21. **Lisa Parsons**, ES/MS/HS Principal, Copenhagen City School District, *PJP 4*
22. **Michael Reho**, MS/HS Principal, East Bloomfield Central School District, *PJP 3*
23. **Helen Santiago**, Superintendent, New York City Department of Education, *PJP 1*
24. **Rajni Shah**, School Business Official, Buffalo City School District, *PJP 2*
25. **Elba Spangenberg**, ES Principal, New York City Board of Education, *PJP 1*
26. **Joel Weiss**, MS Principal, Clarence Central School District, *PJP 4*

**NY Research Project
Professional Judgment Panel Participants Profiles
July 28-30, 2003**

Selina Ahoklui

- 40 years experience in K-12 education; currently a teacher of mathematics, the coordinator of Special Programs in her district and the coordinator of Project Peace at Brooklyn College Community Partnership for Research and Learning
- Doctorate Degree in Education and two Masters in Education
- Recipient of the New York State Teacher of the Year Award given by The Board for the Education of People of African Ancestry, named Title I Distinguished Educator, recipient of New York State Teacher of the Year Award given by the Department of Education, recipient of the NYNEX Award, American Federation of Teachers Award and many others.
- Director of the Family and Youth Empowerment Services, USA Inc. and a member of the New York State Professional Standards and Practices Board for Teaching as well as other associations.
- Study Assignment: PJP 1

Donald Benker

- 39 years experience as a junior high and high school Math Teacher, 30 years as president for the Kenmore Teachers Association
- Holds a masters degree
- Member of the Kenmore Teachers Association, New York State United Teachers, and the Executive Committee of New York State United Teachers
- Recipient of the Western New York Leadership Award, WNY Education Service Council Award, Kenmore Teachers Association Award, and was named Chair of the NYSUT Committee on School Finances
- Study Assignment: PJP 3

Joan Colvin

- Cumulative experience of 37 years in education, 20 years as an Assistant Superintendent for Business Affairs
- Holds a doctoral degree in Educational Leadership
- Member of NYSASBO and ASBO International
- Recipient of the Eagle Award International ASBO, Women's Coaching Association Central Valley Council Coach of the Year, and Outstanding Teacher of the Year, in addition has received commendations for Excellent Service to a Community - Gloversville and Service to a Professional Organization - NYASBO
- Study Assignment: PJP 3

Bruce Feig

- Currently the Chief Financial Officer for the New York City Department of Education.
- Holds a Master of Public Administration in Public Finance and an Master of Arts in Sociology

- Recipient of the Charles Evans Hughes Award for Lifetime Achievement in Public Service given by the American Society for Public Administration.
- Study Assignment: PJP 1

Bruce Fraser

- More than 20 years experience in K-12 education; Currently the superintendent and principal of a high school in Lockport City School District.
- Holds a Doctor of Education and a Master of Education in Education Administration
- Recipient of the Outstanding Dissertation research Award from the American Educational Finance Association and the Alumni Medal (University of Buffalo's highest award for Scholastic Athletic Achievement)
- Study Assignment: PJP 2

Steve Frey

- Cumulative 37 years experience in K-12 education; currently the teacher of a high school in Yonkers City School District.
- Holds Masters Degree in Education and 60 additional post graduate credits
- Recipient of several Teacher of the Year Awards given by the Jewish Council of the West and the Junior Achievement of the West. Named recipient of the Jenkins Award for Teacher of the Year.
- President of YFT, member of the Westchester Association of Social Studies Teachers, NYSUT, AFT, as well as many other organizations.
- Study Assignment: PJP 2

Michelle Hancock

- Currently the principal of an elementary school in the Rochester district with 560 students, 92% eligible for free or reduced price meals and 48% minority. Cumulative 28 years experience in K-12 education.
- Holds a Certificate of Advanced Study in Education Administration as well as a Masters Degree
- Member of ASCD, Phi Delta Kappa, NYS Association for Women in Administration (NYSAWA) and the National Alliance of Black School Educators (NABSE)
- Recipient of the Readling Award from Oswego University, the Pathfinderr's Award from the NYS Business Council, the National School Change Award from the American Association of Administrators and many others.
- Study Assignment: PJP 2

Sandra Hassan

- Currently the Chief Educational Officer for a Middle/High School
- Holds an Administrative Certificate
- Named Teacher of the Year by the Cuban Hands Across
- Member of President Bush's Testing and Standards Committee 1993-1994
- Member of the National Association of Secondary School Principals, Association of Supervisor and Curriculum Directors, the New Your City High School Principals Association and the New York City Council of Supervisors and Administrators

- Study Assignment: PJP 2

Pam Hatfield

- 25 years experience in education, currently the School Business Administrator for a district with a student population of over 3,400 students
- Holds a masters in Education Administration
- Member of International Association of School Business Officials, NYS Association of School Business Officials, and the Capitol Chapter of the Association of School Business Officials
- Study Assignment: PJP 4

Frank Herstek

- 34 years experience in Education with 10 years as an Assistant Superintendent for a BOCES with a student population of 46,000 students
- Holds a Ph.D.
- Member of the Council for Administrators of Special Education, Family and Children's Service, and the Mental Health Association
- Study Assignment: PJP 4

Gregory Hodge

- Over 20 years experience in K-12 education with 7 years experience as a principal. Currently the principal of a school grades 6-12 with 1180 kids, student population being 69% eligible for free or reduced price meals and 99% minority.
- Holds a Doctorate Degree in Education as four Masters Degrees.
- Recipient of the Heritage Award.
- Member of the AEEE.
- Study Assignment: PJP 1

Virginia Hutchinson

- Principal of a K-8 school with 508 students, 91.5% eligible for free or reduced price meals and 98.1% minority; cumulative of 33 years experience in K-12 education.
- Holds a Masters Degree
- Named Principal of the Year in 2002
- Member of the Reading Recovery Council, the ASCD and the CSA.
- Study Assignment: PJP 1

Mary Kruchinski

- 28 years as an elementary school teacher for a 900 student K-12 school
- Is a candidate for a masters and administration certificate
- Member of the Greater Capital Region Teacher Center and President of the Washington Academy Teachers' Association
- Study Assignment: PJP 4

Laura Lavine

- Cumulative 25 years experience in education, 10 years as an elementary school principal, currently Director of Special Education
- Doctoral candidate
- Member of the Onondaga County Republican Committee, William B. Hoyt Children and family Trust Fund Advisory Board, Temple Society of Concord, Syracuse/Onondaga County Youth Bureau Board, and the Onondaga County Runaway and Homeless Youth Advisory Board
- Study Assignment: PJP 3

Peter Litchka

- 32 years experience in education including teaching, Director of Curriculum and Instruction, currently Superintendent of Schools
- Holds a doctorate in Educational Leadership and Administration
- Member of NYS Council of School Superintendents, Association for Supervision and Curriculum,, and the American Association for School Administration
- Recipient of the Maryland Teacher of the Year, National Award for Excellence in Teaching Economics, and the Milken National Educator Award
- Study Assignment: PJP 3

Dan Lowengard

- 31 years experience in K-12 education with 8 years experience as a principal and more than 5 as a superintendent; Currently the superintendent of a district with 9,100 students with 70% eligible for free or reduced price meals.
- Holds a Masters Degree
- Member of Utica College Board of Trustees, WCNY Board of Directors, Syracuse University School of Education Advisory Board, NYS Small Cities Association Board, NYS Council of School Superintendents, Communities That Care, as well as many others.
- Study Assignment: PJP 2

Bertye Martino

- 35 years experience in education, 9 years as an elementary school principal of a rural school with a student population of 307
- Holds a Masters in School Administration and Supervision
- Member of the Madison County Youth Board, Mathematics Association, and a past board member of Eisenhower Grant in Washington, DC
- Study Assignment: PJP 4

John Metallo

- Cumulative 32 years of experience in education including 8 years as a high school principal and 10 years as a district superintendent
- Holds a doctorate in Educational Leadership
- Member of the NYS Council of School Superintendents, Editorial Board of Aspen Publications, Phi Delta Kappa, Pupil Benefits Plan Insurance Consortium Advisory

Board, City School District of Albany Staff Development Committee, City School District of Albany Comprehensive District Educational Planning Committee, National Council Teachers of English, among many other organizations.

- Recipient of the American School Boards' Association Magna Award, Principal of the Year, "Educator Who Most Affected My Life", Fulton County Service Award to Youth, SAANYS School Positive Public relations award, and the FFA Distinguished Service Award for Service to youth
- Study Assignment: PJP 4

Nancy Needle

- Cumulative 29 years in K-12 education and is currently a Special Education Director for New York City.
- Holds a Doctorate Degree in Education
- Member of the CEC and the ASCD
- Study Assignment: PJP 1

Dianne Olivet

- 26 years experience in education with 19 years in the classroom and 7 years an elementary school principal
- Holds a master and a certificate of advanced study in Educational Administration
- Member of Phi Kappa Delta, Association of Early Childhood Educators, and the Principals' Center at Harvard
- Study Assignment: PJP 3

Lisa Parsons,

- Currently the principal of a K-12 school
- Holds a Masters and a Certificate of Advanced Study in Educational Administration
- Study Assignment: PJP 4

Michael Reho

- 18 years experience in education with 5 years a middle school/high school principal in a school with a student population of 650
- Holds a Masters Degree in Education and a Certificate of Advanced Studies in Educational Administration
- Member of the National Association of Secondary School Principals, New York Staff Development Council, and the School Administrators Association of New York State
- Study Assignment: PJP 3

Helen Santiago

- Currently the superintendent of a community school district with 8,700 students, 69.4% eligible for free or reduced price meals and 85% minority; cumulative 32 years experience in K-12 education with 1 year experience as a principal and more than 3 years experience as a superintendent.
- Holds a Masters Degree in Urban Education with 28 credits in Supervision and Administration and 30 addition credits in other areas.

- Recipient of the Educator of the Year Award given by the New York City Association of Supervision and Curriculum, named Bilingual Educator of the Year and named Outstanding Educator by the New York City Association of Deputy Superintendents.
- Member of the Association of Supervision and Curriculum Development, the National Staff Development Council, and the National Association of Effective Schools.
- Study Assignment: PJP 1

Rajni Shah

- 19 years experience in K-12 education as a school business official; currently employed in a district with 45,000 students with 78% eligible for free or reduced price meals and 74% minority.
- Holds an MBA, CPA, CAS, SBA & SDA
- Member of the School Finance Advisory at SED of NY State, Finance Committee of ASBO International, Finance Committee of NYS ASBO, Association of School business Officials International, New York State Society of Certified Public Accountants, New York State Association of School Business Officials and others.
- PJP 2

Elba Spangenberg

- 32 years experience in K-12 education with 11 years experience as a principal; currently a Bilingual Instructor/Principal for the New York City Board of Education; school employed at has 1,120 students grades K-5 with 98% eligible for free or reduced price meals and 99.9% minority.
- Holds both a Doctorate Degree and a Masters Degree
- Recipient of several awards including the New York State Assembly Certificate of Merit, Youth Leadership Program Award the East Tremont Health Start Award, and the Principal of the Year Award, among many other additional awards.
- Member of PRO Ed and Lucero
- Study Assignment: PJP 1

Joel Weiss,

- Cumulative 35 years of experience in education, currently a principal for a 6-8 middle school with a student enrollment of 1,260
- Holds a Master Degree and Administrative Certificate
- Member of PDK, Western New York School Principals Association, Committee for Identifying Educational Leadership, and ADCD
- Recipient of the Teacher of the Year Award - Buffalo, Middle Level Liaison to the New York State Education Department, and the Jayne K. Rand Award
- Study Assignment: PJP 4

INSTRUCTIONS

PJP 1

Introduction

Please read this introduction entirely before beginning any of the tasks.

The purpose of this project is for your team to describe educational programs that, in the professional judgment of its members, will provide an adequate opportunity for the specified student populations to meet the expectations described in Exhibit 1. The program design should define the type and quantity of resources (e.g., personnel, supplies, equipment) necessary to deliver instruction to the students described in the assumptions. MAP/AIR will impute prices for these resources based on the best available market data.

Specifically, your task is to design adequate instructional and support programs for students in Kindergarten through 12th grade that you are confident will meet the expectations specified in Exhibit 1 for the student populations described in the assumptions listed below. As you move from exercise to exercise, please be mindful of any changes in student populations, no matter how subtle, as you design your instructional and support programs. You should approach this task as if it were a real assignment, in a real school district in which you were employed. The program design should be one that you would reasonably expect to be adopted and funded by a school board or state legislature comprised of knowledgeable, well intentioned lay persons.

With the exception of the constraints imposed by these instructions, you are free to configure your programs in any way that you are confident will deliver the capacities. The programs should be founded on your professional judgment and to the extent possible, high quality research. They should be practical and have a reasonable chance of being implemented successfully by competent educators.

You must take the assumptions as given, even if they are not consistent with conditions in your district.

Do not take into account sources of funding as you design your program. For example, the fact that some of the costs of the program you design may be funded through federal categorical programs should not influence your design.

In all but Task #1, teams will work independently. You should not discuss the work of your team with members of other teams until instructed to do so by a facilitator.

Pacing

From our experience working with other educators on similar projects, the most effective groups first decide the nature of the program they would provide and then proceed with staffing the program and allocating resources accordingly. For example, class size is derived from program design rather than vice versa.

A second characteristic of the more effective groups is that they estimate the total time necessary to complete all of the exercises and allocate their time as necessary. This is particularly important to avoid giving short shrift to secondary program design, which, by its nature can be very complex, particularly given the need to design a master schedule for the high school. As a rule of thumb, by the end of the first day you should have completed the design of your elementary school program and, at least, to have begun design of the middle school program. You should have completed Tasks 1-2A by mid-afternoon of the second day, and Tasks 3-7 by noon on the third day.

TASK ASSUMPTIONS

Exhibit 1

Desired Educational Outcomes

The federal No Child Left Behind Act and state law require *all* students in every school district to meet the Regents Learning Standards within the next 11 years and to make steady progress toward that goal each year. As of 2005, all high school students (except for certain special education students) will be required to achieve a passing score of 65 on the Regents' examinations in English, social studies, mathematics, and science to receive a high school diploma. As of the 2005-06 school year, students in grades 3-8 will be tested in English, and mathematics (and shortly thereafter in science) to determine whether they are making satisfactory progress toward meeting the Learning Standards. Rates of yearly progress toward these goals will be disaggregated by racial, economic, disability and limited English proficiency categories.

Your job is to design an instructional program that will provide *all* students in the school a full opportunity to meet the Regents Learning Standards, and to attain a Regents' diploma. For students in the early grades and preschool, this means designing an instructional program that will seek to address any learning problems with which students enter school. For students further along in their educational careers, it means addressing any deep-rooted educational deficiencies that may have developed as thoroughly as possible, and minimizing dropout rates.

School and District Assumptions

1. The elementary school serves children Kindergarten through Grade 5, with an enrollment of 774. Enrollments are 129 students at each grade level.
2. The middle school is comprised of grades 6 through 8, with an enrollment of 951. Enrollments are 317 at each grade level.
3. The high school is comprised of grades 9 through 12, with an enrollment of 1,184. Enrollments are 296 at each grade level.
4. Assume that the student population in each school reflects the demographic characteristics of the district averages.
5. All personnel are state-certified in the subject areas that they are teaching; salaries are adequate to attract and retain certified faculty and staff.
6. Facilities are in place and funding for facilities improvements are not part of this exercise. If, however, the program you are designing would require any major changes in

the current general state of facilities in the district, please briefly note what those changes would be.

7. On-going facilities maintenance and operations are considered a district expense, are assumed to continue at their current level and cannot be changed.
8. Assume that the program you are designing is for an existing school that has the amount of supplies, equipment, and textbooks that is typical of NYC schools in New York State today; you may suggest changes or additions to current levels of supplies, equipment, and textbooks, but if you do so, you must describe how these changes will contribute to the specified outcomes.
9. Assume that the school has computer technology existing and that the age of the computers, the amount of software, internet access, and teacher training is typical of NYC schools in New York State today. You may suggest changes or additions to current technology arrangement, but if you do so, you must describe how these changes will contribute to the specified outcomes.
10. Assume statewide average distribution of disability and severity across the district. Based on your professional judgment of what types of special education students should be served and what types of services should be provided at neighborhood schools, design appropriate special education instructional programs at each school level (i.e., elementary, middle, high).

You need not discuss/design special education programs that you do not believe are best provided at neighborhood schools, e.g., programs in separate facilities or that are clustered only at designated neighborhood schools. A separate special education committee will meet in August to derive a full description of the special education program for each district.

You also do not need to describe services for any special education related services, e.g., speech or physical therapy. The special education committee that will meet in August will cover these on a district-wide basis. Therefore, for the most part, you should be primarily describing special education resource specialist programs and any related need for special education aides at the school level.

Also, please describe the degree to which special education students should be included in general education classrooms and any changes that should be made to the general classroom descriptions, e.g., changes in class size or additional aide time that may be needed. Please be as specific as you can about the types of students (e.g., primary category of disability) you believe should be included and whether this will differ by school level. This specificity in regard to the special education students you believe should be fully, or partly, mainstreamed into general education settings will provide important guidance to the special education panels.

These panels will take what you provide as input to be used in specifying a full set of special education programs and services for the district. As an example, if your general education panel expressed the opinion that all special education students should be fully included in general education classrooms and specified resources within these general education classrooms accordingly, the special education panels would have no need to specify any separate settings (e.g., special education self-contained classes or separate special education facilities.) Being as specific as possible about the special education students you are including within general classroom settings will provide important input for the work of the subsequent special education panels.

11. The line item budget for district administration is the amount that the district charges these schools, is adequate for district-level operations and cannot be changed.
12. The line item budget for transportation will be assumed to continue at current levels. If, however, the program you are designing would require any major changes in the current level of transportation funding in the district, please briefly note what those changes would be.
13. Multi-grade, multi-level classes, block schedules and other non-traditional organization structures are permissible.
14. You may design part-time or full-day preschool, full-day kindergarten, extended-day programs, summer school, or other support programs if they are necessary to produce the required outcomes. You must define the population who would receive such services and you must justify such services by describing how they will contribute to the specified outcomes. Assume that the total number of preschool age children at each age level is equal to the number of first grade students and that their demographic characteristics are consistent with district averages described in the exercises.

Task #1: Confirming Elements

The table below tentatively lists elements of typical elementary, middle, and high school educational programs. Your first task is to review these elements and suggest any additions, deletions, or revisions. For this task only, all teams collaborate. In order to make the products of your work more generalizable we prefer more generic descriptions. For example, in many cases it will be possible and desirable to subsume specific elements under a more general category (e.g., reading specialist under pupil support). Our goal is to capture all resources, but not necessarily list them in great detail.

Program Elements

A. Personnel	B. Supplies & Materials
1. Teachers	C. Equipment & Technology
2. Substitutes	D. Student Activities
3. Aides	E. Professional Development
4. Pupil Support Staff	F. Assessment
a. Guidance Counselors	G. Food Service
b. School Psychologists	H. Special Education
c. Social Workers	I. District Expenditures
d. Other	1. Maintenance & Operations
5. Nurses	2. Central & Mid-Level Administration
6. Librarians	3. Transportation
7. Principals	4. Debt Service Principle & Interest
8. Assistant Principals	
9. Other Prof. Staff	
10. Clerical/Data Entry	

Task #2: Develop Programs

In the simplest terms, your team is to develop and describe elementary, middle, and high school educational programs and specify the resources necessary to deliver them. Schools are configured K-5, 6-8, and 9-12. Enrollment is 774 elementary, 951 middle, 1,184 high school. For each school describe the nature of the instructional and support programs and the specific skills and knowledge that would be introduced or reinforced in each grade or course. Be as specific as possible given the time available. From your description, professional educators who are not part of your discussion should be able to understand the nature of the program you have designed and how it relates to the expectations in Exhibit 1.

The student population in the district:

- 1.5% of the student population is identified LEP
- 34.2% of the student population is eligible for free or reduced price lunch
- 6.7% of the student population has been identified as Learning Disabled or Speech & Language Disabled
- 3.1% of the student population is identified special education with handicaps other than Learning Disabled (LD) and Speech and Language (SL)

Products for Task #2

Use the computer provided to your team to record your work.

Each team is provided with Exhibits Task 2 A-C (resource allocation for each school level – A=Elementary School, B=Middle School, and C=High School) in the form of an electronic spreadsheet. You will use this spreadsheet to record the quantities of each resource necessary to deliver the program you design. Record all other work on the word processing program provided.

1. Describe the kindergarten through grade 5 educational program your team developed. Assign teachers and students to grade levels. Describe how other instructional employees (including administrators and pupil support) would be deployed.

In instances where an employee works in this school less than full time, allocate only the fraction of full time (FTE) necessary to deliver the educational program with the resources available. For example a teacher who teaches half time would count as 0.5 FTE. Keep in mind all assumptions listed above.

2. Describe the grade 6 through grade 8 educational program your team developed. Include a course schedule and assign enrollment or class sizes in sufficient detail to determine how teachers and other instructional employees (including administrators and pupil support) would be deployed.
3. Describe the grade 9 through grade 12 educational program your team developed. Include a course schedule and assign enrollment or class sizes in sufficient detail to

determine how teachers and other instructional employees (including administrators and pupil support) would be deployed.

4. Describe any preschool, extended-day programs, or other support programs necessary to produce the required outcomes. You must define the population who would receive such services, and you must justify such services by describing why they are necessary and how they will contribute to the specified outcomes. Refer to research results wherever possible.
5. List any additional assumptions or concerns that are necessary to understanding the educational program developed by your team.

Task #2A: Programs for Prototypical Students

As a check on the adequacy of the program you have designed, describe the educational experience of three prototypical students who would be educated in this school district. Beginning with kindergarten (or preschool) and progressing through grade 12, describe specifically where and how the opportunity to meet the expectations described in Exhibit 1 will be provided to each of the students described below. Keep in mind that *all* students are entitled to an educational program consistent with these expectations.

Prototypical Students

Student X does not plan to attend a four-year college. X may begin working immediately after high school or may attend a post-secondary vocational program. X's academic test scores are typically in the 40th to 70th percentile.

Student Y is disadvantaged and struggles with academics. Y's academic test scores are typically somewhere near the 10th to 30th percentile.

Student Z is college bound. Z is highly motivated and plans to enroll at a major university. Z's test scores are consistently at or above the 80th percentile.

Products for Task #2A

1. Describe the elementary, middle, and high school educational programs experienced by students X, Y, and Z indicating where each would acquire the skills and knowledge specified in the Exhibit 1.
2. Provide team answers to the following questions.
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the K-5 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to the all of the school's students? _____
 - b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? _____
 - c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 9-12 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? _____

Comments:

Task #3: New School Assumptions

Assume that all of the conditions described in the Assumptions 1-14 remain unchanged; consider a district with the following student demographics:

The student population in the district:

- 9.7% of the student population is identified LEP
- 65.8% of the student population is eligible for free or reduced price lunch
- 6.7% of the student population has been identified as Learning Disabled or Speech & Language Disabled
- 3.1% of the student population is identified special education with handicaps other than Learning Disabled (LD) and Speech and Language (SL)

Do these changes in assumptions affect your confidence levels stated in Task 2?

yes no

If no, please proceed to Task #4. Otherwise, please continue with Tasks 3 and 3A.

Products for Task #3 (Use Exhibits Task 3 D-F as appropriate)

What changes, if any, would you make to the programs you have just designed as a result of this changed assumption? Specifically:

1. Describe the kindergarten (or preschool) through grade 5 educational program your team developed. Assign teachers and students to grade levels. Describe how other instructional employees (including administrators and pupil support) would be deployed.
2. Describe the grade 6 through grade 8 educational program your team developed. Include a course schedule and assign enrollment or class sizes in sufficient detail to determine how teachers and other instructional employees (including administrators and pupil support) would be deployed.
3. Describe the grade 9 through grade 12 educational program your team developed. Include a course schedule and assign enrollment or class sizes in sufficient detail to determine how teachers and other instructional employees (including administrators and pupil support) would be deployed.
4. Describe any preschool, extended-day programs, or other support programs necessary to produce the required outcomes. You must define the population who would receive such services, and you must justify such services by describing why they are necessary and how they will contribute to the specified outcomes. Refer to research results wherever possible.
5. List any additional assumptions or concerns that are necessary to understanding the educational program developed by your team.

Task #3A: Programs for Prototypical Students

(Complete only if there were program changes under the new assumptions)

As a check on the adequacy of the program you have designed, describe the educational experience of three prototypical students who would be educated in this school district. Beginning with kindergarten (or preschool) and progressing through grade 12, describe specifically where and how the opportunity to meet the expectations described in Exhibit 1 will be provided to each of the students described below. Keep in mind that *all* students are entitled to an educational program consistent with these expectations.

Prototypical Students

Student X does not plan to attend a four-year college. X may begin working immediately after high school or may attend a post-secondary vocational program. X's academic test scores are typically in the 40th to 70th percentile.

Student Y is disadvantaged and struggles with academics. Y's academic test scores are typically somewhere near the 10th to 30th percentile.

Student Z is college bound. Z is highly motivated and plans to enroll at a major university. Z's test scores are consistently at or above the 80th percentile.

Products for Task #3A

1. Describe the elementary, middle, and high school educational program experienced by students X, Y, and Z, indicating where each would acquire the skills and knowledge specified in the Exhibit 1.
2. Provide team answers to the following questions:
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the K-5 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to the all of the school's students? _____
 - b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? _____

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 9-12 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? _____

Comments:

Task #4: New School Assumptions

Assume that all of the conditions described in the Assumptions 1-14 remain unchanged; consider a district with the following student demographics:

The student population in the district:

- 9.7% of the student population is identified LEP
- 85.3% of the student population is eligible for free or reduced price lunch
- 6.7% of the student population has been identified as Learning Disabled or Speech & Language Disabled
- 3.1% of the student population is identified special education with handicaps other than Learning Disabled (LD) and Speech and Language (SL)

Do these changes in assumptions affect your confidence levels stated in Task 2?

yes no

If no, please proceed to Task #5. Otherwise, please continue with Tasks 4 and 4A.

Products for Task #4 (Use Exhibits Task 4 G-I as appropriate)

What changes, if any, would you make to the programs you have just designed as a result of this changed assumption? Specifically:

1. Describe the kindergarten (or preschool) through grade 5 educational program your team developed. Assign teachers and students to grade levels. Describe how other instructional employees (including administrators and pupil support) would be deployed.
2. Describe the grade 6 through grade 8 educational program your team developed. Include a course schedule and assign enrollment or class sizes in sufficient detail to determine how teachers and other instructional employees (including administrators and pupil support) would be deployed.
3. Describe the grade 9 through grade 12 educational program your team developed. Include a course schedule and assign enrollment or class sizes in sufficient detail to determine how teachers and other instructional employees (including administrators and pupil support) would be deployed.
4. Describe any preschool, extended-day programs, or other support programs necessary to produce the required outcomes. You must define the population who would receive such services, and you must justify such services by describing why they are necessary and how they will contribute to the specified outcomes. Refer to research results wherever possible.
5. List any additional assumptions or concerns that are necessary to understanding the educational program developed by your team.

Task #4A: Programs for Prototypical Students*(Complete only if there were program changes under the new assumptions)*

As a check on the adequacy of the program you have designed, describe the educational experience of three prototypical students who would be educated in this school district. Beginning with kindergarten (or preschool) and progressing through grade 12, describe specifically where and how the opportunity to meet the expectations described in Exhibit 1 will be provided to each of the students described below. Keep in mind that *all* students are entitled to an educational program consistent with these expectations.

Prototypical Students

Student X does not plan to attend a four-year college. X may begin working immediately after high school or may attend a post-secondary vocational program. X's academic test scores are typically in the 40th to 70th percentile.

Student Y is disadvantaged and struggles with academics. Y's academic test scores are typically somewhere near the 10th to 30th percentile.

Student Z is college bound. Z is highly motivated and plans to enroll at a major university. Z's test scores are consistently at or above the 80th percentile.

Products for Task #4A

1. Describe the elementary, middle, and high school educational program experienced by students X, Y, and Z, indicating where each would acquire the skills and knowledge specified in the Exhibit 1.

2. Provide team answers to the following questions:
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the K-5 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to the all of the school's students? _____

 - b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? _____

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 9-12 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? _____

Comments:

Task #5: New School Assumptions

Assume that all of the conditions described in the Assumptions 1-14 remain unchanged; consider a district with the following student demographics:

The student population in the district:

- 9.7% of the student population is identified LEP
- 93.0% of the student population is eligible for free or reduced price lunch
- 6.7% of the student population has been identified as Learning Disabled or Speech & Language Disabled
- 3.1% of the student population is identified special education with handicaps other than Learning Disabled (LD) and Speech and Language (SL)

Do these changes in assumptions affect your confidence levels stated in Task 2?

yes no

If no, please proceed to Task #6. Otherwise, please continue with Tasks 5 and 5A.

Products for Task #5 (Use Exhibits Task 5 J-L as appropriate)

What changes, if any, would you make to the programs you have just designed as a result of this changed assumption? Specifically:

1. Describe the kindergarten (or preschool) through grade 5 educational program your team developed. Assign teachers and students to grade levels. Describe how other instructional employees (including administrators and pupil support) would be deployed.
2. Describe the grade 6 through grade 8 educational program your team developed. Include a course schedule and assign enrollment or class sizes in sufficient detail to determine how teachers and other instructional employees (including administrators and pupil support) would be deployed.
3. Describe the grade 9 through grade 12 educational program your team developed. Include a course schedule and assign enrollment or class sizes in sufficient detail to determine how teachers and other instructional employees (including administrators and pupil support) would be deployed.
4. Describe any preschool, extended-day programs, or other support programs necessary to produce the required outcomes. You must define the population who would receive such services, and you must justify such services by describing why they are necessary and how they will contribute to the specified outcomes. Refer to research results wherever possible.

5. List any additional assumptions or concerns that are necessary to understanding the educational program developed by your team.

Task #5A: Programs for Prototypical Students

(Complete only if there were program changes under the new assumptions)

As a check on the adequacy of the program you have designed, describe the educational experience of three prototypical students who would be educated in this school district. Beginning with kindergarten (or preschool) and progressing through grade 12, describe specifically where and how the opportunity to meet the expectations described in Exhibit 1 will be provided to each of the students described below. Keep in mind that *all* students are entitled to an educational program consistent with these expectations.

Prototypical Students

Student X does not plan to attend a four-year college. X may begin working immediately after high school or may attend a post-secondary vocational program. X's academic test scores are typically in the 40th to 70th percentile.

Student Y is disadvantaged and struggles with academics. Y's academic test scores are typically somewhere near the 10th to 30th percentile.

Student Z is college bound. Z is highly motivated and plans to enroll at a major university. Z's test scores are consistently at or above the 80th percentile.

Products for Task #5A

1. Describe the elementary, middle, and high school educational program experienced by students X, Y, and Z, indicating where each would acquire the skills and knowledge specified in the Exhibit 1.
2. Provide team answers to the following questions:
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the K-5 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to the all of the school's students? _____
 - b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? _____

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 9-12 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? _____

Comments:

Task #6: New School Assumptions

Assume that all of the conditions described in the Assumptions 1-14 remain unchanged; consider a district with the following student demographics:

The student population in the district:

- 26.7% of the student population is identified LEP
- 96.6% of the student population is eligible for free or reduced price lunch
- 6.7% of the student population has been identified as Learning Disabled or Speech & Language Disabled
- 3.1% of the student population is identified special education with handicaps other than Learning Disabled (LD) and Speech and Language (SL)

Do these changes in assumptions affect your confidence levels stated in Task 2?

yes no

If no, please proceed to Task #7. Otherwise, please continue with Tasks 6 and 6A.

Products for Task #6 (Use Exhibits Task 6 M-O as appropriate)

What changes, if any, would you make to the programs you have just designed as a result of this changed assumption? Specifically:

1. Describe the kindergarten (or preschool) through grade 5 educational program your team developed. Assign teachers and students to grade levels. Describe how other instructional employees (including administrators and pupil support) would be deployed.
2. Describe the grade 6 through grade 8 educational program your team developed. Include a course schedule and assign enrollment or class sizes in sufficient detail to determine how teachers and other instructional employees (including administrators and pupil support) would be deployed.
3. Describe the grade 9 through grade 12 educational program your team developed. Include a course schedule and assign enrollment or class sizes in sufficient detail to determine how teachers and other instructional employees (including administrators and pupil support) would be deployed.
4. Describe any preschool, extended-day programs, or other support programs necessary to produce the required outcomes. You must define the population who would receive such services, and you must justify such services by describing why they are necessary and how they will contribute to the specified outcomes. Refer to research results wherever possible.

5. List any additional assumptions or concerns that are necessary to understanding the educational program developed by your team.

Task #6A: Programs for Prototypical Students

(Complete only if there were program changes under the new assumptions)

As a check on the adequacy of the program you have designed, describe the educational experience of three prototypical students who would be educated in this school district. Beginning with kindergarten (or preschool) and progressing through grade 12, describe specifically where and how the opportunity to meet the expectations described in Exhibit 1 will be provided to each of the students described below. Keep in mind that *all* students are entitled to an educational program consistent with these expectations.

Prototypical Students

Student X does not plan to attend a four-year college. X may begin working immediately after high school or may attend a post-secondary vocational program. X's academic test scores are typically in the 40th to 70th percentile.

Student Y is disadvantaged and struggles with academics. Y's academic test scores are typically somewhere near the 10th to 30th percentile.

Student Z is college bound. Z is highly motivated and plans to enroll at a major university. Z's test scores are consistently at or above the 80th percentile.

Products for Task #6A

1. Describe the elementary, middle, and high school educational program experienced by students X, Y, and Z, indicating where each would acquire the skills and knowledge specified in the Exhibit 1.
2. Provide team answers to the following questions:
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the K-5 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to the all of the school's students? _____
 - b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? _____
 - c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 9-12 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? _____

Comments:

Task #7: Evaluation and Feedback

This task also is to be completed independently by individual participants.

Each participant is asked to answer the following questions. On a scale of 1 to 5, with 5 being *strongly agree* and 1 being *do not agree*.

- a) The facilities and other meeting arrangements were adequate. _____
- b) This was a rewarding professional experience. _____
- c) The programs designed and the responses to the various questions represent the professional consensus of the team members. _____
- d) I was given the opportunity to express my professional opinion on all of the products produced by my team. _____
- e) The facilitators did not impose their values or opinions on me. _____
- f) No one, other than team members, tried to influence the team's deliberations or its conclusions. _____
- g) The programs developed by my team would be realistic in the context of the school district where I work. _____

If your answer to any of the above was less than 3, please explain.

Comments:

Name

Social Security Number
(Necessary for honorarium processing)

STRATEGIES FOR IMPROVING EDUCATIONAL OUTCOMES: A BRIEF SYNTHESIS OF THE LITERATURE

There are a great many strategies that have been proposed to improve educational outcomes, and there is a substantial literature focused on determining the effectiveness of these strategies. This informational document has been created to provide a summary of this literature for some of the more prominent strategies that have been proposed and evaluated.⁷ Where possible, we have included selected references of research that address the efficacy of the presented strategies.⁸ This document, in no way, is intended as an endorsement of any particular strategy or set of strategies. Rather, it simply provides some documentation of the available evidence and should serve only as a background for the deliberations of the professional judgment panels organized for this project.

- **Class Size** – Perhaps the most pervasive debate concerning educational reform has been whether class-size reduction is an effective method to improve academic achievement. By far, the Tennessee STAR project (Student-Teacher Achievement Ratio) has been the most widely cited study of class-size reduction to date. The results of several independent analyses of this experimental design study reveals both concurrent and long-term positive effects on achievement associated with small, single-teacher classes in kindergarten through the third grade, particularly for low-income, minority students (Finn and Achilles, 1990; Gerber, Finn, Achilles & Zaharias, 2001; Grismer, 1999; Krueger and Whitmore, 2001; Mishel & Rothstein, 2002). However, despite the STAR results there is still little consensus among researchers that reducing class size definitively improves academic achievement (Hanushek, 1986).
- **Extra Help Strategy for Struggling Students** – Students considered at risk of academic failure generally include those from lower-income backgrounds, those struggling to learn English, and those with learning and other mild disabilities. Some literature suggests that the most powerful and effective strategy is individual one-to-one tutoring, provided by licensed teachers (Shanahan, 1998; Wasik & Slavin, 1993). From the practice of many comprehensive school designs, a number of fully licensed teacher tutors are hired to attend to struggling students, with a set minimum regardless of the number of students having learning difficulties. Schools could deploy these resources in ways other than individual tutoring, though quite a bit of research shows tutoring to be the most effective strategy.
- **Full-Day Kindergarten** – Research on primary education contends that full-day kindergarten, particularly for students from low-income backgrounds, also has

⁷ Much of what follows draws on strategies considered to be “state-of-the-art” in the report by Odden, Fermanich and Picus (2003), which addresses school finance adequacy for the state of Kentucky, including some excerpts directly taken from the work.

⁸ We have presented the characteristics/practices in alphabetical order in order to prevent any misinterpretation of the information being listed in order of necessity or importance.

significant, positive impacts on student learning in the early elementary grades (Slavin, Karweit & Wasik, 1994).

- **Instructional Facilitators** – Many program designs call for school-based instructional facilitators who assist teachers in researching both materials and strategies for the most effective means of presenting various areas of the curriculum to students (Odden & Busch, 1998). More technology-intensive designs might also require a technology coordinator. Furthermore, several designs suggest that while one facilitator might be sufficient for the first year, an additional facilitator would be needed in subsequent years. In addition, for some technology designs, a full-time facilitator is recommended, who spends at least halftime as the technology expert. These individuals would coordinate the instructional program, provide ongoing coaching and mentoring (which may be deemed necessary for teachers to change and improve their instructional practice), and would include the technological expertise to fix small problems with computer systems, install software, and connect computer equipment so it can be used for both instruction and management issues (also see section on Technology, below).
- **Mentoring** – Some comprehensive school designs have made use of school-based mentorship programs to enhance student outcomes. This strategy has been shown to promote better schooling outcomes in terms of attendance, educational attainment, and attitudes towards learning (Jekielek, Moore & Hair, 2002). In addition, there is research suggesting that school-based mentorship programs serve as effective complements to more traditional community-based programs (Herrera, Sipe & McClanahan, 2000).
- **Ongoing Professional Development and Training** – Research on effective training and development for education professionals, i.e., professional development that produces changes in classroom practices that lead to improved student achievement, suggests that substantial investments of this type are integral to the implementation of successful comprehensive school designs.⁹ Note, this is in addition to any resources allocated to providing a daily planning and professional development period during the regular school day (see next section on Planning and Preparation). Additionally, it should be noted that much research suggests that professional development should occur in all subjects, although some studies have shown investments in professional development to be most effective in math and science (Wenglinsky, 2000). However, other works of research challenge the view that the modest levels of professional development currently found in schools can significantly improve educational outcomes of those children with the greatest need (Jacob & Lefgren, 2002).
- **Planning and Preparation Time/Collaborative Professional Development** – Some argue that teachers need some time during the regular school day for collaborative planning in addition to ongoing curricular and professional development and review. One way to provide for this is to allow the use of a

⁹ For a survey on methods states are using to improve teacher quality see Hirsch, Koppich & Knapp (2001). A scientific work providing evidence as to the effectiveness of in-service teacher training is Angrist & Lavy (2001).

significant portion of planning and preparation time within the normal school day (Odden & Archibald, 2001). In addition, some research suggests that a significant number of hours in professional development should be provided annually for each teacher and include the following characteristics (Birman, Desimone, Porter & Garet, 2000; Cohen & Hill, 2001; Desimone, et al., 2002a; Desimone, et al. 2002b; Garet, Birman, Porter, Desimone & Herman, 1999):

- a) Include extensive coaching in the teacher's classroom.
- b) Cover all faculty in a school.
- c) Focus heavily on the subject content that each teacher covers.
- d) Be aligned with state/district content standards and aligned tests.
- **Pre-School** – Some research has shown that high-quality preschool, particularly for students from lower-income backgrounds, has significant long-term impacts on student academic achievement, as well as other desired social and community outcomes (Barnett, 1995, 1996, 2000; Karoly, Greenwood, Everingham, Hoube, Kilburn, Rydell, Sanders, Chiesa, 1998; Slavin, Karweit & Wasik, 1994).
- **School Size** – The research on school size is arguably clearer than that on class size; several studies assert that the optimum size for elementary schools is 300-600 and for secondary schools is 600-900 (Andrews, Duncombe & Yinger, 2002; Lee & Smith, 1997; Raywid, 1997/1998). For the purposes of this study, elementary, middle and high school sizes will be set to the average enrollment within the PJP category you participate in. However, in the exercises your group will complete, schools may be divided into “schools-within-a-school.” This may mean creating several independent “schools” within existing buildings, each with a separate student body, separate principal, etc. (Murphy, Beck, Crawford, Hodges & McGaughy, 2001). For secondary schools, research also finds that curriculum offerings should emphasize a large core of academic classes for all students (Bryk, Lee & Holland, 1993; Lee, Croninger & Smith, 1997; Newman, 1997).

Related to the school size issue is choosing the desired amount of administrative staff.

Clearly, each school unit needs a principal. However, while all comprehensive school designs include a principal, some fail to include assistant principal positions. Drawing on the above findings related to school size, many designs recommend that instead of one school with a large number of students, school buildings with large numbers of students should be sub-divided into school units within the school, with each unit having a principal.

- **Student Support/Family Outreach** – Many comprehensive school designs require a student support, family outreach strategy be put in place. For example, Wehalge & Stone (1995) find that school-based student support programs that are integrated into the organization of the school as a whole, as opposed to a separate bureaucratic unit, create a focused vision and sense of shared responsibility, which results in better student outcomes. In addition, parental involvement in the educational process is shown to have positive effects on grades, test scores, long-term academic achievement, and behavior (Henderson, 1988; Rich, 1985). Various designs suggest different ways to provide this program entity. In terms of necessary resources, the more needy the student body, the more comprehensive

such a strategy will have to be. The general standard involves assigning one licensed professional for a set proportion of the student body (say, for every 20% of the student body) coming from a low-income background, with a minimum of one for each school.

- **Technology** – A practice commonly proposed in comprehensive school designs is to embed technology in the instructional program and school management strategies. Previous research has demonstrated higher levels of students' motivation associated with the use of educational technology (The CEO Forum on Education and Technology, 2002) in addition to some positive effects on mathematics achievement (Wenglinsky, 1998). However, there also exists works that call into question the efficacy of technology in the classroom (Angrist and Lavy, 2001). Based on school designs that included such technology, one plausible assumption is that schools choosing to make this investment (with little or no initial technology being used) would have to purchase, update and maintain hardware and software over a relatively long period of time, which could be viewed as an annual operating cost (Odden, 1997). In addition, at least one classroom technology integration specialist per school would be needed to plan with teachers how to best integrate computer use into the curriculum and reconcile new methods of instruction which effectively combine the use of technology with traditional methods. While the potential student population benefiting from technology encompasses all individuals, certain groups could be targeted such as ethnic minorities struggling to learn English or special-needs children with speech difficulties for whom auditory skill development is deemed necessary.

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ANALYSIS OF THE DATA DERIVED FROM THE PROFESSIONAL JUDGMENT PANELS

I. Introduction

The worksheets presented in appendices A, B, and C of this document represent statistical summaries of the data generated in the exercises conducted by the general and special education professional judgment panels (PJP)s during the summer of 2003. The general education PJPs met in July of 2003 and were organized around four categories of districts:¹⁰

- PJP 1 - *New York City*
- PJP 2 - *Mid- to Large-Sized Cities, Urban Fringes and Other Districts With High Needs-to-Resource-Capacity* – Districts other than New York City characterized by a high Needs-to-Resource-Capacity index located in the vicinity of any:
 - 1) Mid-size city (i.e. having a population less than 250,000) of a Metropolitan Statistical Area (MSA) or Consolidated Metropolitan Statistical Area (CMSA).
 - 2) Large city (i.e. having a population greater than or equal to 250,000) of a CMSA.
 - 3) Urban fringes of mid-sized and large cities (i.e. including any incorporated or census designated place) or places defined as urban by the Census Bureau.
 - 4) Four select large and small towns (i.e. with populations greater than or equal to 25,000, and between 2,500 and 25,000 inhabitants, respectively) and one rural place (Cortland, Ogdensburg, Olean, Plattsburgh and Watertown).¹¹
- PJP 3 - *Mid-sized Cities, Urban Fringes and Other Districts With Average or Low Needs-to-Resource-Capacity* – Districts characterized by an average Needs-to-Resource-Capacity index located in:
 - 1) Mid-size cities (same as in PJP 2 definition, above).
 - 2) Urban fringes of mid-sized and large cities (same as in PJP 2 definition, above).
 - 3) Large and small towns (same as in PJP 2 definition, above).
- PJP 4 – *Rural Areas Across All Needs-to-Resource Capacities* – Districts located in:
 - 1) Any place defined as rural by the Census Bureau.
 - 2) Fifteen select places defined as rural according to the N/RC index and as mid-size or large city urban fringe by the NCES locale classification.¹²

¹⁰ More details about the categorization of school districts can be found in the beginning of this appendix. A discussion of the “needs-to-resource capacity” index used by the New York State Education Department may be found in <http://www.emsc.nysesd.gov/repcrd399/similar.html>.

¹¹ Detailed census definitions of CMSA and MSA are included below.

¹² In these instances, where the NYSED and NCES classification schemes contradicted each other, the classification rule was determined by the NYSED N/RC index.

Two additional PJP^s, which were devoted to a comprehensive review of special education services, were selected from among the participants of the general education PJP^s, and these two special education panels met during August of 2003.

Each of the general education panels was asked to design instructional programs at the elementary, middle, and high school levels and then to specify the personnel and non-personnel resources that would be necessary to deliver these programs. Specifically, the panels were asked to design programs to achieve the following objective:

Exhibit 1. Desired Educational Outcomes

The federal No Child Left Behind Act and state law require all students in every school district to meet the Regents Learning Standards within the next 11 years and to make steady progress toward that goal each year. As of 2005, all high school students (except for certain special education students) will be required to achieve a passing score of 65 on the Regents' examinations in English, social studies, mathematics, and science to receive a high school diploma. As of the 2005-06 school year, students in grades 3-8 will be tested in English, and mathematics (and shortly thereafter in science) to determine whether they are making satisfactory progress toward meeting the Learning Standards. Rates of yearly progress toward these goals will be disaggregated by racial, economic, disability and limited English proficiency categories.

Your job is to design an instructional program that will provide all students in the school a full opportunity to meet the Regents Learning Standards, and to attain a Regents' diploma. For students in the early grades and preschool, this means designing an instructional program that will seek to address any learning problems with which students enter school. For students further along in their educational careers, it means addressing any deep-rooted educational deficiencies that may have developed as thoroughly as possible, and minimizing dropout rates.¹³

Each PJP was asked to specify the personnel and non-personnel resource requirements across a range of pupil demographics (i.e., percent of students in poverty, percent of students classified as English language learners, and percent of students eligible for special education) typical of the types of school districts within each of the corresponding PJP categories described above. The results of this collection of exercises provided the research team with a total of 40 data points across the four PJP categories that reflected the range of variations in pupil needs and school sizes in New York State. For example, student poverty ranged from a low of about four percent to a high well over 90 percent among the four PJP categories. In addition, there was a significant variation in school size across the PJP categories. For example, the average elementary school size ranges from an average of around 400 students in PJP4 (rural) to a high of almost 800 students in PJP1 (NYC).

¹³ This statement was presented to the PJP^s in the original instructions provided to the panels to carry out their job during the summer meetings.

Using the range of size and pupil needs reflected in the 40 data points provided by the general education PJP, the research team used statistical methods (i.e., *multivariate regression models*) to construct representative patterns of variation in personnel and non-personnel resource requirements to achieve the goals (i.e., in Exhibit 1) specified for the PJP exercises across the schools of varying size and pupil demographics in New York State¹⁴. Eight additional data points provided by the special education PJP, making a combined total of 48 data points (i.e., 40 from the general education and eight additional from the special education PJP), were utilized to obtain further information about how special education resources varied across different levels of identification of special education eligible students.

The worksheets in appendix G represent the results of an analysis of the patterns of variation observed in the data points. These worksheets and the FTE staffing and expenditure values represent an amalgam of the specifications of the various PJP teams from all across the state. The values of these resources presented in the elementary, middle, and high school worksheets reflect estimates of the implied resource specifications derived from the work of the PJP for specific combinations of school sizes and pupil demographics. They are, in all essence, an average, but one that takes into account the specific enrollment level and composition of pupil needs as reflected in the percent of students eligible for free and reduced price lunches, for special education services, and for English language learner (ELL) services.

Summary PJP

The AIR/MAP research team has taken the next step in the analysis of the data from the PJP by selecting representatives from the original panels to serve on what we refer to as the *Summary PJP*. Through a structured set of exercises, the research team will be asking the *Summary PJP* to review the patterns of resource utilization represented in the worksheets in appendix G (i.e., the AIR/MAP synthesis of the PJP data) and to provide further input as to whether these patterns of resource use are appropriate to achieve the desired goals. We recognize that there are no guarantees in this kind of analysis. We are relying on the professional judgment of the *Summary PJP* as a team of successful educators based on their own experiences tempered by the experiences and judgments of their peers with whom they are serving on this *Summary PJP*. At all points along the way, we encourage the panel to keep the goals in mind and to evaluate how each resource specified will be used to achieve the desired outcomes.

¹⁴ The regression specifications can be found in Appendix G.

II. Description of the school level worksheets

The school level worksheets are organized around instructional programs or service delivery systems directed at specific populations of students. First, there are separate worksheets for elementary, middle, and high schools (see appendix G), and each of these worksheets includes the grade-level appropriate instructional programs. Exhibit 2 below lays out the programs included in each of the school level worksheets.

Exhibit 2. Programs specified in each of the worksheets by school level

Program	Elementary School	Middle School	High School
Kindergarten			
Grades 1 through 5			
Grades 6 through 8			
Grades 9 through 12			
Pre-kindergarten (4 year olds)			
Early childhood development (3 year olds)			
Extended day			
Extended year			

The elementary school includes programs for kindergarten students, students enrolled in first through fifth grades, pre-kindergarten students (i.e., 4 year olds), early childhood development (i.e., 3 year olds), and programs for students requiring extended day and/or extended year (i.e., summer school) services. The middle and high school programs include the appropriate grade-level services along with the extended day and year programs.

Within each program there are two types of resources: personnel and non-personnel. We have presented the personnel data on these worksheets in three different formats for ease of use by the panels. Namely, the personnel data are expressed in the form of (a) total full-time-equivalent staff and (b) staffing ratios (i.e., full-time-equivalent staff per 100 pupils served).

Under alternative *a*, the personnel resources are all specified as total FTE (full-time-equivalent) staff assigned to a school with the enrollment level reported at the head of the corresponding column in the worksheet.

Under alternative *b*, the personnel resources are all specified as staffing ratios expressed in FTEs (full-time equivalents) per 100 pupils served. Assume for the moment that there was 26 FTE *core classroom teachers* reported under alternative *a* for our model elementary school serving a total enrollment in grades one through five of 465 students. The FTE value reported under alternative *b* would be 5.6 [=26/(465/100)] FTE *core classroom teachers* per 100 students served in grades one through five.

Another way of viewing these data is to look at pupil teacher ratios. To do this, one simply has to invert the resources presented under alternative *b*. For example, the 5.5 FTE per 100 pupils translates to 17.9 [=100/5.6] students per FTE *core classroom teacher*.

Non-personnel resources are simply expressed in dollars per pupil served.

The base level of resources: the effects of school size.

The first three columns (B, C and D) in each worksheet provide what we refer to as the base level of resources in each type of school (elementary, middle and high school) at different enrollment levels, assuming no students eligible for free and reduced lunch, no students eligible for English language learner services, and the percentage of students eligible for special education services in the district at the 25th percentile (i.e., 9.8% of students identified as eligible).¹⁵ (*See appendix G for these worksheets.*) To reiterate, all of these resource specifications are based on statistical analysis of the original data provided by the PJP. Variations in the resource requirements in these three columns reflect only the effects of varying enrollment levels as derived from the PJP specifications.

Based on our analysis, some resources vary significantly with school size, while others do not. These patterns will be clearly reflected in the FTE staffing levels appearing in each of the worksheets. For example, each school within the enrollment levels represented in the PJP exercises has one full-time *principal*. This translates to about .24 *principals* per 100 pupils in an elementary school of 414 students, .18 *principals* per 100 pupils in an elementary school of 558, and .13 *principals* per 100 pupils in an elementary school of 774. In contrast, the number of *core classroom teachers* is relatively constant at about 5.8 to 6 FTE teachers per 100 pupils served.

Exhibit 3 shows the relationship between expenditures per pupil and school size, controlling for pupil needs, within the ranges of enrollment represented in the original PJP exercises this summer for elementary, middle, and high school, respectively.¹⁶ At each school level, the PJP specifications generate a negative relationship between overall expenditures per pupil and the enrollment of the school. The exhibit represents total expenditures per pupil as an index where the base value of the index corresponds to an elementary school at the smallest size reflected among the PJP exercises (i.e., an enrollment of 414).

Exhibit 3 reveals that, based on the PJP specifications, the total estimated cost per pupil decline by 20.6 percent (i.e., from an index of 126 to an index of 100) in moving from the smallest elementary school (with an enrollment = 414) to the largest elementary school (with an enrollment=774) among the PJP.

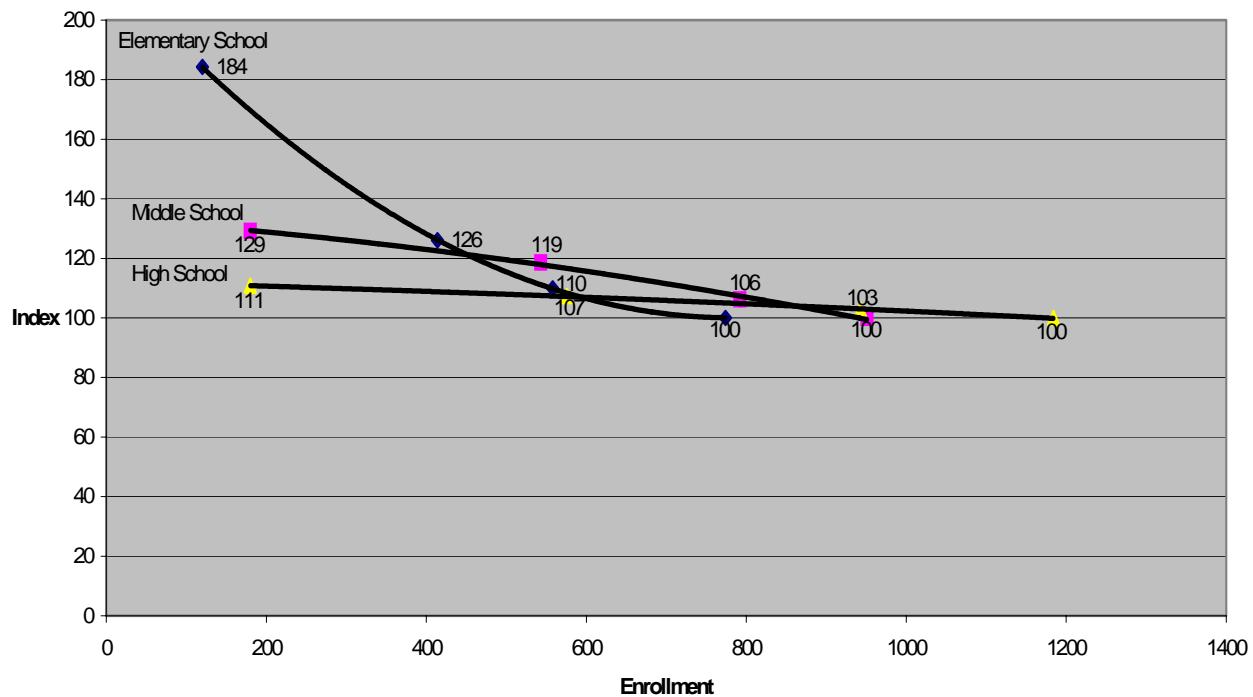
Index values of 184, 129, and 111, for elementary, middle, and high schools, respectively, are located along the left side of exhibit 3. These values were the projected expenditures for very small schools. The PJP exercises this summer dealt with schools of the next enrollment size. For example, the smallest elementary school the PJP considered had an enrollment of 414, and we projected expenditures for a very small elementary school with an enrollment of 120.

¹⁵ The number of special education students was set at the 25th percentile of the distribution of special education identification rates across the State of New York.

¹⁶ We are only able to reflect the economies of scale that are represented within the range of schools sizes included in the PJP exercises. To go beyond these limits would not be an appropriate use of the data.

Exhibit 3. Index of Total Expenditure Per pupil by Enrollment Level for Elementary, Middle, and High Schools

(100=Total Expenditure Per pupil at the Largest school among the PJP's)



The resource effects of poverty

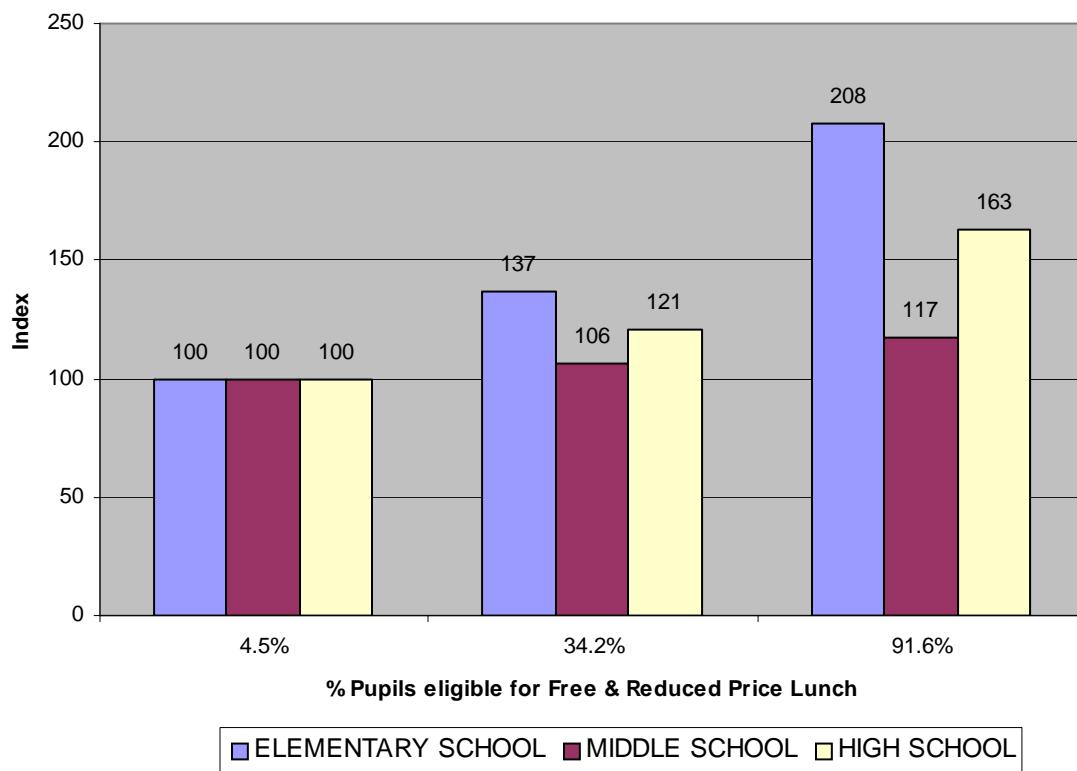
To measure the effects on costs of variations in the numbers of students living in poverty, we will utilize the information in column sets E/F, G/H and I/J of the elementary, middle and high school worksheets (*see appendix G*). These three sets of columns provide you with the estimated average values of personnel and non-personnel resources at three different levels of poverty, holding constant school size, the percent of students requiring English language learner services, and the percent of students eligible for special education services. The resource levels at these three different poverty levels are based again entirely upon the data derived from the PJP exercises conducted during this past summer. The selected poverty levels are 4.5%, 34.2%, and 91.6% of students eligible for free and reduced price lunch. Note that 34.2% is the mean value of poverty across districts in New York State. Variations in resource requirements reflect average differences in the needs for each resource at the three different poverty levels, controlling for school size and other pupil needs.

The first column in each pair (i.e., E, G, and I) is fixed based on the statistical analysis conducted by the research team during the past few months. The second column in each pair (i.e., F, H, and J) are currently filled in with the default values and are equal to the corresponding values presented in the first column (i.e., E, G, and I) of each pair. During the exercises of December 10th, the *Summary PJP* will be asked to evaluate and adjust these numbers as you see fit to achieve the desired results (e.g., those outlined in Exhibit 1).¹⁷

Exhibit 4 shows the relationship between expenditures per pupil and the percent of students eligible for free and reduced price lunches, controlling for school enrollment and the percent of other special need students. This exhibits shows a positive relationship between per pupil costs and school poverty, based on the specifications of the PJPs. Based on these specifications, it appears that poverty has a very dramatic impact on elementary relative to its impact on middle and high school programs. For an elementary school at the average percent students eligible for free and reduced lunch (i.e., 34.2 percent), total per pupil expenditure would be 37 percent higher than a school with 4.5 percent eligible students. In part, the magnitude of this differential can be attributed to the increased allocations associated with pre-kindergarten and early childhood development programs, which are add-ons for the elementary school program. However, even without these add-ons for preschool services, the elementary program specifications developed by the PJPs are associated with a 19 percent differential between the average poverty elementary school and one with 4.5 percent of students living in poverty.

¹⁷ We have color coded all reference values (i.e., those in columns E, G and I) derived from the original PJP data in blue while cells that require your input (i.e., those in columns F, H and J) are colored white.

**Exhibit 4 - Index of Per Pupil Expenditure for the Base Program by Percent of Pupils Eligible for Free & Reduced Price Lunches for Elementary, Middle, and High Schools
(100 = expenditures for a school with 4.5% students poverty)**

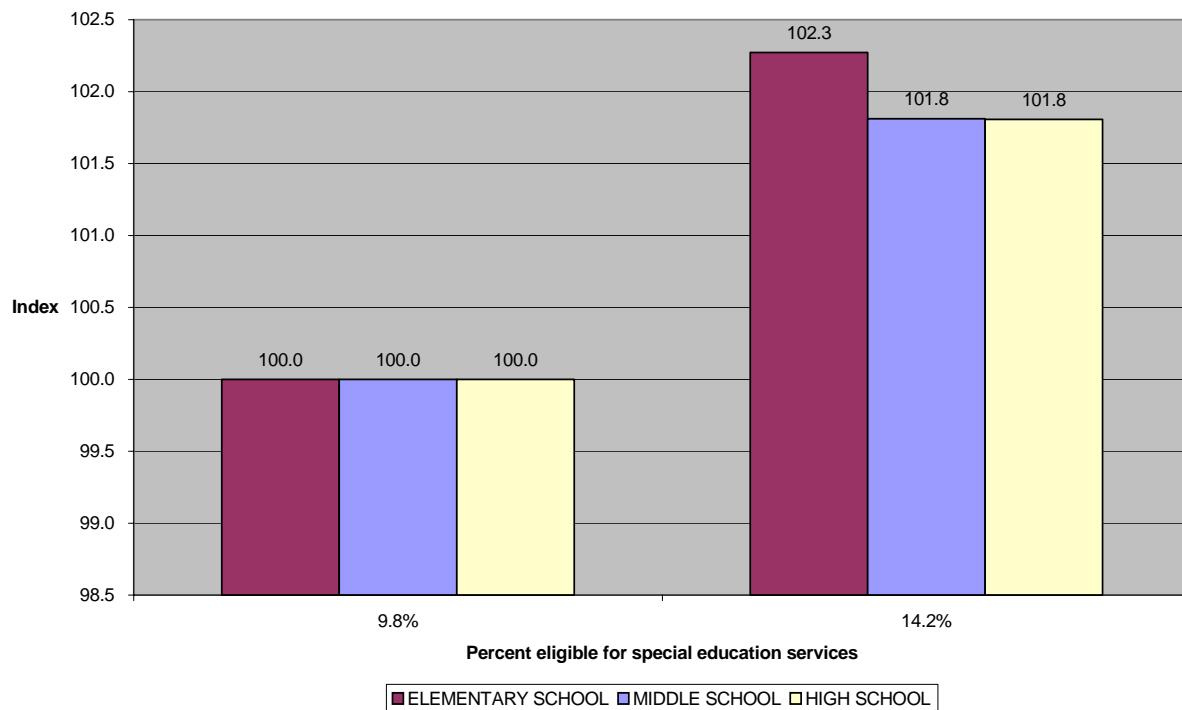


The resource effects of additional students eligible for special education services

To measure the effects on costs of variations in students with disabilities, we will utilize the information in column sets G/H and K/L on the elementary, middle, and high school worksheets (*See appendix G*). As in the case of the poverty effects described above, these sets of columns provide you with the estimated average values of personnel and non-personnel resources at the different levels of special education identification rates, holding constant school size, the level of poverty, and the percent of students eligible for ELL services. That is, variations in resource requirements between the two column sets reflect average differences in the needs for each resource at the two different special education levels, controlling for school size and other pupil needs. The reference resources figures at these two different special education identification levels (i.e. columns G and K) are based again entirely upon the data gleaned from the exercises of the general and special education PJP's conducted during this past summer. We have used our statistical analysis to project the needs for special education resources at identification rates of 9.8 and 14.2 percent, which represent the 25th and 75th percentile of the distribution of identification rates in New York State. The mean incidence of special education students in New York State is 12.8 percent.

Exhibit 5 shows the relationship between total expenditures per pupil and the percent of students eligible for special education services in the elementary, middle and high school models derived from the PJP specifications. For each school level, an increase in the identification of special education students from 9.8 percent to 14.2 percent is associated with approximately a two percent increase in total spending per pupil. It is at 2.3 percent at the elementary level, and 1.8 percent at the middle and high school level.

Exhibit 5. Index of Total Expenditure Per Pupil by Percent of Students Eligible for Special Education for Elementary, Middle, and High Schools
(Includes add-on programs for preK, ECD, and Extended Day and Year)



The resource effects of additional English language learners (ELL)

To measure the effects of variations in ELL students, we will utilize the information in columns G/H and columns M/N of the worksheets. Here, the two sets of columns provide you with the estimated average values of personnel and non-personnel resources at two different levels of ELL, holding constant school size, the level of poverty, and the percent of students eligible for special education services. Therefore, variations in resource requirements reflect average differences in the needs for each resource at the two different ELL levels, controlling for school size and other pupil needs.

The resources levels at these two different ELL levels are based again entirely upon the data derived from the PJP exercises conducted during this past summer. The selected ELL levels are 0.9% and 18.8%. The mean percent of ELL students in New York State is 1.5%.

Exhibits 6a, b and c combine information on school size and ELL eligibility derived from the PJP specifications. Across all three schooling levels the current model exhibits no discernable relationship between ELL eligibility and spending. Based on our review of the program narratives, the differences in programs for ELL seem to be less a matter of the quantity of resources than the kind of resources (e.g., qualifications of personnel) that are employed.

III. Description of the district level worksheets

The district level worksheet reflects specifications developed by the special education PJP and encompasses three dimensions of special education services. A portion of these resources reflect related service *personnel who serve multiple schools* throughout the district, but who generally operate out of the district office or possibly other agencies such as the Boards of Cooperative Education Services or BOCES. These resources have been specified in terms of personnel or non-personnel resources, but may be translated into tuition or other kinds of transfers among districts or between districts and other agencies.

In addition, there are some special education teaching resources specified in this district model that are available to serve other *low incidence* special education students who are unlikely to be distributed evenly across schools.

Finally, the special education PJP decided to specify the preschool special education resources at the district level rather than attached to the school. For this reason, we have set to zero the FTEs per student served for all *preschool* special education resources originally specified at the school levels. The *Summary PJP* may decide during the exercises to alter this decision and for this reason we have provided the list of special education resources at the school level to accommodate any change

As with the school level worksheets, personnel resources are expressed in FTEs, while the non-personnel resources are expressed in dollars per pupil.

There is one important change, however, in the way personnel FTEs are calculated at the district level. The special education PJP tied these resources to district enrollment rather than to the number of students specifically identified as eligible for special education services. That is, regardless of the actual special education identification rate, FTEs are expressed as a total per one thousand (1,000) students enrolled in the district. To be clear, we are talking about total enrollment and **not** enrollment in special education. We selected 1,000 students as the basis simply to increase the very small values of the FTEs so that the resource requirements are more easily interpreted. The numbers in the worksheet represent average values specified by the two special education panels. The model district represents the average size of school districts in New York State, which enrolls about 4,225 students. For example, the panels specified that a district enrolling 4,225 students would need 1.10 FTE physical therapists to serve the population of students who might need such services. This calculates to represent an average of 0.26 FTE physical therapists per 1,000 students enrolled.

Exercises for the *Summary PJP*

The exercises on the following pages pose a series of questions for you to consider and help us answer in the process of producing a final set of cost numbers. Before embarking on these exercises, it is important that you review the synthesis of the narrative descriptions that the PJP provided to the AIR/MAP team during the meetings this past summer. This synthesis can be found in **TAB 3** of this binder. As you review the program narrative and the resource specifications, we would like the *Summary PJP* to consider the ways in which each of these resources will be utilized to achieve the desired educational outcomes. As the panel proceeds through the exercise, a member of the AIR/MAP team will be available to take notes on the deliberations of the panel to help elaborate on the nature of these discussions and to capture any detail provided by the *Summary PJP* regarding how various resources will be utilized to achieve the objectives.

You will note in each exercise, we have provided tables for you to record your responses for each of the questions. We have provided these for your own convenience in making any notes that you would like to make either in recording the proceedings of the meeting or for the purpose of preparing yourself in advance for discussions during the actual *Summary PJP* meeting. We will have a member of the research team who will be taking notes and filling in spaces provided with each exercise based on your comments during the course of the meeting. These notes will be used for our records of the proceedings.

Exercise #1. Kindergarten Program

Virtually all of the PJP's selected a full-day kindergarten program. Please review the program specifications and answer the following questions:

General Questions about the Program

1. Which of the following options would you recommend in accordance with the outcome goal shown on page 2?	<i>Place an X next to your choice</i>
A full-day program for all students	<input type="checkbox"/>
A full-day program for students living in poverty and half day for the rest	<input type="checkbox"/>
A half-day program for all students	<input type="checkbox"/>
2. Would you make any changes in the resource specifications for this program? Resources include:	<i>Check response below</i>
	<input type="checkbox"/> Yes <input type="checkbox"/> No

Resource Utilization Table: Use the following table to provide supplemental information on how each of the resources will be utilized for the Kindergarten Program as necessary to help clarify your decisions about the resource specifications.

Resources	Notes on how resources will be utilized
Kindergarten teachers and paraprofessionals	
Special education teachers and paraprofessionals	
Non-personnel resources	

Exercise #2. Elementary, Middle, and High School Programs (including school and district level resources for special education services) for grades 1 through 5, 6 through 8, and 9 through 12, respectively)

In this exercise, we ask you to review the synthesis of the program narrative and the resource specifications specified for grades 1 through 5 on the elementary worksheet, grades 6 through 8 on the middle school worksheet, and grades 9-12 on the high school worksheet. In addition, we are asking you to review the synthesis of the district level resources that were developed by the special education PJP along with these elementary, middle, and high school programs.

Primary Question	Check one:
Would you make any changes in the resource specifications for these grade level appropriate programs within each school level to achieve the desired educational outcomes?	<input type="checkbox"/> Yes <input type="checkbox"/> No

In considering this larger question, please be sure you have included the following in your deliberations:

*How will each of the categories of general education and special education resources be utilized? Use the **Resource Utilization Table** on the next page to address this issue. Specifically, reflect on the following three points.*

<p>1. Special education services. What percent of the total students identified as eligible for special education services do you anticipate being served in regular schools versus other district programs? Please review the resource specifications for special education instruction and related service personnel presented in the Worksheet in appendix G at the same time you are reviewing the elementary, middle, and high school specifications.</p>	<p>_____ % of special education students</p>
<p>2. Poverty effects. Are the observed variations in the general and special education resource levels across poverty levels sufficient to achieve the desired educational outcomes?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>3. ELL Programs. The current model derived from the PJP specifications suggest no difference in the resources associated with increases in ELL. Please describe how you envision the needs of EL students being addressed through the resources specified.</p> <p><i>Response:</i></p> <div style="border: 1px solid black; height: 100px; margin-top: 10px;"></div>	

Resource Utilization Table: Use the following table to provide supplemental information on how each of the resources will be utilized for these Elementary, Middle, and High School Programs as necessary to clarify your decisions about the resource specifications.

Resources	Notes on how resources will be utilized
Personnel resources	
Core classroom teachers and paraprofessionals	
Special education teachers and paraprofessionals	
Other teachers	
Instructional support and pupil support personnel including psychologists and related service providers for special education	
Administrative, other professional staff, and clerical support personnel	
Security personnel	
Non-personnel resources	
Instructional supplies and materials, equipment & technology	
Student activities	
Assessment	
Food Services	

Exercise #3. Pre-Kindergarten (4 year old) and Early Childhood Development (3 year old) Programs.

Please review the program specifications and answer the following questions:

General Program Questions	<i>Pre-kindergarten program (for 4 year olds)</i>	<i>Early childhood development program (for 3 year olds)</i>
1. In your professional opinion, is a pre-kindergarten program school program in New York State necessary to meet the outcome standard specified on page 2 of this document?	<i>Check response below</i>	
	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. Which of the following options would you recommend ?	<i>Place an X next to your choice</i>	
A full-day program	<input type="checkbox"/>	<input type="checkbox"/>
A half-day program	<input type="checkbox"/>	<input type="checkbox"/>
3. In your professional opinion, which student population should be served by the pre-school program?:	<i>Place an X next to your choice</i>	
All students	<input type="checkbox"/>	<input type="checkbox"/>
Only students living in poverty	<input type="checkbox"/>	<input type="checkbox"/>
Some pre-specified percent of students based on poverty	<input type="checkbox"/>	<input type="checkbox"/>
4. Would you make any changes in the resource specifications for this program? Resources include:	<i>Check response below</i>	
	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Resource Utilization Table: Use the following table to provide supplemental information on how each of the resources will be utilized for the Pre-kindergarten Program, as needed

Resources	Notes on how resources will be utilized
Teachers and paraprofessionals	
Special education teachers and paraprofessionals	
Non-personnel resources	

Exercise #4. Extended day and Extended Year Programs

Please review the program specifications at each level and answer the following questions:

General Program Questions	Extended Day programs	Extended year programs
1. In your professional opinion, are extended day or extended year programs in New York State necessary to meet the outcome standard specified on page 2 of this document?	<i>Check response below</i>	
	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. How many hours per year should such programs be available to students?	<i>Place an X next to your choice</i>	
Before school programs	_____ hrs/yr	_____ hrs/yr
After school programs	_____ hrs/yr	_____ hrs/yr
Weekend programs	_____ hrs/yr	_____ hrs/yr
3. Which schools should be eligible for such programs?	<i>Place an X next to your choice</i>	
All schools	<input type="checkbox"/>	<input type="checkbox"/>
Only schools above a minimum poverty level	<input type="checkbox"/>	<input type="checkbox"/>
Minimum poverty level	_____ % poverty	_____ % poverty
3. What student populations should be served in schools at different poverty levels?	<i>Place an X next to your choice</i>	
All students	<input type="checkbox"/>	<input type="checkbox"/>
Only students living in poverty	<input type="checkbox"/>	<input type="checkbox"/>
Some pre-specified percent of students based on poverty	<input type="checkbox"/>	<input type="checkbox"/>
4. Would you make any changes in the resource specifications for this program? Resources include:	<i>Check response below</i>	
Teachers and paraprofessionals	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Special education teachers and paraprofessionals	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Instructional supplies and materials, equipment & technology	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Resource Utilization Table: Use the following table to provide supplemental information on how each of the resources will be utilized for the extended day or extended year programs as necessary to help clarify your decisions about the resource specifications

Resources	Notes on how resources will be utilized
Teachers and paraprofessionals	
Special education teachers and paraprofessionals	
Non-personnel resources: instructional supplies, materials, equipment & technology	

Exercise #5. Specification of Resources for Small Schools.

The base level of resources in columns B, C, and D provide information on the effects of school size on the allocation of resources reflected in the program delivery systems specified by the general education PJP. The range of size observed in these model elementary, middle, and high schools are presented in Exhibit 2-1 below.

Exhibit 5-1. Range of Model School Sizes

School type	Small	Median	Large
Elementary school	414	558	774
Middle school	543	792	951
High school	576	943	1184

The cost analysis currently reflected in the worksheets uses the median school size for each level. However, the patterns of resource specifications developed by the PJP this past summer show a negative relationship between the total expenditure per pupil and school size. That is, taken in the aggregate, costs per pupil that decline with size.

The purpose of this exercise is to draw upon the expertise of the members of the *Summary PJP* with regard to school size. There are two issues to be explored. First, how do we handle *necessary* small schools? These schools are in geographic regions that of necessity operate at smaller enrollment levels, e.g. due to remoteness.

In our previous PJP exercises this summer, school sizes were generally fixed around the median levels for each school type (elementary, middle, and high) within each PJP. For example, New York City generally exhibits larger average school sizes at every school level than the rest of the districts in the state. We did not vary school size at the time in part because of the limits of time and the demands on the PJP for addressing other issues related to pupil needs.

The resources specified by the PJP this past summer may not fully allow for diseconomies associated with “necessarily” small schools (i.e., schools located in remote regions of the state in communities where there are limited options for increasing size). With this issue in mind, please carry out exercises 5A and 5B.

Exercise 5A. Review and revise as necessary the resource allocations at the small school size from the original half PJP exercises. Review the resource specifications for the small school exercise in Model VI in the worksheet columns O and P for the elementary, middle and high schools. The major difference between the default values in column O and those in column B for the original small school specification is that the poverty level has been reset to the average level of 34.2 percent. The AIR/MAP team has estimated what the resource levels would be for the small school at this average poverty level using the statistical model derived from the PJP specifications of this past summer. Your job is to review these specifications and make any necessary adjustments you believe to be appropriate in column P, if any. Please complete the **Resource Utilization Table** below if there are any significant considerations to report.

Resource utilization table: Use the following table to provide supplemental information on any significant changes in how each of the resources will be utilized for a *small* school versus a larger school program (e.g., as the one specified in exercises 1 & 2).

Resources	Notes on how resources will be utilized
Personnel resources	
Core classroom teachers and paraprofessionals	
Special education teachers and paraprofessionals	
Other teachers	
Instructional support and pupil support personnel including psychologists and related service providers for special education	
Administrative, other professional staff, and clerical support personnel	
Security personnel	
Non-personnel resources	
Instructional supplies and materials, equipment & technology	
Student activities	
Assessment	
Food Services	

Exercise 5B. Review and revise as necessary the resource allocations for a “very small school.” The AIR/MAP team has estimated what the resource levels would be for the small school at this average poverty level using the statistical model derived from the PJP specifications of this past summer. These estimates are presented in column Q under Model VII for the Very Small School on the elementary, middle, and high school worksheets. These estimates may or may not be adequate to achieve the objectives in Exhibit 1 since the original PJP exercises did not include schools with *very small* enrollments as those specified in this exercise. We have set the enrollment levels somewhere between the lowest one to five percentile of schools in New York State at the corresponding level. Please review and revise, as necessary, the resource specifications for the very small school exercise in column R under Model VII in the worksheets for the elementary, middle and high schools. Please complete the **Resource Utilization Table** below if there are any significant considerations regarding differences in the utilization of resources in this *very small school*.

Resource utilization table: Use the following table to provide supplemental information on any significant changes in how each of the resources will be utilized for this *smaller* school program.

Resources	Notes on how resources will be utilized
Personnel resources	
Core classroom teachers and paraprofessionals	
Special education teachers and paraprofessionals	
Other teachers	
Instructional support and pupil support personnel including psychologists and related service providers for special education	
Administrative, other professional staff, and clerical support personnel	
Security personnel	
Non-personnel resources	
Instructional supplies and materials, equipment & technology	
Student activities	
Assessment	
Food Services	

APPENDIX C

DETAILS OF THE COST CALCULATION METHODOLOGY

Method to Calculate Simulated Costs at the School Level

The cost calculations developed for the AIR/MAP simulations are based on data collected from the original Professional Judgment Panels that convened in the summer of 2003. Each of the steps used in transforming this information into simulated bottom-line expenditures for each district in the state is outlined below.

- 1. Calculate the Prototype Costs** – A synthesis of prototype “adequate” resource allocations at each schooling level (elementary, middle and high school¹⁸) was performed based on regression equations (presented in Appendix G) using the resource specification data from the original ten PJP^s.¹⁹ The school prototypes at each schooling level were defined by the demographic characteristics listed in Exhibit C-1.

Exhibit C-1 – Characteristics of Prototypical Schools									
Schooling Level	Characteristic	Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII	Model VIII
Elementary	Enrollment	558	558	558	558	558	774	414	120
	Percent Free/ Reduced Lunch	4.5%	34.2%	91.6%	34.2%	4.5%	34.2%	34.2%	34.2%
	Percent Special Education	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%	9.8%	9.8%
	Percent English Language Learner	0.9%	0.9%	0.9%	0.9%	18.8%	0.9%	0.9%	0.9%
Middle	Enrollment	792	792	792	792	792	951	543	180
	Percent Free/ Reduced Lunch	4.5%	34.2%	91.6%	34.2%	4.5%	34.2%	34.2%	34.2%
	Percent Special Education	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%	9.8%	9.8%
	Percent English Language Learner	0.9%	0.9%	0.9%	0.9%	18.8%	0.9%	0.9%	0.9%
High	Enrollment	943	943	943	943	943	1,184	576	180
	Percent Free/ Reduced Lunch	4.5%	34.2%	91.6%	34.2%	4.5%	34.2%	34.2%	34.2%
	Percent Special Education	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%	9.8%	9.8%
	Percent English Language Learner	0.9%	0.9%	0.9%	0.9%	18.8%	0.9%	0.9%	0.9%

Bottom-line cost estimates are then calculated for the resource specifications developed for each of these Stage 1 *prototypes*. These cost figures reflect the projected *standardized* per pupil costs of the resources corresponding to the synthesis of the

¹⁸ Elementary, middle and high schools are defined as serving students in kindergarten through grade 5, grades 6 to 8, and grades 9 to 12, respectively.

¹⁹ The synthesized Stage 1 resource allocation prototypes were also used for the Stage 2 deliberations (i.e., the December meetings of the Summary PJP), in which they were slightly modified and subsequently used to simulate the cost of “adequacy” for every school in the state via the method described in steps 1 through 8. Note that the modified resource allocations across the prototypes resulting from the Stage 2 deliberations were used as a starting point for the Stage 3 meeting and subsequent simulation.

resource specifications developed by the PJP's during the summer meetings of 2003. That is, the cost calculations use standardized prices for staff taking the form of pupil-weighted statewide average compensation levels for school personnel where compensation is made up of both salaries and benefits.²⁰

2. **Calculate Programmatic Cost Indices and Develop Equations for Pupil Need/School Size Cost Adjustments** – The prototype school program cost estimates were then utilized to determine variations in the necessary per pupil cost of providing an “adequate” education in elementary, middle and high schools of varying size, poverty, English Language Learner (ELL) percentages, and special education identification rates.

First, three programmatic cost indices (for elementary, middle and high schools) were created based on the prototype school program cost estimates. The center point for each index was the expenditure necessary to operate schools of average size, poverty, and percent ELL and special education at standardized personnel compensation rates.²¹ The necessary per pupil expenditure for each of these base models corresponds to a school program cost index of 100. The standardized per pupil cost for each of these base models is as follows:

- a. Elementary School – \$10,072
- b. Middle School – \$9,899
- c. High School – \$10,443

Next, AIR/MAP was able to trace out the impact of school size and the concentrations of student poverty levels, ELL, and special education enrollments on the three programmatic cost indices. Using these relationships, three equations were developed that captured the relative variations in per pupil costs at each school level with respect to school scale and need characteristics. (See discussion below about school size for variations possible at this stage of the cost calculations.) Exhibit C-2 contains the equations that reflect the index of variations in school programmatic per pupil costs for elementary, middle and high schools.

Exhibit C-2 – Estimated Equations for Programmatic Cost Index

Schooling Level	Intercept	Enrollment	Enrollment Squared	Percent Free/ Reduced Lunch	Percent Free/ Reduced Lunch Squared	Percent Special Education	Percent ELL
Elementary	110.380	-0.095	0.00004	58.184	6.923	97.239	17.855
Middle	134.850	-0.104	0.00010	36.863	-4.630	40.732	19.612
High	98.013	-0.032	0.00001	56.223	-15.495	53.948	21.207

Note: equations correspond to the school prototype resource specifications from the Stage 3 (January 2004) deliberations of the Summary PJP Team.

3. **Calculate a Weighted Average Per Pupil Cost for Each School in New York –** AIR/MAP used the NYSED IMF (NYSED Institutional Master File) to determine the actual levels of enrollment, poverty, ELL, and special education for each school in the

²⁰ The average benefit rates used were based on data from the NYSED fiscal files (ST3) provided by Charles Shippee.

²¹ Average school demographics are taken at the state-level within each schooling level and correspond to the Model II prototypes defined in Exhibit C-1.

state. Index values were predicted for each school corresponding to the three schooling-level specific equations defined in Exhibit C-2. Elementary, middle and high school cost figures were then assigned to each school by multiplying these predicted index values by the base cost per pupil corresponding to each of the respective schooling levels (i.e., \$10,072, \$9,899 and \$10,443 for elementary, middle and high school, respectively). The overall programmatic cost per pupil for the school was then determined as the weighted combination of the predicted elementary, middle, and high school cost, where the weights reflected the enrollment shares within each level-specific grade ranges. That is, the projected elementary, middle, and high school costs were applied proportionately to the share of school enrollment in kindergarten to 5, 6 to 8, and 9 to 12, respectively.

4. **Adjust Projected Costs in Each School for Geographic Cost Differences** – The geographic cost of education index (GCEI) developed in Chapter 3, which reflects variations in the compensation (salaries and benefits) of comparable school personnel in different school districts across the state, is applied to the school programmatic costs estimated in Step 3.²² The index is weighted by the estimated proportion of total expenditure allocated to school personnel for the prototype models that varied scale (i.e., models II, VI, VII and VIII in Exhibit C-1, above). For example, if only 90% of the costs of the prototype were for personnel, only that portion of the expenditure was affected by the GCEI. Alternatively speaking, no cost index was applied for the projected share of school-level expenditures spent on non-personnel resources.
5. **Incorporate Costs of Centralized District Functions** – To account for the costs associated with those centralized district functions (i.e., central district administration and maintenance and operations services) that were not included in the school-level prototypes addressed by the Summary PJP Team, the methods detailed in Chapter 4 were used. As described in that chapter, two alternative approaches were utilized to add back these costs of centralized district functions:
 - a. Lump-sum approach – simply adds the actual, current per pupil cost of these functions spent by each district in New York State to each school within the district.
 - b. Lump-sum/ratio approach – allows for a change in the per pupil cost of *selected* district-level functions thought to vary in proportion to changes in instructional program costs while leaving expenditure levels on those other district functions, thought not to vary with cost of instructional program, unaffected.
6. **Adding Preschool Costs** – Preschool enrollment levels are determined as follows:
 - a. Kindergarten enrollment levels are determined for each school. These enrollment levels are used to estimate the potential enrollment of 3 and 4 year olds who were potentially eligible for preschool programs (i.e., pre-kindergarten and early childhood development).
 - b. Next, the proportion of the potential preschool population to be offered service is projected based on the relationship, reflected in the Summary PJP Team

²² The GCEI resulting from the fixed-effects teacher cost model is the chosen index used for all simulations (see Chapter 3 of the main report).

- specifications, between poverty and the percent of potential enrollment targeted for pre-kindergarten and ECD, respectively.
- c. The projected targeted enrollments are multiplied times the per pupil costs of the prototype preschool models.
 - d. Last, a percentage of these total preschool costs are added to account for those selected district-level functions thought to vary with the preschool component of the instructional program.

Alternative Assumptions about School Size

It is worth noting that at Step 2 of the process above, one can modify the school enrollment levels used in the calculation of the programmatic cost indices to incorporate different assumptions how scale should affect costs of an “adequate” education. The following are the alternatives used for the analysis contained in this report:

1. **Actual school sizes within the limits of the original PJP exercises** – Most of the simulations in this report use the following rules for assigning school size in the calculation of the programmatic cost index values from the equations in Step 2:
 - a. Actual school size is assigned for all schools that fall within the enrollment limits associated with the original PJP exercises from the summer meetings. For example, for elementary schools this would be within a range of 414 to 774.
 - b. For schools below the minimum (e.g., 414 for elementary schools), the minimum value of school enrollment was assigned.
 - c. For schools above the maximum (e.g., 774 for elementary schools), the maximum value of school enrollment was assigned.
2. **Mean school sizes** – Where specified, some of the simulations simply calculated the programmatic cost indices by setting enrollment levels for each school based on the mean school enrollment by level.
3. **Hybrid model of school size** – One hybrid model might be to show what the projected costs would be if policy makers were interested in understanding the costs of smaller schools by capping school size at the mean enrollment by school level. The results from this model are only presented in the latter part of this appendix and do not appear in the main body of this report. Under this hybrid model, programmatic cost indices are calculated from the equations in Step 2 using the following rules for the assignment of school size:
 - a. Actual school size is assigned for all schools that fall below the mean enrollment levels by level. For example, for elementary schools this would be any school below 558.
 - b. For schools above the mean school size, the mean school enrollment level was assigned (e.g., 558 for elementary schools).

For the purposes of these simulations, we used both the lump-sum and lump-sum/ratio approach to add district-level expenditures in all three alternatives (i.e., applying within-sample actual, mean, and hybrid enrollment strategies).

Aggregation to the district level

Once the costs were calculated for each school, the total costs were summed by district along with the information on the total kindergarten through grade 12 enrollment, the composition of

school enrollments by grade level, the percent of students eligible for free and reduced price lunch, the percent of ELL students, and the percent of students identified as eligible for special education. These figures were then used along with the Need to Resource Capacity (NRC) and enrollment categories of the districts to calculate the total and per pupil costs of achieving adequacy in New York State. These district-level data underlie most of the charts presented in Chapter 4 of the main body of the final report.

Calculation of NEED/SCALE and Implicit GCEI

Within the section entitled “Understanding the Components of Educational Cost Differences” in Chapter 4, we explained how the *projected cost of an adequate education* is used in combination with the *standardized projected cost* of an adequate to calculate the Implicit Geographic Cost of Education Index (IGCEI).²³ The only difference between these two cost projections is that the geographic cost adjustments are reflected in the projected costs while they are not reflected in the standardized projected costs. Thus, the ratio of the projected costs with the geographic cost adjustments to the standardized projected costs reveals the impact of the geographic cost adjustments. The main reason for the difference in the value in the geographic cost adjustment index and the implicit geographic cost adjustment is that only a portion of total current expenditures is allocated to personnel.

Régressions used to calculate the separate effects of pupil needs and scale of operations on the costs of an “adequate” education –

The regression equations displayed in this section of the appendix show the relationship between the need/scale indices calculated from the standardized costs of educational services across the districts in New York State. From Chapter 4, the reader will recall that the need/scale index for district ‘i’ is defined as follows:

$$(eq. 3 \text{ from Chapter 4}) \quad \text{NEEDSCALE}(i) = \text{STD_EXP}(i) / \text{BASE_EXP},$$

where $\text{STD_EXP}(i)$ is the *standardized projected expenditure* to produce an “adequate” education in district ‘i’, and BASE_EXP is the pupil-weighted average of the *standardized projected expenditures* across all districts to provide an “adequate” education (i.e., as defined by the PJP resource specifications). The NEEDSCALE index reflects the variation in projected expenditures associated with pupil need and scale of operations where,

Pupil Need

- District type (elementary, high or unified) to capture the composition of enrollments and schools by grade level which affects the types of schools included in the projected costs for each district
- Percent of students eligible for free and reduced lunch
- Percent of students identified as ELL
- Percent of students identified as special education

Scale

- District size in various functional forms and sparsity of district population

²³ This discussion will not be repeated here.

Often linear and squared terms are used for enrollment to reflect the curvilinear relationship between spending and district size. AIR/MAP initially followed that convention. Moreover, because there are complex patterns of spending with respect to some of the district-level functions across the state, AIR/MAP also experimented with higher powers of enrollment and other variables such as sparsity of population to pick up the affects of school and district size on both instructional and non-instructional spending. However, rather than relying solely on the results where a functional form was imposed via estimation of a quadratic or some higher order polynomial, the relationship between the need/scale index and district enrollment was ultimately estimated with separate enrollment range-specific equations corresponding to the following five enrollment categories:

- Enrollment Category 1: District Enrollment <1,000
- Enrollment Category 2: 1,001 <= District Enrollment <2,500
- Enrollment Category 3: 2,501 <= District Enrollment <5,000
- Enrollment Category 4: 5,001 <= District Enrollment <10,000
- Enrollment Category 5: 10,000 < District Enrollment

Specifying the equations in this manner allows the effects of the various need and scale factors to differ across the enrollment range categories. Alternatively speaking, specifying enrollment category-specific equations allows for more flexibility in the estimated parameters in that it does not assume any specific functional form of the non-linear relationship between the need/scale index and enrollment.

For each enrollment category, we have included the following six sets of regressions corresponding to different simulations:

Exhibit C-3 – Table of Need/Scale Regressions with Respect to Treatment of Enrollment and District-Level Expenditures				
		Enrollment Alternative		
District-Level Expenditure Method	Actual	Mean	Hybrid	
	Actual	Mean	Hybrid	Hybrid
	Lump-Sum	Lump-Sum	Lump-Sum	Lump-Sum
Lump-Sum/Ratio	Actual	Mean	Hybrid	Hybrid
Lump-Sum/Ratio	Lump-Sum/Ratio	Lump-Sum/Ratio	Lump-Sum/Ratio	Lump-Sum/Ratio

Therefore, a total of 30 regressions have been run contrasting all permutations between the five enrollment categories, three enrollment alternatives, and two district-level funding methods. It is from these regressions that the data used to create the charts in Chapter 4 documenting the average needs/scale indices and their components (the separate need and scale indices) by NRC and enrollment category was generated (see Exhibits 4-8 to 4-10 in Chapter 4).

Exhibits C-4a through C-4f contain the results of each set of enrollment category-specific regressions for the six enrollment alternative/district-level expenditure method combination defined above. The coefficients on enrollment reflect the impact on the need/scale index of a one percent change in enrollment within the enrollment category. The coefficient for elementary district type simply approximates the proportionate effect of being an elementary district. One can use the coefficients on the percent of students by need category (i.e., poverty, special education, ELL) to ascertain the percentage effect on projected expenditure of a one percent change in each category.

As an example, consider the first column in Exhibit C-4a denotes the effects of the enrollment and need variables on the need/scale index of the average district in enrollment category 1 (districts with less than 1,000 students). Here we find an enrollment increase of one percent is expected to decrease the need/scale index by about 0.14. Conversely, for every one-percent increase in students eligible for free or reduced lunch, taking special education, or identified as an English language learner, the index for the average Enrollment Category 1 district is expected to increase by 0.24, 0.29 and 0.53, respectively. Finally, being an elementary relative to a high school or unified district has no discernable impact on the expected need/scale index for very small districts.

It is also instructive to look at these effects across the five enrollment categories (i.e., as enrollment increases). For example, the effect of enrollment on the need/scale index becomes smaller in magnitude and generally insignificant as district enrollment increases (i.e., one goes “up” the enrollment categories). This is the case regardless of enrollment alternative/district-level expenditure method combination. The effect of percent of students eligible for free or reduced lunch exhibits a U-shape with respect to enrollment category, having the least impact in mid-sized districts (i.e., those between 2,501 and 5,000 students) and the biggest impact on the larger and smaller districts (greater than 5,000 and less than 2,501). The effect of incidence of special education is generally increasing with district enrollment whereas the percent of students identified as English language learners exhibits an inverted U-shape, having the largest impact

on the need/scale index of mid-sized districts. The regression results suggest that being a small or mid-sized elementary (relative to a high school or unified) district has a small, but significant, negative effect on the need/scale index.

Exhibit C-4a – Regressions of Need/Scale Index Using Stage 3 Resource Specifications, Lump-Sum District-Level Expenditures and Actual (Within Sample) Enrollment

	Enrollment Category 1	Enrollment Category 2	Enrollment Category 3	Enrollment Category 4	Enrollment Category 5
Natural log of enrollment	-0.137 (6.74)***	-0.029 (1.57)	-0.077 (3.36)***	-0.030 (1.18)	-0.010 (1.80)
Percent eligible for free/reduced lunch	0.242 (4.78)***	0.255 (8.85)***	0.187 (6.48)***	0.356 (7.87)***	0.352 (5.83)***
Percent special education	0.290 (2.90)***	0.420 (5.44)***	0.708 (3.58)***	0.640 (2.90)***	0.776 (2.42)**
Percent English language learners	0.530 (4.29)***	0.737 (3.29)***	1.029 (6.59)***	0.588 (2.35)**	0.340 (1.11)
Elementary school district indicator	-0.029 (0.53)	-0.100 (4.90)***	-0.077 (9.63)***	0.000 (.)	0.000 (.)
Constant	0.161 (3.80)***	-0.071 (1.32)	0.057 (0.64)	-0.125 (1.14)	-0.222 (4.66)***
Observations	183	267	140	75	15
Adjusted R-squared	0.5907	0.4406	0.5722	0.7539	0.8877
Robust t statistics in parentheses					
* significant at 10%; ** significant at 5%; *** significant at 1%					

Exhibit C-4b – Regressions of Need Index Using Stage 3 Resource Specifications, Lump-Sum District-Level Expenditures and Mean Enrollment

	Enrollment Category 1	Enrollment Category 2	Enrollment Category 3	Enrollment Category 4	Enrollment Category 5
Natural log of enrollment	-0.131 (6.29)***	-0.011 (0.62)	-0.037 (1.83)*	-0.006 (0.27)	-0.008 (1.84)*
Percent eligible for free/reduced lunch	0.249 (4.99)***	0.240 (8.28)***	0.190 (7.42)***	0.317 (7.62)***	0.297 (6.24)***
Percent special education	0.293 (2.98)***	0.439 (5.03)***	0.555 (3.44)***	0.541 (2.83)***	0.866 (3.73)***
Percent English language learners	0.554 (4.54)***	0.770 (3.64)***	0.965 (6.77)***	0.690 (2.84)***	0.526 (2.13)*
Elementary school district indicator	-0.012 (0.23)	-0.078 (4.55)***	-0.071 (2.70)***	0.000 (.)	0.000 (.)
Constant	0.098 (2.21)**	-0.154 (2.90)***	-0.071 (0.91)	-0.203 (2.03)**	-0.228 (6.95)***
Observations	183	267	140	75	15
Adjusted R-squared	0.5883	0.4225	0.6080	0.7475	0.9361
Robust t statistics in parentheses					
* significant at 10%; ** significant at 5%; *** significant at 1%					

Exhibit C-4c – Regressions of Need Index Using Stage 3 Resource Specifications, Lump-Sum District-Level Expenditures and Hybrid Enrollment					
	Enrollment Category 1	Enrollment Category 2	Enrollment Category 3	Enrollment Category 4	Enrollment Category 5
Natural log of enrollment	-0.174 (9.20)***	-0.034 (1.80)*	-0.066 (3.08)***	-0.023 (0.96)	-0.008 (1.53)
Percent eligible for free/reduced lunch	0.216 (4.36)***	0.255 (8.54)***	0.195 (7.36)***	0.342 (7.77)***	0.327 (5.90)***
Percent special education	0.298 (2.78)***	0.418 (5.48)***	0.681 (3.75)***	0.613 (2.81)***	0.807 (2.72)**
Percent English language learners	0.496 (3.80)***	0.752 (3.57)***	0.944 (6.42)***	0.595 (2.43)**	0.404 (1.42)
Elementary school district indicator	-0.009 (0.17)	-0.090 (5.07)***	-0.057 (5.85)***	0.000 (.)	0.000 (.)
Constant	0.243 (6.23)***	-0.060 (1.07)	0.019 (0.23)	-0.150 (1.46)	-0.234 (5.62)***
Observations	183	267	140	75	15
Adjusted R-squared	0.6545	0.4195	0.5906	0.7584	0.9027
Robust t statistics in parentheses					
* significant at 10%; ** significant at 5%; *** significant at 1%					

Exhibit C-4d – Regressions of Need Index Using Stage 3 Resource Specifications, Lump-Sum/Ratio District-Level Expenditures and Actual (Within Sample) Enrollment					
	Enrollment Category 1	Enrollment Category 2	Enrollment Category 3	Enrollment Category 4	Enrollment Category 5
Natural log of enrollment	-0.099 (6.35)***	-0.028 (1.65)	-0.067 (3.28)***	-0.051 (1.95)*	-0.011 (2.02)*
Percent eligible for free/reduced lunch	0.365 (9.23)***	0.377 (14.80)***	0.330 (14.99)***	0.474 (10.37)***	0.422 (5.67)***
Percent special education	0.344 (4.07)***	0.434 (5.49)***	0.750 (4.39)***	0.714 (2.99)***	0.836 (2.79)**
Percent English language learners	0.167 (1.42)	0.280 (1.68)*	0.561 (4.67)***	0.215 (1.08)	0.149 (0.53)
Elementary school district indicator	-0.047 (1.19)	-0.094 (4.70)***	-0.059 (10.84)***	0.000 (.)	0.000 (.)
Constant	0.054 (1.69)*	-0.097 (1.95)*	-0.017 (0.22)	-0.077 (0.71)	-0.239 (6.21)***
Observations	183	267	140	75	15
Adjusted R-squared	0.6443	0.5881	0.6962	0.8419	0.8813
Robust t statistics in parentheses					
* significant at 10%; ** significant at 5%; *** significant at 1%					

Exhibit C-4e – Regressions of Need Index Using Stage 3 Resource Specifications, Lump-Sum/Ratio District-Level Expenditures and Mean Enrollment					
	Enrollment Category 1	Enrollment Category 2	Enrollment Category 3	Enrollment Category 4	Enrollment Category 5
Natural log of enrollment	-0.089 (5.64)***	-0.008 (0.51)	-0.021 (1.22)	-0.023 (1.03)	-0.008 (1.87)*
Percent eligible for free/reduced lunch	0.381 (10.74)***	0.365 (15.45)***	0.335 (17.19)***	0.429 (10.42)***	0.358 (5.52)***
Percent special education	0.361 (4.53)***	0.458 (5.06)***	0.575 (4.49)***	0.604 (2.94)***	0.950 (3.77)***
Percent English language learners	0.171 (1.55)	0.296 (2.00)**	0.480 (4.40)***	0.333 (1.83)*	0.368 (1.55)
Elementary school district indicator	-0.030 (0.90)	-0.068 (4.93)***	-0.052 (2.04)**	0.000 (.)	0.000 (.)
Constant	-0.027 (0.83)	-0.193 (4.00)***	-0.166 (2.61)**	-0.169 (1.84)*	-0.246 (7.26)***
Observations	183	267	140	75	15
Adjusted R-squared	0.6619	0.5913	0.7565	0.8446	0.9256
Robust t statistics in parentheses					
* significant at 10%; ** significant at 5%; *** significant at 1%					

Exhibit C-4f – Regressions of Need Index Using Stage 3 Resource Specifications, Lump-Sum/Ratio District-Level Expenditures and Hybrid Enrollment					
	Enrollment Category 1	Enrollment Category 2	Enrollment Category 3	Enrollment Category 4	Enrollment Category 5
Natural log of enrollment	-0.147 (10.03)***	-0.034 (1.92)*	-0.055 (2.88)***	-0.042 (1.77)*	-0.009 (1.72)
Percent eligible for free/reduced lunch	0.324 (7.84)***	0.373 (13.78)***	0.335 (15.86)***	0.454 (10.07)***	0.391 (5.55)***
Percent special education	0.344 (3.56)***	0.430 (5.55)***	0.716 (4.50)***	0.687 (2.87)***	0.880 (3.02)**
Percent English language learners	0.150 (1.22)	0.308 (2.03)**	0.477 (4.22)***	0.236 (1.19)	0.235 (0.89)
Elementary school district indicator	-0.017 (0.41)	-0.084 (4.98)***	-0.037 (5.15)***	0.000 (.)	0.000 (.)
Constant	0.163 (5.55)***	-0.084 (1.59)	-0.058 (0.83)	-0.108 (1.09)	-0.251 (7.11)***
Observations	183	267	140	75	15
Adjusted R-squared	0.6757	0.5561	0.7149	0.8460	0.8946
Robust t statistics in parentheses					
* significant at 10%; ** significant at 5%; *** significant at 1%					

APPENDIX D

INSTRUCTIONAL PROGRAM DESCRIPTIONS

Your program description should be sufficiently detailed for someone who did not participate in the process to understand what you propose. Describe what teachers and students will be doing, any special scheduling considerations, etc.

TASK 2A: Instructional Program

1. Elementary

- Major emphasis is placed on providing appropriate support and interventions in the early childhood grades, Pk-K-1-2-3 in order to ensure that students achieve the standards for proficiency in literacy and mathematics by the end of grade 3.

PK: Instruction: A FULL DAY enriched program, composed of motor/sensory skill development, social skills development (e.g., conflict resolution), dance, music, art and trips, will be provided for all students, up to the limits of space (anticipated at 129 seats). The curriculum will be developmentally appropriate and focus on language development; e.g., High Scope, Bank Street, Reggio Emilia. Computers will be utilized for instruction. Professional development and parent involvement are essential.

Teacher Certification: There should be special certification established for PK teachers.

Staff/Class Size: 1 teacher and 1 para per 15 students.

Additional Support: 1 special education teacher and 1 special education para to provide targeted intervention to at-risk students in classes (e.g., consultant teacher) and provide for coverage to enable teachers and paras to participate in PD activities, such as intervisitations.

Kindergarten: Instruction: The program will focus on reading readiness in a center-based environment. The school day will be structured around development of literacy and mathematical skills in center-based activities incorporating all subject areas (e.g., science, art, music).. Writing for different purposes will be taught. Buddy upper grade students with early childhood students. Calendar expectations.

Assessment: The E-CLAS assessment tool will be used in September and May. Teachers will use portfolio assessment. A team will use the case conferencing method to identify, for each student, areas requiring intervention.

Staff/Class Size: 1 teacher and 1 para per 18 students.

Additional Support: 1 special education teacher and 1 special education para to provide targeted intervention to at-risk students in classes and provide for coverage to enable teachers and paras to participate in PD activities, such as intervisitation.

Interns (grades K/1) : graduate students to work with small groups of students during the day, while developing their own instructional strategies. Total for both grades: 7 (\$15/hour, 6 hours/day, 5 days/week; estimated # days = 150). This is recorded under Other Professional Staff: 1.5 FTE to generate the approximate cost, \$95,000.

Supervision: all day direct supervision by a dedicated Assistant Principal.

Professional Development: Provide PD in Mel Levine's One Mind at a Time.

Grade One: Instruction: Emphasis continues on development of literacy and mathematics skills. Elements: reading, writing, math workshops; phonics; leveled libraries, language development (story telling), integration of the arts (drama, music, etc.), physical education, movement, social skills; 90 minutes of literacy and 60 minutes of mathematics per day. During lunch, the guidance counselor will conduct advisory groups with small numbers of at-risk students.

Daily Schedule:

- ELA = 90 minutes
- Math = 60 minutes
- Social Studies/Science = 60 minutes
- Enrichment Period/Day = Dance, movement = 60 minutes
- Meeting Time (affective) = 15 minutes
- Organized Recess = 30 minutes

Intervention Support: One Reading Teacher Specialist – visit classrooms daily to work with individual students or small groups in classes (push-in); meet with Child Study Team conduct demonstration lessons; attend grade level meetings with the teacher to participate in collaborative planning.

Parent Involvement: monthly workshops; parent newsletter.

Staff/Class Size: 1 teacher per 18 students

Grade Two: Instruction: Curriculum similar to grade one; enrichment for struggling students.

Intervention Support: One .5 Reading Teacher Specialist and .5 Math Teacher Specialist – same duties as the grade one specialist,

Assessment: Diagnostic assessment in September; assessments conducted a maximum of 3 times/year

Staff/Class Size: 1 teacher per 18 students

Grade Three: Instruction: content teaching, research/information literacy, enrichment – special interests and choices

Collaborative Team Teaching (inclusion): One teacher

Intervention Support: .5 Reading Teacher Specialist and .5 Math Teacher Specialist

Assessment: early diagnostic assessment

Staff/Class Size: 1 teacher per 20 students

Grade Four: Instruction: Social studies – primary source document-based learning with multiple perspectives; group work – exit projects.

Collaborative Team Teaching (inclusion): One teacher

Assessment: beginning of the school year

Extended Day -Test Preparation- Saturdays: 15 hours/reading test and 15 hours/math test; 6 teachers/subject.

Intervention Support: One .5 Reading Specialist and one .5 Math Specialist

Staff/Class Size: 1 teacher per 25 students

Grade Five: Instruction: Inclusion class; conflict resolution/social skills; health education; public speaking

Collaborative Team Teaching (inclusion): One teacher

Intervention Support: One .5 Reading Specialist and .5 Math Specialist

Guidance: One of the two guidance counselors in the school provides guidance for articulation to middle school.

Clubs: debate club, drama/theatre club --- Set up Club Fridays during last period.

Staff/Class Size: 1 teacher per 25 students

FOR THE ENTIRE SCHOOL

Prep Period Coverage for Teachers: provided at .2 per classroom teacher, in accordance with current contractual requirements

SETSS (resource room) Teachers: 2 teachers

Librarian: One full-time open access librarian; teaches information literacy.

One school aide will be dedicated to the library.

Technology Instruction Specialist: One teacher

Coaches: 1 Literacy and 1 Math (teacher positions)

Technology Technician: One person to repair computers and provide PD in standard diagnostic procedures

Homework Policy: Establish a homework policy beginning in grade 3.

Special Education: Place students in the least restrictive environment. To meet special needs, provide targeted assistance in the classroom first through the teacher, reading/math specialist, speech teacher, and crisis intervention teacher. As a secondary option, provide the services of a paraprofessional (one para/grade included in the plan). Consideration of referral for placement in a more restrictive environment is a last resort, after all possible interventions in the GE classroom have been utilized.

EXTENDED TIME (DAILY SCHEDULE AND SCHOOL YEAR) – Assume that the current schedule provides 6 hours 20 minutes/day, plus a 50 minute block on one day for instruction and another 50 minute block on one day for PD.

Desired Schedule:

Instruction: 7 hours student instruction/day

PD: one hour of PD/week or 2 hours every other week.

Last week of August: All teachers return one week early for PD on five days.

Add 8.5% to the salaries of the teachers, guidance counselors, paras, and school secretaries.

CHILD STUDY TEAM

(This new concept subsumes the work of the current School-Based Support Team and is designed to reduce the need for referrals to special education. One of the members listed will serve as the Team Leader.)

- Two guidance counselors, one for early grades and one for upper grades
- Two speech teachers
- One Crisis Intervention Teacher
- One psychologist
- One social worker
- One SETSS teacher – Special Education teacher support services
- Early Childhood Parent Outreach Person (Family Worker) – to address family issues, student lateness and absences.

2. Middle

Daily Schedule: Start the day at 8:30 AM and end at 3:30 PM.

Grade 6:

Instruction: Two teams of teachers (houses); ELA/SS: 3 periods; Math/Science: 3 periods; 0 period homeroom/activities - study skills; physical education, art; cycles -- technology, art, science electives; extracurricular activities. Workshop model. Advisory model. Teachers meet by grade and subject area.

Collaborative Team Teaching (inclusion): One class

Instructional Specialists/Staff Developer: One Reading/Math Specialist – to provide direct instruction in classrooms to at-risk students, demonstration lessons in content area strategies, and coverage for teachers to attend PD activities

Career/Technical Education: School to work programs

Extracurricular Activities: 3:30 – 6:00 PM daily

Summer Program: Include summer transitional program for grade 5 to grade 6; class size = 18; 30 days x 4 hours/day.

Guidance Counselor: One position

Staff/Class Size: One teacher per 25 students (heterogeneous grouping)

Grade 7

Instruction: Two teams of teachers (houses); ELA/SS: 3 periods; Math/Science: 3 periods; 0 period homeroom/activities - study skills; physical education, art; cycles -- technology, art, science electives; extracurricular activities. Workshop model. Advisory model. Teachers meet by grade and subject area.; college awareness, visits to campuses.

What is different? Encourage more independence; choice of strands – i.e., band, drama, etc.; guidance counselor and grade advisor move up with students; continuous grouping/teacher.

Collaborative Team Teaching (inclusion): One class

Instructional Specialists: One Reading/Math Specialist

Guidance Counselor: One position

Staff/Class Size: One teacher per 25 students

Grade 8:

Instruction: Two teams of teachers (houses); ELA/SS: 3 periods; Math/Science: 3 periods; 0 period homeroom/activities - study skills; physical education, art; cycles --

technology, art, science electives; extracurricular activities. Workshop model. Advisory model. Teachers meet by grade and subject area. **What is different?** Exit projects; high school visits; college camps - summer, vacations, weekends (2 teachers, transportation, lodging, food, materials), visiting speakers, cultural outings, enrichment programs.

Collaborative Team Teaching (inclusion): One class

Instructional Specialists: One Reading/Math Specialist

Summer Program: Include summer transitional program for grade 8 to 9; class size = 18.

Guidance Counselor: One position

Guidance Counselor/Articulation Advisor: One position

Staff/Class Size: One teacher per 25 students

FOR THE ENTIRE SCHOOL

EXTENDED TIME (DAILY SCHEDULE AND SCHOOL YEAR) – Assume that the current schedule provides 6 hours 20 minutes/day, plus a 50 minute block on one day for instruction and another 50 minute block on one day for PD.

Desired Schedule:

Instruction: 7 hours student instruction/day

PD: one hour of PD/week or 2 hours every other week.

Last week of August: All teachers return one week early for PD on five days.

Add 8.5% to the salaries of the teachers, guidance counselors, paras, and school secretaries.

General Curricular Design: Student Government Councils empowered with decision-making powers; student court; intramural sports, field trips, research – seminar learning, full-time health clinic (adolescent issues), health education, technology – laptops – multimedia presentations; one nurse; outward bound trips – in-house team building; theme days; mentoring by representatives of external organizations (CBOs, businesses, etc.).

Special Education: One (1) special education self-contained class per grade level: 12:1:1

Security Officers: Training for security officers in understanding and managing student behavior.

Prep Period Coverage for Teachers: provided at .4 per classroom teacher, in accordance with current contractual requirements

Additional Positions:

SETSS (resource room) Teachers: Three (3) teachers – flexible scheduling, combination of push-in and pull-out

ESL: One (1) English as a Second Language teacher

Deans: Three (3) positions, one/grade: grade advisor, conflict resolution; proactive; leads an advisory group; teaches social skills; alternative setting/in-school suspension coordinator; student incentives/celebrations.

Librarian: Two (2) full-time open access librarian; teaches information literacy

Technology Instruction Specialist: One teacher

Coaches: 1 Reading and 1 Math coach (teacher positions)

Technology Technician: Two (2) persons to repair computers and provide PD in standard diagnostic procedures

Community Service Coordinator: One position – to coordinate service learning

Attendance Teacher: One position

CHILD STUDY TEAM

(This new concept subsumes the work of the current School-Based Support Team and is designed to reduce the need for referrals to special education. One of the members listed will serve as the Team Leader.)

- Three (3) guidance counselors (as described)
- Two (2) psychologists - .6 SE, .4 GE
- One (1) social worker
- One (1) speech teacher
- One of the three (3) SETSS teachers – Special Education teacher support services
- Parent Outreach Person (Family Worker) – to address family issues, student lateness and absences.

Professional Development: Content area training; professional courses for certification paid by DOE; two weeks in the summer; every week – 2 hours of PD; teams meet during common planning time (1 or 2 period/week).

Summer Program: Assume 1/3 of the students will be eligible for the summer transitional program.

- **High School**

Schedule: 8:00 – 3:00 PM, plus 3:00 – 5:00 PM

Classes: Four (4) core subjects + art, music, second language, physical education

Class Size: 25/class

Organization: Groups of 100 students; teachers teach 4 classes + one class to be selected (e.g., conflict resolution, direct services to students, advisory, internship supervision, etc.) – **Seven (7) teachers per 100 students.** Common meeting time – a SE representative is present.

Instruction: school to work/career internships; mentoring (role models).

Guidance Counselors: One (1) position/200 students -- includes college advisement, typical dean responsibilities, articulation to colleges, etc.

Summer Bridge Program: Grade 8 to Grade 9: assume 70% of incoming students will participate; 30 days x 4 hours/day.

Assistant Principals: AP-organization, AP-subject areas (math, science, ELA, social studies)

Additional Positions

Special Education Liaison/Coordinator: 1 position

SETSS (resource room) Teachers: Three (3) teachers – flexible scheduling, combination of push-in and pull-out

ESL: One (1) English as a Second Language teacher

Teacher Coordinators: Two (2) positions related to school themes – staff development, CBOs, partnerships, grant writing/fund raising, curriculum development, recruitment of teachers and students

Librarian: Two (2) full-time open access librarians; teaches information literacy

Technology Instruction Specialist: One teacher

Coaches: 1 Reading and 1 Math coach (teacher positions)

Technology Technician: Two (2) persons to repair computers and provide PD in standard diagnostic procedures

Attendance Teacher: One position

CHILD STUDY TEAM

(This new concept subsumes the work of the current School-Based Support Team and is designed to reduce the need for referrals to special education. One of the members listed will serve as the Team Leader.)

- Three (3) of the six (6) guidance counselors (as described)
- Two (2) psychologists - .6 SE, .4 GE
- One (1) social worker
- One (1) speech teacher
- One of the SETSS teachers – Special Education teacher support services
- Parent Outreach Person (Family Worker) – to address family issues, student lateness and absences.

FOR THE ENTIRE SCHOOL

EXTENDED TIME (DAILY SCHEDULE AND SCHOOL YEAR) – Assume that the current schedule provides 6 hours 20 minutes/day, plus a 50 minute block on one day for instruction and another 50 minute block on one day for PD.

Desired Schedule:

Instruction: 7 hours student instruction/day

PD: one hour of PD/week or 2 hours every other week.

Last week of August: All teachers return one week early for PD on five days.

Add 8.5% to the salaries of the teachers, guidance counselors, paras, and school secretaries.

- **List any additional assumptions that are essential to understanding the program you developed?**

- Each elementary school should include pre-kindergarten.
- Explore expansion of summer program opportunities for all students through community-based organizations.
- Students should be held over not more than once for not meeting promotional standards.
- **Professional development:** Professional development must include grade level sessions, as well as vertical K-12 sessions on curricular areas. Establish an institute for training reading specialists.
- **Teacher Absence – Provide an Absence Teacher Reserve (ATR):** Elementary and Middle School: Five (5) teachers/school - to be available on a daily basis to cover absences in lieu of hiring substitutes or paying lost preps. High School: Six (6) teachers/school. The cost factor added in the spreadsheet (on the teacher line) reflects the difference between this # F/T teachers and the FTE already reflected on the substitute line.
- **For extended time, as described (+ 100 minutes/week + last week in August), add 8.5% to the salaries of the teachers, guidance counselors, paras, and school secretaries.**

JOB DESCRIPTIONS

Speech/Language Teacher

- Serve IEP-mandated students with language development issues and non-mandated students who exhibit difficulties
- Serve as a staff developer in language strategies, such as phonemic awareness in grades K-2
- Provide demonstration lessons, after-school workshops
- Support administering assessments, such as E-Clas and other assessments for language development

Family Worker/Parent Coordinator

- Provide parent outreach for all families, with emphasis on hard to reach families
- Facilitate translation of all information into the languages spoken by students at the school
- Provide support for all parent meetings in the form of letters, phone calls, flyers, room arrangements, refreshments.
- Make arrangements for open houses and tours for prospective parents
- Help new families adjust to the new school
- Coordinate outreach for students in attendance and/or lateness problems
- Be a parent advocate; link families to services
- Ensure that school is a welcoming place for all parents and guardians
- Be a link between the PTA and faculty

Student Support Personnel - Crisis Intervention Teacher (CIT)

- Take a proactive approach to dealing with student issues
- Receive training in conflict resolution and special education adaptation methods
- Provide and supervise alternative places for students with difficulties
- Be a liaison with the classroom teacher to support students with specific behavioral needs
- Conduct advisory groups on behavior management for these students
- Conduct functional behavioral assessments as needed

- Formulate behavioral intervention plans
- Create, implement and supervise behavior management programs as needed
- Participate in creation of positive school discipline codes
- Coordinate suspension procedures
- Be available during lunch hour for to lead groups
- Utilize de-escalation techniques to respond to disruptive behavior
- Teach conflict resolution lessons in the classroom
- Serve a home-school connection for the same students
- Lead faculty workshops in their areas of expertise

SETSS Teacher

Implements and updates IEPs on an ongoing basis.

SETSS – Resource Room Teacher

- Supplement classroom instruction
- Modifies classroom activities according to individual needs
- Consults with classroom teacher and related personnel regarding areas that require attention/intervention
- When possible, interpret test data for teachers
- Be flexible in scheduling and working with classroom teachers

SETSS - Consultant Teacher

- collaborates with GE teacher and related personnel
- Provides strategies for modification within the classroom environment
- Provides instructional support as needed
- Conducts small group lessons with children with IEPs as needed
- Conducts informal observations of GE students for assessment purposes, as needed

Paraprofessional

IEP-mandated Paraprofessional

- Provide services as stipulated on the student's IEP.

Program Paraprofessional

- Provide assistance to classroom teacher as needed
- Participate in joint planning sessions with the teacher
- Duties may include, but are not limited to: behavioral support, instructional assistance, clerical duties, and record keeping.
- Willing to take specialized courses

ESL Teacher

- Work in classroom with small groups of English Language Learners
- Articulate with classroom teacher
- Procure and provide parent information and parent contact, as needed
- Provide demonstration lessons in ESL methodologies
- Participate in grade conferences and child study team
- Conduct ongoing assessment of student proficiency in English, interpret assessment data, and provide information to the teacher to guide instruction

Reading or Mathematics Instructional Specialist [assigned by grade]

- Provide small group instruction to at-risk students in the classroom
- Participate in the Child Study Team
- Model demonstration lessons
- Review and interpret assessments; make recommendations to classroom teachers
- Cover classes to enable teachers to participate in intervisitations
- Work in each class on the grade each day, according to a prescribed schedule; this schedule enables the teacher to become familiar with all students
- Confer with teachers regarding interpretation of student performance data and assist in prescribing specific strategies for intervention
- Conduct parent workshops on how to help their children learn at home
- Assist in organizing after-school instructional activities to improve reading and/or mathematics skills

Coach/Staff Developer [Reading or Mathematics] Hours: 8:00 – 4:00

- Identify staff development needs based on student and teacher needs
- Attend grade level and curriculum team meetings
- Use a variety of staff development strategies, such as modeling, coaching, consulting, workshop model, arranging intervisitations, study groups, etc.
- Set goals for each teacher with the teacher and administrator that are appropriate for the teacher and reflect school goals
- Know current trends in research in literacy and mathematics
- Present parent workshops
- Align work with the reading and math specialists
- Participate in the PD committee at the school level
- Coordinate development of PD calendar, including attendance of teachers at workshops; lead debriefing sessions
- Assist in ordering instructional materials
- 1/3 – demo lessons; 1/3 – observations of mini-lessons; 1/3 – coaching for specific strategies; every F – out of building for regional PD.

Technology Specialist

- Prepare instructional technology action plan for the school
- Train staff and students on the use of technology as an instructional tool
- Order and inventory computers, A-V hardware and software
- Schedule students, staff and parents for computer access
- Conduct parent and teacher workshops on integrating technology into teaching all curriculum areas
- Conduct demonstration lessons
- Oversee the work of the technicians

Technology Technician

- Provide maintenance and repair of hardware and all media equipment
- Assist in setting up and operating equipment at school events
- Train students to be technicians

- Train staff in maintenance procedures
- Coordinate the referral of repair needs to the DOE Help Desk.

Library/Media Specialist [Full-Time Position]

- Select and order appropriate library materials – books, videos, DVDs, periodicals, software, etc.
- Work with teachers on planning projects; e.g., research, presentations, exit projects
- Conduct read-alouds, book talks, poetry reading, long-term writing projects, contests
- Conduct lessons on use of the library to students
- Oversee “weeding” – keep the library up to date; ensure that the library collection has a multicultural perspective
- Create an environment reflective of the literacy program of the school; ensure pleasant and welcoming atmosphere for reading
- Identify on-line materials, web sites; ensure appropriateness for students
- Consult with teachers, coaches, administrators on the literacy program; chair meetings on literacy
- Attend professional meetings outside the school
- Work with the Technology Specialist on curriculum integration; integrate technology into the library
- Arrange for author visits
- Establish relationships with public libraries, vendors, etc.
- Develop school-wide procedures for borrowing/returning books
- Coordinate summer reading programs and read-a-thons
- Conduct parent workshops
- Maintain a professional library for the faculty

Guidance Counselor

- Counsel students
 - Serve as a member of the Child Study Team
 - Share information with teachers and staff; provide behavioral and academic interventions
 - Lead specific advisory groups, such as divorce, new siblings, newcomers to school, death and bereavement
 - Provide training to staff on child abuse/neglect identification and notification procedures
 - Collaborate with the attendance teacher and parent outreach person (family worker) on responding to student attendance problems
 - Serve as a liaison to the student’s former school in the case of high student mobility
 - Provide parent outreach
 - Support post-school placement
 - Supervise the maintenance of transcripts and student records
 - Manage referral and evaluation process for each student recommended for referral
 - Assign case managers for each child brought to Child Study Team for review and intervention
 - Maintain records of all services and interventions provided to each at-risk child.
- [The principal should dedicate clerical support to the guidance counselor; e.g., school aide.]

Attendance Teacher

- Work with principal, parents and staff to develop a School Attendance Plan, incorporating daily internal procedures to promote excellent attendance
- Train teachers in daily attendance procedures
- Monitor daily student attendance
- Make home contacts for students who are absent or late
- Visit homes, certify addresses, assist with researching LTAs, remove LTAs from registers in accordance with regulations
- Conduct home visits for students for whom 407s are generated; close cases appropriately
- Create incentive programs for improved attendance
- Follow up with other agencies (Bureau of Child Welfare, health, etc.)

Security Staff

- Assist in development of the School Safety Plan
- Check identification of visitors upon entrance into the building
- Monitor hallways, bathrooms, perimeter of school
- Assist in developing a safe corridor between home and school
- Participate in parent workshops to explain security procedures, such as scanning, identification procedures, etc., and how to identify signs of gang-related activity.
- Report all occurrences to the principal promptly.
- Get to know the personnel and students in the building, including special circumstances affecting families (e.g., custody, restraining orders, orders of limited access)

5. Describe the elementary, middle and high school programs of students X, Y and Z.

- **STUDENT X**

Elementary:

Student X will be exposed to a variety of electives through lunchtime clubs, fun Friday activities, extracurricular activities, career days, mentoring,.

Middle:

Student X will participate in trips, internships, community service, buddy relationships with peers and mentors, advisory groupings; be exposed to a variety of readings that highlight careers

High School:

Student X will participate in the summer bridge program, developmentally appropriate educational experiences, workshop/standards-based learning in literacy and mathematics; CTE classes with paid internship opportunities; cooperative education programs; arts programs; Renzulli multiple intelligences programs.

- **STUDENT Y**

Elementary: Student Y will participate in resource room, SETSS push-in support, guidance and social worker support, enrichment activities (sports, arts); assistive technology; will be provided in all necessary accommodations to be able to succeed; additional assistance in from the reading and math specialists; extended day; summer program

Middle: Same as elementary, plus content area support, adaptations and alternatives (e.g., double reading period in lieu of foreign language), school to work experiences, counseling.

High School: Student Y will participate in high school placement activities to ensure a college match aligned with student interests and abilities; portfolio assessment.

• **STUDENT Z**

Elementary, Middle, High School

'Student Z will be exposed throughout his/her school career to compacting – alternative learning opportunities (e.g., independent study); encouraged to work more deeply in community services; participate in mentoring and community service activities.

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 4.5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 4.5
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 4.5
- d) If it were necessary to raise salaries to a higher level to attract and retain qualified personnel, and total budgets were raised correspondingly, would you change the way you have allocated resources (that is, would you change the configuration of the program you designed)? No If you answered yes, please explain how and why.
- e) If lower salaries were adequate to attract and retain qualified personnel, and total budgets were decreased correspondingly, would you change the way you allocated resources (that is, would you change the configuration of the program you designed)? No If you answered yes, please explain how and why.

Comments:

TASK 3A: Instructional Program

- **Elementary**
 - Add one ESL teacher – to deliver English as a second language instruction to ELL students in small groups, class size up to 15.
 - Mobile laptop computers will be utilized.
 - One of the guidance counselors will be bilingual.
 -
- **Middle**
 - Add one ESL teacher
 - Mobile laptop computers will be utilized.
 - One of the guidance counselors will be bilingual.
- **High**
 - Add one ESL teacher
 - Mobile laptop computers will be utilized.
 - One of the guidance counselors will be bilingual.

4. List any additional assumptions that are essential to understanding the program you developed?

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 4.5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning

opportunities specified in Exhibit 1 to all of the school's students? 4

Comment:

We prefer a grade K-8 school or 6-12 school. The resources shown are adequate and could be redeployed in these alternative configurations.

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 4.5
- d) If it were necessary to raise salaries to a higher level to attract and retain qualified personnel, and total budgets were raised correspondingly, would you change the way you have allocated resources (that is, would you change the configuration of the program you designed)? No If you answered yes, please explain how and why.
- e) If lower salaries were adequate to attract and retain qualified personnel, and total budgets were decreased correspondingly, would you change the way you allocated resources (that is, would you change the configuration of the program you designed)? No If you answered yes, please explain how and why.

Comments:

TASK 4A: Instructional Program

- Elementary
 - Middle
 - High
4. List any additional assumptions that are essential to understanding the program you developed?
5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.
- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? _____
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____
- d) If it were necessary to raise salaries to a higher level to attract and retain qualified personnel, and total budgets were raised correspondingly, would you change the way you have allocated resources (that is, would you change the configuration of the program you designed)? _____ If you answered yes, please explain how and why.
- e) If lower salaries were adequate to attract and retain qualified personnel, and total budgets were decreased correspondingly, would you change the way you allocated resources (that is, would you change the configuration of the program you designed)? _____ If you answered yes, please explain how and why.

Comments:

TASK 5A: Instructional Program

- Elementary
 - Middle
 - High
4. List any additional assumptions that are essential to understanding the program you developed?
5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.
- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? _____
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____
- d) If it were necessary to raise salaries to a higher level to attract and retain qualified personnel, and total budgets were raised correspondingly, would you change the way you have allocated resources (that is, would you change the configuration of the program you designed)? _____ If you answered yes, please explain how and why.
- e) If lower salaries were adequate to attract and retain qualified personnel, and total budgets were decreased correspondingly, would you change the way you allocated resources (that is, would you change the configuration of the program you designed)? _____ If you answered yes, please explain how and why.

Comments:

TASK 6A: Instructional Program

- **Elementary**
 - Add an educational program for three year olds.
 - Lower class size: 1 teacher/15 students
 - Expand the after school program to provide more homework assistance.
 - Expand outreach to community, such as parenting workshops, parties to bring parents into the school, and stipends for parents.
 - Add six week summer program; assume 50% of students will participate.

- **Middle**
 - Lower class size: 1 teacher/20 students
 - Expand the after school program to provide more homework assistance.
 - Expand outreach to community, such as parenting workshops, parties to bring parents into the school, and stipends for parents.

- **High**
 - Lower class size: 1 teacher/25 students
 - Expand the after school program to provide more homework assistance.
 - Expand outreach to community, such as parenting workshops, parties to bring parents into the school, and stipends for parents.
 - Provide two nurses

- 4. List any additional assumptions that are essential to understanding the program you developed?

- 5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning

opportunities specified in Exhibit 1 to the all of the school's students? 4

- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 4
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 4
- d) If it were necessary to raise salaries to a higher level to attract and retain qualified personnel, and total budgets were raised correspondingly, would you change the way you have allocated resources (that is, would you change the configuration of the program you designed)? No If you answered yes, please explain how and why.
- e) If lower salaries were adequate to attract and retain qualified personnel, and total budgets were decreased correspondingly, would you change the way you allocated resources (that is, would you change the configuration of the program you designed)? No If you answered yes, please explain how and why.

Comments:

PJP 2: Instructional Program Descriptions

Your program description should be sufficiently detailed for someone who did not participate in the process to understand what you propose. Describe what teachers and students will be doing, any special scheduling considerations, etc

TASK 2A: Instructional Program

- Elementary
 - Full-Day Kindergarten
 - Create a “summer before and after” program for students needing early intervention
 - Approximately 40 % or 34 students
 - 6 week program
 - 3 hours per day
 - Focus on early literacy/language development, and school readiness skills
 - More instructional time necessary to meet learning standards
 - 15-18 students per class (5 classes)
 - 1 special education teacher for the grade level
 - Special education categories excluded will be severely emotionally disturbed, multiple disabilities, and medically fragile.
 - 1 special education aide
 - 2 paraprofessionals are shared at the grade level
 - 1 full time reading teacher are shared at the grade level
 - Want to saturate the early grades with resources, especially Kindergarten
 - 1st Grade
 - 15-18 students per class (5 classes)
 - Classes remain small to eliminate kindergarten retentions and reduce the need for more intensive services at middle and high school levels as students progress through grades (same for all grades)
 - Prevents the need for more services later
 - 2 paraprofessionals shared at the grade level
 - 1 Reading specialist for the grade level
 - 1 special education teacher
 - 1 special education aide
 - 2nd Grade
 - 15-18 students per class (5 classes)
 - Assures continued literacy development and growth for all students
 - 2 paraprofessionals shared at the grade level to assist with meeting individual needs of students
 - 1 Reading specialist for the grade level
 - 1 special education teacher
 - 1 special education aide
 - 3rd Grade

- 18-21 students per class (4 classes)
 - Continue to provide high level of intensity of instructional services to meet individual needs of students so they will meet standards.
 - Smaller student-teacher ratio to help ensure that all students will be reading on grade level by the end of third grade
- 2 paraprofessionals shared at the grade level
- 1 Reading specialist for the grade level
- 1 special education teacher
- 1 special education aide
- 4th Grade
 - 21-24 students per class (4 classes)
 - Smaller student-teacher ratio to help ensure that all students will be meeting 4th grade standards
 - 1.5 paraprofessionals shared at the grade level
 - 1 special education teacher
 - 1 special education aide
- 5th Grade
 - 21-24 students per class (4 classes)
 - Smaller student-teacher ratio to help ensure that all students will be meeting 5th grade standards
 - 1.5 paraprofessionals shared at the grade level
 - 1 special education teacher
 - 1 special education aide
- P. E.: 2 teachers to provide instruction 2X per week per class
- Music: 2 teachers to provide instruction 2X per week per class
- Art: 1 teacher to provide instruction 1X per week per class
- Computers
 - Assume that there is a computer lab (25 computers) and 4 computers in each classroom
 - 1 technology teacher for the school
- Clerical
 - Secretary: 12 months
 - Attendance secretary: 10 months
 - Clerk/Typist: 10 months
 - Security guard: 10 months
 - Parent Liaison
- Guidance Counselor: 0
 - Needs addressed by psychologist & social worker
- Psychologist: 1 FTE; Responsibilities will include:
 - Assessments
 - Compliance
 - AIS
 - Support to families
 - Attendance follow-up
 - Alignment to agencies
 - Safety net for declassification support services

- 50% General Ed., 50% Special Ed.
 - There is a level of discomfort in trying to delineate this in percentages
- Social worker: 1 FTE; Responsibilities will include:
 - Social/Family history for CSE
 - Compliance
 - AIS
 - Support to families
 - Alignment to agencies
 - Student counseling
- Special Education
 - 98% of the special education population are in neighborhood schools
 - 6 special education teachers to serve this population within the general education classroom and through pull out services if needed. Services could include the following :
 - Co-teaching
 - Consulting
 - Resource
 - Direct instruction
 - Acceleration (remediation)

In addition to direct services, the teachers and paras will collaborate with the general education teacher for the purpose of:

 - Adapting of instruction
 - Test accommodations
 - Monitoring progress
 - Developing IEP's
 - Assessing students for initial and 3 year re-evaluations
 - Additional aides may be needed depending on the specific disabilities of the students
- Nurses: 1 FTE; Responsibilities will include:
 - Dispense medications
 - Disease prevention
 - Triage for sick students
 - Coordinate with doctors and health agencies
- Librarians: 1
 - .5 position for technology support & training
- Principal: 1
- Assistant principals: 0
 - See Other Professional Staff instead
- Other Professional Staff: 1
 - Staff developer (curriculum and instruction)
- AIS team:
 - Functions as a team
 - Create a referral process that will include student performance data and teacher requests
 - Team members will include: 1 psychologist, 1 social worker, 1 staff developer (already specified)

- Additional team members:
 - Reading teachers: 2
 - Math teachers: 2
 - Speech/Language: 1
 - Paraprofessionals: 2
- Reading and math teachers will provide enrichment as well as acceleration (remediation)
- ESL: 0.5 FTE teacher
 - Assumes that all students are ESL and not bilingual
- Common Planning Time
 - Should be available between classroom grade levels or primary/intermediate
 - 60 minutes once per week
 - Focus on Professional Development
 - Analyzing student work
 - Collaborative efforts to improve performance
 - Additional time in morning once per week
 - I.e. Teachers arrive at 7:45 1X per week instead of 8:15
 - Classes start at 8:45
 - Arriving students are supervised by auxiliary staff
 - There is an assumption that most districts will have to negotiate this in their teachers' contract
- Non Personnel
 - Supplies & Materials
 - Textbooks
 - Consumables
 - Instructional software
 - Student supplies
 - Classroom supplies
 - Office supplies
 - Copying
 - Library books
 - Technology & Equipment
 - Computer hardware and operating software
 - Wiring & network expenses
 - Classroom furniture
 - A/V Equipment
 - Copiers
 - Leases and service contracts
 - Student Activities
 - Field trips
 - Academic assemblies, fairs
 - Intramurals
 - Clubs
 - Book fairs
 - Support to schoolwide improvement plans
 - Individual and classroom activities

- Professional Development
 - Mentoring (a large portion of the allocation)
 - Curriculum development
 - Coursework
 - Collaboration/Visitations
 - Consultants
 - Professional library
 - Assumes that it is budgeted only at the school level and not centrally
- Assessment
 - Tests aligned with reading program
 - Achievement tests
 - Psych. Tests
 - Speech/language
- Pre-K
 - 34% of the students (F/RL eligible)
 - Full-day for 4 year olds, 1/2 day for 3 year olds
 - Additional classroom openings will be filled by other students identified as at risk by professional staff ie doctors
 - 2 teachers and 2 aides for 4 year olds
 - 1 teacher and 1 aide for 3 year olds
- Extended Day Program
 - Focus on literacy and math standards
 - Target 10 % of the students
 - 10 students per class
 - 1 hour per day; 3 days per week
 - 5 teachers
- Extended Year Summer
 - Students serviced Students identified as at-risk by professional staff or who are eligible for F/RL will be served
 - Serves students grades K-5, as well as the summer before K
 - 40 % of students eligible for the program
 - 15 students per class
 - 13 teachers
 - 2 aides
 - 3 hours per day for 6 weeks
 - Focus on Literacy and math standards
- Middle
 - Special education
 - 90-96% of the special education population will be in neighborhood schools
 - 5 FTE teachers, 2 FTE aides- Services based on IEP needs
 - For grade 6: 2 teachers teach the core subjects of each class
 - Modified block schedule in 7th and 8th grades targeting English and math
 - Enrichment and remediation provided
 - 9 class periods
 - 41 minute periods

- 6th grade
 - English/ELA: 2
 - Math: 1
 - Science: 1
 - Social Studies: 1
 - Lunch
 - P.E/Music: 1
 - Exploratory (Home & Careers, Art, Technology): 1
 - AIS/Enrichment/Resource: 1
- 7th grade
 - English/ELA: 1.5
 - Math: 1.5
 - Science: 1
 - Social Studies: 1
 - Lunch
 - Foreign Language: 1
 - P.E.: .5
 - Health: .5
 - Exploratory (Home & Careers, Art, Technology) or music: .5
 - AIS/Enrichment/Resource: .5
- 8th grade
 - English/ELA: 1.5
 - Math: 1.5
 - Science: 1
 - Social Studies: 1
 - Lunch
 - Foreign Language: 1
 - P.E.: .5
 - Music or other: 5
 - Exploratory (Home & Careers, Art, Technology): 1
 - AIS/Enrichment/Resource: 1
- Teachers' Schedule
 - 5 periods teaching
 - 1 period AIS/supervisory
 - Lunch
 - 1 prep period
 - 1 team planning period
- Class size
 - 6th: 20-22
 - 7th: 22-24
 - 8th: 22-24
- Staffing
 - 6th grade
 - Math, Science, Social Studies: 2.5 each
 - ELA: 5.0
 - 7th grade:

- Math & ELA: 3.5 each
 - Science: 2.3
 - Social Studies: 2.3
 - 8th grade:
 - Math & ELA: 3.5 each
 - Science: 2.3
 - Social Studies: 2.3
 - Non-Core Teachers
 - Physical Education: 3.6
 - Music: 2.5
 - Foreign Language: 4.4
 - Exploratory (Home & Careers, Art, Technology): 2.5
 - Health 1.2
 - ESL: 1.0
 - Computer teacher: 1
 - Administration
 - 1 principal
 - Evaluations
 - Supervision
 - Scheduling
 - Hiring
 - AIS
 - 3 Assistant Principals to follow each class through
 - Scheduling
 - Evaluations
 - Discipline
 - Supervision
 - AIS
 - Staff support
 - Other Professional Staff
 - 1 Staff developer (curriculum and instruction)
 - Librarians: 1.5 FTE + 0.5 tech support
 - Social Worker: 1.5 FTE
 - Clerical
 - School secretary: 1
 - For the Assistant Principals: 1
 - Attendance: 1
 - Guidance: 1
 - Clerk/Typist: 1
 - Paraprofessionals
 - Health office aide: 1
 - Library: 1
 - Office Aide: 1
 - Extended Day Program
 - 10% of student population
 - 1 hour per day, 3 days per week

- 10 students per teacher
 - 8 teachers
 - Focus on ELA and Math
- Extended Year Program
 - Offered to students who failed 2 or more core subjects
 - Also offered to students in need of academic intervention to meet standards and who may not have failed 2 courses
 - These two groups should not exceed 25% of the total population
 - Six week program, 3 hours per day, M-F
 - 20 students per class
 - 10 classroom teachers, 1 special education teacher & 1 instructional aide
- High
 - Organization
 - Block scheduling for 4 core courses (English, social studies, math, and science (labs included).
 - 9 periods per day
 - Alternating A/B day schedule for grades 9 and 10; semesters 1 and 2 for grades 11 and 12. Rationale: students in grade 11 will be taking English regents in January; if they do not pass they will receive additional AIS in order to re-take the test in June.
 - Scheduling:

	Grade 9		Grade 10		Grade 11		Grade 12	
	A	B	A	B	1	2	1	2
1	Eng	SS	Eng	SS	Eng	SS	Eng	SS
2	Eng	SS	Eng	SS	Eng	SS	Eng	SS
3	For. Lang		For. Lang		For. Lang		Elective	
4	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch
5	Math	Sci	Math	Sci	Math	Sci	Elective	
6	Math	Sci	Math	Sci	Math	Sci	Elective	
7	PE	Hall	PE	Health	PE	Hall	PE	Hall
8	Elective		Elective		Elective		Elective	
9	Elective		Elective		Elective		Elective	

- Class size: 24-26
- Staffing
 - Core teachers 9-12: 36
 - Includes accommodation of 1.0 FTE for department chairs for the core areas (release time)
 - Elective teachers 9-12: 35
- Librarians: 1.5 FTE + 0.5 tech support
- Psychologists: 1 FTE
- Social Workers: 2 FTE
- Guidance Counselors: 4 FTE (one per grade level, loop)
- Nurses: 1 FTE

- Assistant Principals: 4 FTE (one per grade level)
- Principal: 1 FTE
- Other Professional Staff: 2.0 FTE (one staff developer, one guidance coordinator)
- Clerical/Data Entry: 7 FTE (nurse's office, data entry/attendance, registrar, guidance office, principal's office, two for assistant principals to share)
- Security: 5 FTE
- Extended Day for 5% of students
 - AIS remediation
 - Regents preparation
 - Suspension/detention tutoring
 - 2 hours per day, 4 days per week
 - 3 hours on Saturdays
 - 5 teachers (class size of 12; incorporates tutoring)
- Extended Year
 - Offered to 30% of students
 - Eligible if a student fails at least one course
 - 6 weeks, 4 hours per day, 4 days per week
 - Class size: 20
 - 18 teachers (1.23 FTE)
 - Added time for principal, nurse, librarian, and aide

ESL Teacher: 1 FTE

Special Education: 9 teacher and 4 paras to address the needs of students and to accommodate grade level differences and testing accommodations.

- List any additional assumptions that are essential to understanding the program you developed?
 - As students progress through the upper grades the amount and intensity of services provided should be revisited annually.
 - Special Education services are delivered in the general education classroom, however a continuum of services will be available (cnst, resource, primary instruction, 1/2 day general ed & 1/2 day special ed) as determined by IEP.
 - Providing intensive services at the Elementary level will assure students reading at grade level by end of third grade as well as meeting NYS standards by grade 4 in order to achieve a level 3 or above on the ELA and math assessments.
 - All field trips will correlate to grade level learning standards and will provide experiential learning opportunities outside of the classroom.

- Research based practices will be used in all schools for example: Americas Choice,, Success for All, Positive Behavior Support, Atlas, Venture etc...
- Professional Development will be ongoing and consistent with researched practices.
- Special education administrators/CSE chairs & secretaries are expenditures at the district level.

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

No preK; full day K; additional reading support; access to AIS services if needed; at Middle School gets extra support to address his needs (AIS, exploratory, or enrichment period); guidance support at the high school level; assume that BOCES and vo-tech is available; academic support through AIS and targeted instruction; may participate in work-study program at high school.

STUDENT Y

Elementary school: PreK starting at age 3; Kindergarten plus program (includes summer before and after); support from the reading specialist; small class sizes; access to speech teacher if needed; extended day program; AIS Team resources; full-time social worker and psychologist services; common planning time for teachers help meet individual student needs. Middle school: AIS support, extended day, summer school, modified block (extended ELA and math), small classes; psychologist and social worker services. High school: Block schedule, extended day, extended year, AIS, Semester schedule in grades 11 and 12 allows students to take exam in January and receive additional support if necessary to re-take exam in June; BOCES access available.

STUDENT Z

Elementary school: No preK; An enrichment teacher is available on the AIS Team; small classes; collaborative planning time for teachers helps address individual needs of students; resources available for enrichment. Middle school: modified block schedules allow for enrichment opportunities. High school: AP classes available; academic electives, opportunities to take college courses; guidance services available for college admissions.

6. Provide team answers to the following questions.

a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How

confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 4.8
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 3A: Instructional Program

1. Elementary
NO CHANGE

2. Middle
NO CHANGE

3. High

Add 0.5 FTE ESL teacher

4. List any additional assumptions that are essential to understanding the program you developed?

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5 _____
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 4.8 _____
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5 _____
- d) If it were necessary to raise salaries to a higher level to attract and retain qualified personnel, and total budgets were raised correspondingly, would you change the way you have allocated resources (that is, would you change the configuration of the program you designed)? _____ If you answered yes, please explain how and why.
- e) If lower salaries were adequate to attract and retain qualified personnel, and total budgets were decreased correspondingly, would you change the way you allocated resources (that is, would you change the configuration of the program you designed)? _____ If you answered yes, please explain how and why.

Comments:

TASK 4A: Instructional Program

1. Elementary School

- Extended day offered to 25% of students.
- Summer program offered to 65% of students.
- Add a language teacher at Kindergarten
- Add 1.0 FTE social worker (more students requiring services, incorporate after-school and home/agency visits)
- Extended day: 25% of students
- Summer program: 65% of students

2. Middle School

Programmatic: Need to increase targeted instruction to students

- Add 2 reading teachers
- Add 1 writing specialist
- Add 1 social worker (focus on attendance, chronic absence problems, try to determine cause, facilitate solution)
- Add 1 clerical worker as a parent liaison
- Extended day: 25% of students
- Summer program: 30% of students (class size of 15)

3. High School

Assumption: An alternative high school is available in the district to serve students who are not responsive to traditional high school interventions and approaches. Cost must be built in for it at the district level.

- Add 1 social worker
 - Add 1 clerical worker as a parent liaison
 - Extended day: 15% of students
 - Summer program: 35% of students (class size of 15)
4. List any additional assumptions that are essential to understanding the program you developed?
 6. Provide team answers to the following questions.
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5

- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 4.8
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 5A: Instructional Program

1. Elementary School

- Add 1 assistant principal
- Add 1 speech/reading teacher for grades K-5
- Add 1 speech/language teacher for preK
- Extended day: 50% of students (2.14 teachers)
- Summer program: 80% of students

2. Middle School

- Add 2 math specialists
- Add 2 paraprofessionals (assisting teachers)
- Extended day: 30% of students
- Summer program: 35% of students (class size of 15)

3. High School

- Add 8.4 teachers to lower class size from 25 to 22
- Extended day: 20% of students (class size of 10)
- Summer program: 40% of students (class size of 15)

Assumption: As the poverty index increases, the expectation is that the alternative high school program may be more utilized.

4. List any additional assumptions that are essential to understanding the program you developed?
6. Provide team answers to the following questions.
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
 - b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 4.8

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 6A: Instructional Program

1. Elementary School

- Offer preschool to all children
- One of the social workers should be bilingual
- One of the clerical staff must be bilingual
- Add 6 paraprofessionals (a bilingual paraprofessional at each grade level prek-5 to help with translation, home communication, etc)
- Add 2 ESL teachers
- Add 1 reading specialist (for grades 4 and 5)
- Add 1 math specialist (for grades 4 and 5)
- Add 1 nurses (bilingual)
- Add 1 bilingual parent liaison (clerical position)
- Add 3 classroom teachers to lower class size to 16-20 (down from 21-24) for grades 3, 4 and 5
- Extended day: 65% of students (includes an ESL teacher)
- Summer program: 100% of students
- Assumptions: district will provide written translation services for all school communications. Also assume a district department of bilingual services to develop the instructional services and support the LEP students/ teachers and assist with family support and home visits as well as parent meeting translators.

2. Middle School

- Add 3 ESL teachers
- Add 1 bilingual guidance counselor
- Add 1 reading, 1 math, and 2 writing specialists (one reading, math, and writing specialist per grade level)
- Add 3 aides, one at each grade level, bilingual
- Add 1 nurse (bilingual)
- One of the clerical workers should be bilingual
- Assumption: district-wide coordination of security
- Extended day: 35% of students
- Summer program: 40% of students (class size of 15)

3. High School

- Add 4.5 ESL teachers
- Add 1 nurse (bilingual)
- Add 4 paraprofessionals (2 bilingual)
- One of the clerical workers should be bilingual
- One of the guidance counselors should be bilingual
- Extended day: 25% of students (class size of 10)

- Summer program: 40% of students (class size of 15)
4. List any additional assumptions that are essential to understanding the program you developed?
- Assumes that the LEP population is predominantly one language.
6. Provide team answers to the following questions.
- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 4.8
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

PJP 3: Instructional Program Descriptions

Your program description should be sufficiently detailed for someone who did not participate in the process to understand what you propose. Describe what teachers and students will be doing, any special scheduling considerations, etc

TASK 2A: Instructional Program

K-2 Program

- Elementary: Full day program for Kdg.(Extended day programs for certain populations of students if full day doesn't work) (This could bring us a facility issue)
 - Flexible schedule K-2 with special education students fully included. (Common planning time is important) Looping is suggested to be used. (Teachers following students for more than one year) Special education teachers will co-teach.
 - Inclusion should be substantial in K-2.
 - Reading/Literacy focus. K-2 (Readiness Program)(Learning how to read, diagnostics)
 - Mathematics intervention in the K-2 program. (Readiness Program)
 - Class size:
 - Technology Integration: (Not just a lab with an aide) ?FTE
 - Pupil Personnel services (guidance, social worker, school psychologists, enrichment specialist)????OT/PT/Speech and Hearing OT= Occupational Therapist and PT= Physical Therapist
 - Special Areas (music, art, PE, Library Instruction)
 - Supplies should be entered as a per pupil charge.
 - Instructional aides would be on an as needs basis for special situations
 - Elementary Summer School was calculated at 10 children....of the 15 kids in the building...the cost would be the BOCES charge for Special Needs Summer Program. Contractual but generally \$4500 per child
 - Pupil Teacher Ratio in the K-2 program is beginning with 18.
 - Other teachers include Reading Specialist, Math Specialist, music, art, and PE.
 - Four Teaching Assistants will work with the four Special Education Teachers...one General Education Aide will work for the building in general, most likely with special education program.
 - The General Aides will be 1.5 lunch monitor, 1.0 Library and .5 general support to the teaching staff.
 - No Guidance Counselor because it isn't required...however, we support the Social Worker.
 - Social Worker: .5 general ed and .5 connected to special education program
- School psychologists: Discussion: This building we are recommending .8 for the building. Of which .5 is special ed and .3 is general ed.
- Other Pupil Support: .5 Speech and Language Pathologists
 - Special Ed Pupil Support staff: .5 Speech and Language Pathologists, and .25 OT/PT
 - Security is a serious concern. Staffing security with a person is one way to handle this issue, however, unanswered for us is the facility security....cameras and monitors with locked doors. We will respond with .5 of a person to deal with security.

- Equipment for an elementary program should reflect actual needs. The allocation is rarely done on a per pupil costs.
- Student activities shall include: Arts in Education, field trips, Oddessey of the Mind, Academic competitions.
- Professional Development: We consider this to be critically important to satisfying the NYS Learning Standards and the NCLB legislation. As a result this number has been calculated using 5 full day, plus the 4 Supt. Conf. Days which are already included in the 185 day school year, for all teachers at the per diem rate of 1/200 of the stated salary.(Cost per pupil is calculated using the 5 days at a rate of \$103 per pupil) This should cost \$290 per day per teacher. Add to the \$103 per pupil per day, \$10 per pupil for consultant fees. The total is then \$113 per pupil. This should help satisfy the 175 hours over five years.
- Assessment: \$9 per day is the cost of the material for the tests and supporting material, this does not address the substitute time for teachers as they evaluate those assessments. The NCLB, State exams, screening, speech and language, AIS required assessments, diagnostic testing in Reading and Math would be examples.

3-5 Program

PTR in the 3-5 program is beginning with 22

Special education discuss is between 2.5 or 3 FTE to support the number of students

- Literacy Collaborative (Reading to learn)
- Middle 6-8
- Space only
- 31:Core Teachers with 11 sections of grade 6 and 10 sections each in grades 7 and 8. Core equals, Math, Science, Foreign Language, English, Social Studies
- 14 Other Teacher: Special area. Technology (2), Health (1), Music (2), P E (3), Family and Consumers (2) (Home Ec.), Art (2) and 2 people to specialize and work with Gifted and Talented programs and kids, curriculum and staff development and other services. Additionally we added (2) Reading Specialists and (1) Math Specialist to work with at risk students.
- Summer program is similar to the Elementary design as a contractual BOCES service for the students specified.
- Organized Core Curriculum Teams with team planning time
- Survey Courses (Special Areas, Health, Technology, Art, PE, Music, Family and Consumer Science)
- Foreign Language (required in NYS,
- Electives (choice) - how much choice, what subjects, survey 6th and electives. Electives of 7-8. If the state alleviates some requirements, we would fill the students' schedules with electives.
- Other Pupil Support: Speech and Language and .2 English Language Learners
- General Aides includes: nurse's aide, Library, 2 hall monitors, and an In-school Suspension Aide.
- Other Professional Staff: .2 equals a Dean of Students who helps with the supervisory activities of the school
- Clerical Data Entry: One Guidance, One Principal, One Assistant Principal

- School Security: two hall monitors and 1 School Related Officers
 - \$85 is Modified Sports Program,, field trips, clubs and activities
 - Activities and clubs are important
 - Study and Communication Skills ? Embedded in curriculum, (speech, writing, studying) Should be integrated.
 - Pupil Personnel Services: Guidance is mandated for grades 7-8
 - Library Media Arts Specialist focused on Research
 - Career Exploration, Community Service, and Character Education. Guidance Counselors help to create a Career Plan
 - High School 9-12
 - High School: Athletics and clubs and activities, including field trip \$230.
 - More academic individualization
 - Create environments of schools within a school
 - Incorporate the alternative program within the school.
 - Increase the requirements for senior year
 - Special Education: Targeted inclusion with team teaching. This is a joint responsibility for all teachers within a school for students' results. Substantial Inclusion, with limited self contained environment. Substantial to us equals 98%.
 - Satisfy all state requirements for graduation.
 - Summer school is similar to El and MS in that we will contract with BOCES for the special needs children.
 - Core Teachers: English, Social Studies, Math, Science with labs. We added an additional 4.0 teachers to support an Advanced Placement environment and Electives at the high school, not to reduce class sizes.
 - Special Ed. Teacher: Assume BOCES and Private Placements are counted at the building level.
 - Other Teachers: Health (1), Art (3), Music (3), PE (4), Tech (3), Business (2), Family and Consumer Science (2), 5 Vocational/Occupation Education Teachers. Vo Tech equals \$9600 times 30 students divided by teacher's salaries \$58000.
 - Other pupil support: .2 English Language Learners (ELL) (Els), Academic Intervention Services (4), Career Exploration (Internship) (1.0). This will satisfy AIS and Enrichment.
 - Special Education Other pupil support. .3 Speech and Language Therapy
 - Other Professional Staff = .4 Deans of Students
 - Clerical/Data Entry: 6, Principal, Both Assistant Principals, 2 Guidance, 1 Attendance.
 - Assessments: at the high school the Regents Exams are free....minimal cost of students who need reassessment for AIS or Alternative Assessments.
 -
4. List any additional assumptions that are essential to understanding the program you developed? We provided a strong emphasis on Professional Development in the creation of our program which will help teachers to use Best Practices to provide quality learning experiences for all students. Professional Development when combined with appropriate staffing and sufficient education resources will provide opportunities for all students to

reach NYS Learning Standards as measured by Regents Diploma requirements. This in our opinion will provide each student an opportunity for a Sound Basic Education.

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X: He/She has access to a vocational program, career exploration at Middle School and Vo Tech and Internship opportunities at the high school. Should problems arise, there are opportunities for Academic Interventions K-12.

STUDENT Y: This student would avail the continuum of services from Special Education and Remedial services. Our emphasis was on Early Interventions and diagnostic assessments at all the grade levels will help to design the best program available to this student. Decisions have been made to provide social and emotional developmentally appropriate activities available during the middle and high school years.

STUDENT Z This student will have the opportunity to receive a Sound Basic Education. Our program provides enrichment opportunities, extra curricular experiences, Advanced Placement courses and a strong Guidance component. The educational program will challenge the student make the student attractive to highly competitive colleges.

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 3A: Instructional Program

- Elementary: We want to recommend that a breakfast program be started at all levels for all children.
- We have increased the social workers time by .5 which should reflect an increase regular ed and special ed both at .25 to equal the 1/2. This person will increase the collaboration between the schools and outside agencies. Also home visits will increase to provide parent outreach. Pre referral intervention strategies will help to hold the line on the referrals
- Our \$113 per pupil expenditure that we built into the 2A exercise will be redirected to deal with the change demographic....all three levels.
- Added time for Reading and Math readiness/remedial services (.2)

- Middle: We increased the social worker .5 for the same reasons as the elementary high school.

- Added time for Reading and Math remedial (.5)

- High: We increase the social worker .5 for the same reasons as the elementary and middle with the increased potential school drop outs.

- 4. List any additional assumptions that are essential to understanding the program you developed?

- 5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? _____

- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____

Comments:

TASK 4A: Instructional Program

- Elementary
 - Middle
 - High
4. List any additional assumptions that are essential to understanding the program you developed?
5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.
- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? _____
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____

Comments:

TASK 5A: Instructional Program

- Elementary: We are adding five teachers...2 to teach Kindergarten and 2 to teach grade 1, 1 to teach grade 3. To maintain the co teaching model we need to cluster the special needs children. We added one section to grade 3 to address the change in skills from Learn to Read, to Read to Learn. Again this could help reduce the number of referrals.
 - We have increased the Reading and Math specialist support by .5 both, for 1FTE.
 - Elementary Summer School at Level 5: We anticipate 5% of our total elementary population at a cost of \$400 per child and then converted to an FTE of .16 . The program's estimated cost includes instructional materials and transportation (\$150 of the 400) and the teacher's salary. We expect 24 students.
 - Increase the ELL from .2 to .4.
 - Middle: We increased the ELL program from .2 to .4 (Other Pupil Support)
 - The clerical/data entry: will increase to 4.0 because of a variety of issues: required period by period attendance, state reporting of disciplinary issues, BEDS data , SAVE legislation....data analysis and reporting.
 - We have increased .5 for both Reading Specialists and Math Specialists.
 - We have increased the Social Worker .5 to 2.0 for Regular Ed
 - Middle Summer School at Level 5: We anticipate 5% of our total middle school population at \$400 per child and then convert the (34) kids to an FTE of .16. The program's estimated cost includes instructional materials and transportation.(See above comments)
 - High: We increase the Ell program from .2 to .4. (Other Pupil Support)
 - At the high school we would add an additional 3 FTEs for an increase in the Vo Tech program. (Other Teachers) These are contracted services through BOCES.
 - We added a .5 social worker in the Regualar Ed. Line. We are looking for a student assisted counselor certified as a social worker. This is direct services to children and family.
 - High School Summer Program: We anticipate that 25% of our Regular Ed. Students may be available for summer school in addition to the 2% of the special ed kids. We have built in a 1.7 FTE to staff this should cover all materials, supplies and transportation. Total cost is \$400 perchild of which \$150 is transportation. We believe that transportation being provide is critical to increase the student participation levels.
4. List any additional assumptions that are essential to understanding the program you developed?

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? _____
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____

Comments:

TASK 6A: Instructional Program

- Elementary: We the Other Pupil Service line we added 1.6 to provide an increase in ELL services
- Middle: We have added 2.1 FTE in the Other Pupil Services line to provide an increase in the ELL services
- High: We have added 3.0 FTE in the Other Pupil Services for an increase in ELL.
- High school: We have added .2 to Other Prof. Staff as a district wide support service for bilingual services.
- A General Statement: In districts of High Wealth and High Costs the per pupil costs do not reflect their reality.

4. List any additional assumptions that are essential to understanding the program you developed?

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? _____
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning

opportunities specified in Exhibit 1 to all of the school's students? _____

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____

Comments:

PJP 4: Instructional Program Descriptions

Your program description should be sufficiently detailed for someone who did not participate in the process to understand what you propose. Describe what teachers and students will be doing, any special scheduling considerations, etc

General considerations/philosophy about how programs were developed:

We note that there is a substantial difference between Teacher Aide and Teacher Assistant – although all listed in Aides areas. Higher salary for Assistants

We have set programs to reach minimal/adequate standards PLUS some programs to allow children to reach their full potentials, e.g.,

Open PreK to all

Gifted/talented

Additional electives and LOTE (Lang other than Eng) were not available, although AP/college level courses had some availability.

We believe that more opportunities probably need to be added to allow full potentials programs to be adequately available.

World of work field experiences abound in HS

General Assumptions Generated about the Prototypical District Vision and School Programs:

Early intervention – pre K – (in house/other providers)

Every child has an opportunity to successfully meet NYS standards

Extended year/day

Emphasis on early literacy K-2 (3?)

Extended staff development

Thematic learning (grades 3-5)

Shared decision making incorporating constituent groups

Accessible data warehouse

Common planning time for teachers

Organized communication system-extensive email

Strong leadership

School culture organized around a community of learners

Curriculum aligned year to year (horizontally and vertically)
 Providing parent instruction/support-key role of social worker
 Parental communication/involvement in school community
 Rich foreign language in elementary
 Lots of hands-on opportunities for middle levels
 Programs would reflect best practices and research
 Organized mentorring program program at the middle level
 Structured career learning opportunities at secondary levels
 Recognition that all people are learners, either young or adult
 Training and mentoring for all adult learners
 Ability for acceleration/remediation/interventions of all learners
 High school offers AP/college level courses
 School within a school concept – alternatives
 Team approach for programs
 Distance learning opportunities
 Lots of opportunities for career education (world of work)
 High quality teachers and support staff
 Support network for those in need (i.e. counseling, social work,...)
 Lifeskills/social skills
 Cooperative interaction with external agencies
 Skills based assessments are oning and diagnosis on a regular basis, and teacher can incorporate it into insturction, such as, skills specific, Computer Assisted Instruction program-self paced basic skills diagnostic porgram is used throughout to supplement remedial help from teachers.

Groupings

Primary-K-2: Self Contained, Heterogeneous Groupings, w/in class flexible groupings for reading and math

Thematic learning integrated into PE, Art Music, etc
 teacher teaming, looping options (K-1, 1-2, K-1-2)

High percentage of day in literacy, numeracy, Critical Think Skills

Intermediate 3-5

More opportunity for departmentalization of instruction

Local assessments aligned to NYS

Parallel assessments aligned to state

TASK 2A: Instructional Program

- **ELEMENTARY**

Birth through 3 year olds would be excluded from school program responsibilities 3 yr old special ed provided by the county.

1.0 FTE devoted to pre-K learners (for 4year olds)

Sped 4 year olds continue to receive services from county
 Pre-K program predicated on screening outcomes – priority to free/reduced lunch
 operating on the assumption that many children receive private learning opportunities
 One day parent involvement attendant to program needs
 Career education school work involvement/community service
 Developmental benchmarks - social/psycho-motor/concepts/language
 Literacy/numeracy rich
 Curriculum aligned with goals of kindergarten readiness skills,
 Resources allocated here to help obviate the need for AIS later on.

Kindergarten

5 sections, one of which is a class limited to one half the average class size and
 devoted to preparing at-risk children with readiness skills expected of a traditional
 Kdg.

Full day program
 Maximum of 20 learners per grade

General Elementary –

Primary Grades 1 and 2

9 classroom teachers (5 first and 4 second) resulting in class sizes of 14 (1st) and 18 (2nd)
 one first grade would be a transitional class for at-risk 1st graders, kids could spend 3 years in K-1 program who need extra attention

2 Reading specialists provided services to learners – push-in/pull-out and supply support services/staff development to classroom teachers

Each learner at-risk in Reading will receive 30 minutes tutoring daily
 1 teaching assistant in Reading will coordinate the tutoring program

Goals is that all students will be reading at grade level by 2nd grade, so heavy emphasis on reading and literacy.

The district will offer opportunities for First Step (preparing for Kdg.) as well as a Transitional First grade program for those learners identified as at-risk

1 elementary specialist to deliver services for those learners at-risk in math/science

Grades 3, 4, and 5

12 classroom teachers allowing 4 sections per grade and class sizes of 18 per class, continue emphasis on meeting standards, flexible groupings with ongoing skills assessments.

Special needs Learners

3 SPED teachers and 2 SPED aides

A majority of sped learners will be mainstreamed 100% of the time
 K-3 with push-in consultants

Grades 4-5 are expected to have one or two learners self contained

Special Areas

Curriculum areas include – Physical Education (2.4 FTE) ; Music (2.5 FTE); Art (2.0 FTE) ; Language Other Than English (1.0 FTE in Spanish); Computer/Technology (2.0 FTE) Students go to PE 3 times a week, 40 minutes each K-5, Computer-2 periods every 6 days, 40 minutes periods, Spanish starting in 1st grade, 1 period every 6 days, 40 minutes, Art- 2 periods/Music-2 periods/ Library 2 periods every 6 days, 40 minutes, Afterschool band, vocals

Professional Development

4 superintendent days; 6 extra days of pay per teacher; .2 FTE to mentor teachers not yet tenured and new teachers; 2 day new teacher orientation; consultants for presentations and expertise; materials and food; all of which totals \$ 90,000.

The professional development program is ongoing standards based, reflecting best practices, and attendant to the culture of the school; ongoing, not one shot with feedback and implementation tied to the curriculum.

General Ed Aides: (9.5) one teaching assistant in reading to coordinate the tutoring program; 9.5 aides for instructional support; 3 monitors for cafeteria/playground/

Guidance Counselor: (1.0) assist with school to work to develop career awareness

Social Workers: (1.0) liaison with parents

Other Pupil Support: (1.0) speech/language

Other Professional Staff: (6.0) 3 reading teachers who provide services to children in grades 1 and 2 and 1 math/science specialist to deliver services for learners at-risk in math/science (go to line 13), and a technology support teacher trainer, and an Instructional technology specialist for the whole school to maintain computers, email and ensure all technology continue to works.

Clerical – 1 prin secy, 1 reception/security, .5 nurse/attendance

Equipment & Technology: \$90 pp periodic replacement of technology and equipment

Every 3.1/2 years replacement cycle

Student Activities: \$50 pp \$10K for field trips and \$10K for extracurricular activities/clubs

Assessment: \$50 pp for three grade levels for Terra Nova tests, screening costs, ongoing assessments for diagnosis, release time for groups of teachers to grade, extra item analyses beyond what state offers on state assessments, computer assisted instruction with diagnostics

Food Service: \$0 self sufficient

The school program is skills based with ongoing, regular assessments, with flexible groupings based on needs of students.

Psychologist would probably spend about half time working with SpEd kids.

Guidance and Social Worker would not specifically be designated as SpEd, but would provide services to that population – in the same manner as w/ “regular” kids. There would be no differentiation.

Portion of several teachers to cover Gifted/Talented, in the regular classrooms with opportunities to accelerate as needed throughout the elementary school day.

- **Middle**

Team teaching, common planning time
 Mentoring program critical/advisory model
 Opportunities for acceleration/homogeneous groupings in all core areas
 Career awareness
 Community service opportunities
 Parallel assessments without taking away from the amount of content instruction
 Learning labs/flexible scheduling for needy learners/at risk kids-individualized instruction
 Study skills/test taking/orgainizational skills classes-character/citizenship education
 Scheduling – flexible
 Departmentalized instruction that is focused on best teaching practices available and rich hands-on curriculum
 Exploratory wheels for exposure to home and career skills industrial technology, etc – 6-wk or 10-wk blocks
 After-school and summer school opportunities for at-risk/other learners.

SpEd

Assume 54 total
 36 LD/Speech-Lang,
 2 tchrs-resource teachers collaborating w/ teams
 1/2 the teams have inclusion kids (one per grade level)
 18 other HC
 12 in self contained classes 12:1:1 class with appropriate regular instruction by core teachers as consultant teachers for subject matter-co-teaching/push-in/pull-out.
 6 in appropriate BOCES severe HC classes

90-100 students per team-students rotate through team (same kids all day long)
 ave class size = 18, inclusions class smaller
 8 tchrs per grade level core subjects
 2 tchrs per grade level LOTE

team leaders in each of 6 teams (stipend)
 meet on advisory council w/ Principal
 guidance counselors do not differentiate between gen and SpEd students
 follow a group of kids grades 6-8
 scheduling, counseling, career counseling
 1 guidance aide to assist w/ career and mentoring programs

Other Pupil Services

.5 Speech Specialist
 • **Reading Specialist**
 AIS (Academic Intervention Services) – 2.0 math-also acceleration/ and work with at-risk kids
 Nurse w/ .5 clerical
 Librarian – 1 plus 1 aide
 One Gen aide = security/reception – sign-ins and sign-outs
 Clerical 1 each guid, prin, asst prin

Other teachers

Art – 1.4 FTE, 10-wk blocks every day

Music – 2.5FTE, 1.0 vocal/general & 1.5 instrumental

10-wk blocks

PE – 3.0 FTE

Industrial/Computer Tech – 2.0FTE, 10-wk blocks

Health – 1.4 FTE, 20 wk block once in Middle School career

Non-personnel

Supplies/Materials – same as elem but more for hands-on instruction, increased for consumables especially science materials for labs, and materials for industrial arts classes

Equipment/technology – computer labs, 3.5 year replacement schedule, industrial technology equipment

Student activities needs some transportation for inter-scholastic modified sports

Assessment – team grading needs release time adds \$5 per student, on-going skill based assessments, and same as elementary

Extended day – 1 hr before/after school for remediation homework help

Extended year – 6 week summer school session for reg and sp ed kids, required to attend to avoid retention – safety net to meet standards

Portion of several teachers for Gifted/Talented

• **High**

Strong school to work program

Strong MS to HS orientation/bridge program

Study skills/citizenship/Community Service programs for sp ed/at-risk students – 4 wks in summer

Alternative ed option – BOCES

Flex scheduling for students that work

Bridge programs for students taking college courses at college campuses

Distance Learning opportunities

Cooperative interaction w/ external agencies

Combination of AP/College Courses/Distance Learning

Block schedule a possibility

Teaming 9th (same kids all day long)/Departmentalization 10-12

Community Service for credit

Mentoring

Assumptions:

576 pupils, 144/grade, 20 per class

4 years ELA, SS

3 years math, science – 2yrs lab classes
9 period day

AIS

each grade – 1 sect Sci, 2 sect ELA, 2 sections math = 1.0 FTE/grade = 4.0 FTE Total – SpEd
kids are included in these classes Social Studies is included in some grades 10-12
(These counts are included in the Core teachers counts and it is assumed that 10 percent of kids would need this service, scoring 1 and low 2 on Regents.

Staffing

28 core teachers, sci, math, ELA, SS + 3 LOTE + 1.0 more for AP courses
gen ed aides – 2 hall monitors, 1 copier aide, 1 library aide
clerical – 1 guid, 1 prin, 1 asst prin, 1 reception/security, 1 nurse, .5 AD
nurse
1 prin and 1 asst prin
guidance – 2.7 reg ed .3 sp ed (meet w/ parents, 4-yr plans, sched + changes, college placement, career planning, etc)
soc worker – parent liaison, collaboration w/ ext agencies, IEP counseling .5 ea reg/sp ed
psych- .5 reg, .5 sp ed
AD = .5

Core teachers handle AIS duties

Special Ed Programs – 3 resource rooms, 1 self contained academic push in, 4 students to BOCES high level programs, all others in th school

1 each computer tech and computer integration professionals
Extended day – 20% 1.5 FTE teachers for homework help, remediation, test taking skills/preparation
Extended year - done at BOCES for reg and sp ed kids includes self-pay driver ed

Business/Keyboarding - 2 FTE

Computer/Industrial Technology – 2 FTE many courses in house, some at BOCES
(Vocational Ed – e.g., Project Lead The Way, CISCO, Web Design, etc in house)

Art - 2

Health/Parenting/Character Education – 1.5 FTE

Music 3 FTE, 1 Vocal/General, 2 Instrumental

PE 3 FTE

4. List any additional assumptions that are essential to understanding the program you developed? None
5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

Elem – not in PreK,

Regular primary

Remediation in intermediate grades

Does not jump out as a high-risk kid

Drawn to career options, advisorship, mentoring programs in MS (critical for success),

AIS as needed

High school focus on career tech ed, AIS english or other core subjects, career guidance, coop school to work program

Post graduate makes \$30 - 50/hr as computer tech

If 40-50 %ile, significant remediation with success at regents/assessment levels

If 60-70 %ile, some remediation with good success at regents/assessment levels

STUDENT Y

ELEM

Attends PreK

At-risk kid that could fall between the cracks in primary/intermediate

F/RP lunch student

1st step K or transitional 1st

Extended day/year programs

PreK/K screening

Access to all support personnel – social worker, counselors

Potential Sp Ed kid – probably IDed in late intermediate

Math and Reading specialist candidate

MIDDLE SCHOOL

Mentoring critical

Social Worker, counselor access

AIS, ext year/day, potential sp ed

Assessment of SpEd needs

Extracurricular programs

HIGH SCHOOL

12:1:1 program, support personnel

Career “Track”

Possible Alt Ed candidate if not handicapped

STUDENT Z

Not PreK – probably went to private PreK and graduated cum latte
 Primary – opportunity to accelerate in reading/math across grade levels
 Probable president of Int Grades student council
 Int grades-Same access to acceleration/integration of thematic units across subject areas
 MS
 Accelerated in core subjects, community service, X-Curr activities
 HS
 Same acceleration opportunities throughout HS, AP, dual credits, finish all regents as Candidate for Regents diploma w/ Advanced designation.
 Takes full advantage of community service programs/internship

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 3A: Instructional Program

1. Elementary

Same as Task 2A except

Staffing levels at Pre-K, AIS via extended day and extended year programs

Also, add .5 reading specialist at K

Staff development will remain the same, but the emphasis will change to reflect the change in demographics.

Also some additional student activities in a mentoring afterschool program with additional stipend to represent that add.

Resources are allocated at this level to lower the amount of AIS/remediation services in higher levels

2. Middle

Same as 2A except

Additional afterschool mentoring activities as reflected in additional nonpersonnel costs.

AIS percentage jumps to 15% (9/class) and can be handled by the same # of AIS tchrs

3. High

Same as 2A except

Suffer school would be in Central Office as a BOCES expense.

10 to 15% AIS increase absorbed within current staffing levels.

4. List any additional assumptions that are essential to understanding the program you developed? There might have been changes in the AIS fields had the program at the 18% level been more bare-bones.

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 4A: Instructional Program

1. Elementary

Assume a small community w/ culture associated with that group.

Shift some of the staff development to address the cultural differences associated with this group
and More staff training in cultural issues..

.5 ESL tchr added 12-mo position = .6 FTE.

Intensive immersion program

2. Middle

More staff training in cultural issues.

Same assumptions as elementary.

.5 ESL tchr added at 12-mo = .6 FTE

Intensive immersion program.

Add 1.0 aide for ESL

3. High

Same as Elem/MS, except

1 ESL tchr for quicker immersion and 1:1 tutoring at 12-mo = 1.2 FTE

1.0 ESL aide

BOCES handles smr school/ext sch yr programs. School pays for this service thru BOCES

4. List any additional assumptions that are essential to understanding the program you developed?

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 5A: Instructional Program

We will have a 3 year old program, 1/2 day 7 in am and PM different groups 2 days per week.
Need .5 social worker for parent liaison. (Included in elem school)

1. Elementary

Will need more Reading and Math specialists to handle larger # of kids as before in 2A, .5 each
Will need additional 5 Social worker
Need additional .5 clerical in nurse office
Need additional .5 Asst Prin to help with home visits, additional absenteeism, etc.

2. Middle

Social worker would be on flex time to make evening home visits to offer services and information on other available community/school services to help the family-acts as liaison between school and family. Also add an additional .5 reg ed SW to ensure adequate support for economically disadvantaged families.

Add .5 reading and .5 math AIS and increase AIS percentage to 20%.
Additional Central Office staff person – clerical – to attend to Medicare record keeping at the Cent Off level.
In extended day have .2 fte tchr for having the computer lab open for additional study/use by students.
In extended year need .5 clerical support in the form of an aide.

3. High

In extended day have .2 fte tchr to have the computer lab open for additional study/use by students.
BOCES run evening supplemental program for those who are having difficulty finishing HS or for those who work and need flex schedule, or for those who don't "fit in" into the regular HS program. Included in ext day programs. (alternate to 3-5/Sat program)
Add two .5 AIS teachers for additional help.
Add one additional Social worker peer mediation, conflict resolution, drug abuse, etc
Intensive day treatment program 45 day program for psycho-social problems. Added through BOCES program.
3-5 pm or Saturday program as part of extended day program (alternate to evening program).
Add .5 career aide in guidance area.
Add \$5 to inst materials and \$20/kid for 2nd computer lab since students would be less likely to have computers at home.
Shift in emphasis on staff development to match needs of district.

4. List any additional assumptions that are essential to understanding the program you developed?

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5

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Comments:

TASK 6A: Instructional Program

Assumption is that more students will take advantage of extra day and extra year programs.

1. Elementary

Same as 4A for ESL.

Similar to 5A for poverty, except:

More tutoring

Food Service for snack at end of after-school program

2. Middle

Ext day pregnancy prevention training

See Elem above

Add .5 reg Social Worker for increased interaction with external agencies and home visits

Add .5 careers aide for instruction in career opportunities in guidance area.

3. High

Ext day pregnancy prevention training

See Elem above

Same adds as MS plus 1.0 AIS teacher

AIS Tchr to team and develop thematic programs to assist students in attaining Regents levels – not in elem/MS due to availability of extra day, not available in HS (due to sports, etc)

Curriculum development will be a focus in staff development area.

School to work coordinator will be involved deeply in community to find job opportunities for students.

4. List any additional assumptions that are essential to understanding the program you developed?

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
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- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

PJP 1: Instructional Program Descriptions

Your program description should be sufficiently detailed for someone who did not participate in the process to understand what you propose. Describe what teachers and students will be doing, any special scheduling considerations, etc

TASK 2A: Instructional Program

- **Elementary School**

Items to be considered in **designing the educational Program:**

- Class Size
- Child Development
- Preparation for transition grades
- Historical entry to Spec Ed. Gr 3
- Assuring solid EC foundation
- Connections to Prior School Experience – Head start, Pre K
- Demographics – early age parenting
- Parent Development
- Continuum
- Philosophy of spec ed and ELL
- Culture, expectations, student/adult behaviors
- Partnerships, CBO, community resources

Key Elements of Program

- SES
- AIS
- Extended Day
- Extended year
- Balanced Literacy (90 Minutes)
- Math (60 Minutes)
- Integrated curriculum
- Technology
- Art
- Music
- Phys Ed
- Dance
- Guidance
- Health Education
- Science
- Social Studies
- Conflict Resolution/Peer Mediation

- Community Relations
- Parent empowerment
- Assessment
- Professional Development
 - Delivery of instruction
 - Team Teaching
- Career Development
- College Prep

Designing the Core Program Structure

- 8AM – 4PM (8 hours) (480 Minutes) (Optional 4-6)
- 5 days with .5 optional on Saturday

Allocation of Time

7:30-8:00 Breakfast

30 Min. Lunch (3 Lunch Periods)

K-2

30 Minute Recess/Phys Ed

90 Min Literacy

60 Math

30 Min Lunch

(120 Min Academic Block- 4X4 see items below)

30 Min AIS/Enrichment

30 Min Tech

30 Min Play (Art and Music)

30 Min Writing

(120 Min Additional Block – 4X4 see items below)

30 Min Blocks for Science, Social Studies, Dance, Theater,

3-5

120 Min Literacy/Humanities

80 Min Math

30 Min Lunch

30 Min Recess/Phys Ed

60 Min out of classroom Tech/Library/Science Lab/Art/Health Ed

(160 Min Block 4X4)

40 Min Blocks for Social Studies, Science, AIS-Enrichment, Club

Cost Assumptions

Note: Extended Year/Summer is included in core program.

- 21/22 per class
- Yields 36 teachers
- Plus 8 more teachers for extended day

- 11 Month year
- Requires 10% more teachers for 11 month year
- 8-4 length of school day
- 400 time teaching per day

- 1 prep and 1 lunch per day
- Yields 8 teachers for clusters to supplement the 400 teaching minutes
- Total teachers 36+8+8 (base+extended day + cluster to cover prep and lunch – 15%)
(Plus 10% for 11th month – see below.)
- All 10 month positions (teachers, aides, guidance counselors, librarians, etc. were increase by 10% to cover the 11th month.
- Special Ed 3 teachers for 52 students in inclusion/push in model
- 2 Special Ed teachers for self contained
- 1 librarian
- .5 teacher for ELL (included on other)
- 2 staff for instructional technology (clerical line)
- 1 Special Ed aide for younger children (12 of the 24 spec ed students)
- Special Ed para does NOT include related services
- AP's are 12 month jobs
- 2 coaches, 1 for literacy and 1 for math – included in other professional
- 2 security on duty requires 3 fte
- 1 parent coordinator in clerical other
- 3 secretaries in clerical other
- Pre K includes 2 teachers, 2 instr aides and a family asst (the family asst is in the main spreadsheet in other professional.)
- Extended week (including sat) requires 14 staff (8 for 4-6PM and 6 for weekends

Non Personnel Expenditures

- A computer for all students amortized over 3 years say \$350 for grades 3-5.
- \$100 per student for software
- Classroom Libraries at 200 per student
- General supplies \$50
- Calculators for 3-5 at 30 per capita (50 dollar device multiplied by 60% of grades, excluding kindergarten)
- \$10 per child assessments

Description of Pre-School Program

- Only for FSL students
- 2 classes of 18 each. Assume 34% eligibility.
- 2 aides and 1 family asst.
- Full day 8-6 hours
- Professional Development included in schools budget (raise from 100 to 110 per pupil)

Description of Extended Day Program

- Hours from 4-6 and .5 day on Saturday
- Program is optional, mandated for students in need.
- Enrichment, sports, tutoring, Ell, special education
- Parent education included
- Targeted services to identified need group based upon informal teacher assessments, results on standardized assessments and recommendations of child study team.
- First report card triggers delivery of additional services.

- **Middle School**

Items to be considered in **designing the educational Program:**

- Class Size
- Child Development
- Preparation for transition grades
- Connections to Prior School Experience – articulation
- Demographics – early age parenting. Lack of parent involvement.
- Parent Development
- Continuum
- Philosophy of spec ed and ELL
- Culture, academic expectations, student/adult behaviors
- Partnerships, CBO, community resources
- Safety
- Psycho-social
- Gender issues

Key Elements of Program

- SES
- AIS
- Extended Day
- Extended year
- Balanced Literacy (90 Minutes)
- Math (60 Minutes)
- Integrated curriculum
- Technology
- Art
- Music
- Phys Ed
- Dance
- Guidance
- Health Education
- Science
- Social Studies

- Conflict Resolution/Peer Mediation
- Community Relations
- Parent empowerment
- Assessment
- Professional Development
 - Delivery of instruction
 - Team Teaching
- Career Development
- College Prep
- Sex, drugs mental health
- Self contained 6th
- Study skills/Time management
- Team/Case conferences
- Accelerated students
- Advisory
- Promotion/Hold overs
- Specialized Programs
- Theme Based
- Community Service
- 5 exit exams
- Attendance programs
- Foreign Language
- Junior National Honor Society

Designing the Core Program Structure

- Avg class size 25
- 317 students per grade; 13 classes per grade (JOE's note: 24.38 pupil:teacher)
- 8AM to 4PM (480 minutes)
- 2 teams per grade with special ed included in the team structure (13 classes per grade, a team of 6 plus 1 special education and a team of 7).
- Curriculum components include literacy, math, foreign language, advisory, phys ed/dance, science, social studies, health education, art, music and technology, conflict remediation/peer.
- 10 periods of 45 minutes with 3 minutes for transition
- Extended day from 4-6, including sports, PSAT prep, newspaper, clubs, community service, targeted tutoring (including peer), science labs, specials, entrepreneurship, technology
- Saturday program – 2 half day programs.

Cost Assumptions:

Note: Extended Year/Summer is included in core program.

- Team of 39 teachers

- Teachers teach 6 periods a day, 1 lunch, 1 prep, 2 administrative duties a day.
- Secondary Instructional Teachers (teachers cover 6 periods these cover 3 other instructional periods) 20 Teachers.
- Extended day (4-6) requires 20 teachers \times 10hours \times 48 weeks \times \$40 is 384,000 divided by 47 equals 8. Two sessions yields 16 teachers
- 11th month for core requires 5 teachers (10% of 59)
- Special Ed 4.5 teachers for self contained classroom plus 10% for 11th month equals 5
- Special Ed resource room (say 30 students) SETS children need 1 teacher plus 11th month yields 1.1
- Special Ed inclusion children (34) requires 3 teachers yielding 3.3
- Ell is in other at .5 plus .1 for extended
- Science lab requires 1 teacher in other teacher plus .1
- Detention room teacher 1.5 plus 10% yields 1.7
- Detention room aides 1.5 plus 10% yields 1.7
- Guidance counselors 6 plus .6 extended year
- Special ed paras 1 plus .1 extended for IEP; 1 plus .1 for classroom total 2.2
- General ed assts are used as school aides include switchboard (1), cafeteria (1), floors (3) and locker rooms (2), Misc (1), library (1) Total 9 plus 11th month equals 9.9
- 1 nurse 12 Mo. Position
- 1 librarian plus ext month equals 1.1
- 3 AP's
- 2 coaches in other professional (plus extended year)
- 1 parent coordinator in clerical
- 3 secys, 2 IT techs in clerical
- 4 security staff
- Extended week (including sat) requires 14 staff (8 for 4-6PM and 8 for weekends

Non Personnel Expenditures

- \$200 for annual replacement of science equipment, \$100 for science consumables
- Music – 60 a child assuming 5 year replacement schedule (total 300,000 for fit up)
- 350 per student for laptops (1000 amortized over 3 years).
- 150 per student for software licenses
- Art supplies \$30 per child
- Phys Ed. \$40 per child
- Library supplies \$60 per child
- Classroom Libraries \$10 replacement cost per year
- Textbooks \$60
- \$10 per child assessments
- \$20 student activity
- \$110 PD

Middle School Program Description

- 3 Houses; 317 students per house

- 2 team of 7 classes including 12-1 (self contained) special education
- Emphasis on reading writing and math skills
- Led by AP in each house
- 8-4 10 period day. Each period is 45 minutes
- 4-6 is extended day with 2 half day sections
- 2 Guidance counselors per house
- Program in following areas
 - Literacy 10 periods per week
 - Math 8 periods per week
 - Foreign Lang 6th gets 2; 7th gets 3; 8th gets 3
 - Phy Ed 5 per week
 - Science 5 per week (6th grade gets extra science or math)
 - Social Studies 5 per week
 - Electives 5 per week (4X4)

- **High School**

Items to be considered in **designing the educational Program:**

- Class Size
- Child Development
- Connections to Prior School Experience
- Demographics
- Parent Involvement
- Continuum
- Philosophy of spec ed and ELL
- Culture, expectations, student/adult behaviors
- Partnerships, CBO, community resources

Key Elements of Program

- SES
- AIS
- Dropouts
- Extended Day
- Extended year
- Balanced Literacy (90 Minutes)
- Math (60 Minutes)
- Integrated curriculum
- Technology
- Art
- Music
- Phys Ed
- Dance
- Guidance
- Health Education

- Science
- Social Studies
- Conflict Resolution/Peer Mediation
- Community Relations
- Work study (Co-op programs)
- Parent empowerment
- Assessment
- Professional Development
 - Delivery of instruction
 - Team Teaching
- Career Development
- College Prep

Designing the Core Program Structure

- 480 minutes available
- Hours 8-4
- 11 months for 10-12
- 12 months for grade 9
- Based upon student performance in formal and informal assessments

Cost Assumptions

Note: Extended Year/Summer is included in core program.

- Teachers are 25% more than middle school since there are 25% more students. Also 25% more for aides, etc.
- 3 teachers for 37, 1 SETs teacher plus 3 additional at 15 to 1. Total 7 adjusted to eight for 11th and 12th month.
- 2 additional teachers for 12th month for 9th grade
- 3 APs
- 3 coaches, math, literacy plus one. Add .5 for summer months
- 2 Nurses

Non Personnel Expenditures

- \$250 for annual replacement of science equipment, \$125 for science consumables
- Music – 40 a child assuming 5 year replacement schedule (total 300,000 for fit up)
- 350 per student for laptops (1000 amortized over 3 years).
- 200 per student for software licenses
- Art supplies \$30 per child
- Phys Ed. \$40 per child
- Library supplies \$90 per child
- Classroom Libraries \$3 replacement cost per year
- Textbooks \$60
- \$10 per child assessments

- \$40 student activity
- \$110 PD

High School Program Description

- All entering 9th and 10th grade students attend summer institute to prepare for rigor of high school. Includes study skills, time management, conflict resolutions skills, skills assessment, health education, introduction to school culture.
 - All 9th grade students receive additional guidance support and will have literacy and math block.
 - Elective course in 9th grade will be delayed to accommodate double periods for math and literacy based upon assessment scores.
 - Formal/informal assessments will be used to determine level of AIS.
 - Completion of NYS Regents requirements with benchmarks being the Regents and students who do poorly will receive additional services which include smaller class size
 - Group guidance given to students to address college prep, health, conflict mediation, career development.
 - For weaker students, elective are moved back to 12th grade.
 - AP courses offered to students based upon student request and teacher recommendation.

 - List any additional assumptions that are essential to understanding the program you developed?
- None
- Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

- Pre school students receive pre reading, socialization, language development, letter recognition, family living skills, music, movement.
- Pre school informal readiness assessments, literacy events, social skills, large motor skills. Based on their skill levels and social assessment they get tailored services.
- Workshops for pre school parents.
- By end of kindergarten this student should improve drawing skills and beginning letter writing across a continuum.
- Identify strengths and weaknesses in kg.
- Parent support, teacher support and guidance are available to help student.
- Student Y will attend a bridge program to prepare child for entry into middle schools. Includes school culture, rules.
- Enters middle school into one of three houses which enhances personal interaction.
- Case conferences help identify student social and academic needs
- Student receives a solid academic program with additional supports, solid advisory program

- Students exposed to 4X4 program and enriched academic program
- Students are taught to link school based learning to work based learning. Career exploration, college preparation.
- Summer orientation program from middle to high school. Student Y is introduced to conflict resolution, careers, college prep and career assessments done by guidance counselors. Also exposure to HS requirements.
- 9th grade extensive math and literacy. Additional tutorial support, literacy support.
- Student Y benefits from field based learning.
- Student Y graduates.

STUDENT Y

Same as Student X except:

- Requires early identification and delivery of services from family worker, social worker, teachers.
- AIS services provides concepts about print in pre k
- Direct academic intervention services
- Appropriate technical support in specialized programs
- Tutorial services
- Assessed for need of special education services.
- Identified in summer pre-HS program
- Program is customized for 9th grade
- Counseling services
- Goes to tutorial
- Extended day and weekend services
- Career exploration important
- Drop out prevention important

STUDENT Z

Same as above except:

- Expectations for achievement begins in early grades
- Use of classroom library
- Experiences differentiated instruction in literacy and math
- Peer tutoring
- Middle school college prep
- PSAT in middle school every year
- Career exploration
- Orientation to HS
- College bound academic program
- Opportunity to take AP and college courses
- Community enrichment activities
- Mentoring

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 3A: Instructional Program

Same Resources as 2. However, school would need the flexibility to reallocate.

The should be constant monitoring of student outcomes.

1. Elementary
2. Middle
3. High

4. List any additional assumptions that are essential to understanding the program you developed?
5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

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2. Middle

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STUDENT X

STUDENT Y

STUDENT Z

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1. Elementary
2. Middle
3. High

4. List any additional assumptions that are essential to understanding the program you developed?

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? _____

- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____

Comments:

TASK 6A: Instructional Program

Same Resources as 2. However, school would need the flexibility to reallocate.

The should be constant monitoring of student outcomes.

1. Elementary
2. Middle
3. High

4. List any additional assumptions that are essential to understanding the program you developed?

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? _____

- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____

Comments:

PJP 2: Instructional Program Descriptions

Your program description should be sufficiently detailed for someone who did not participate in the process to understand what you propose. Describe what teachers and students will be doing, any special scheduling considerations, etc

TASK 2A: Instructional Program

1. Elementary Description

No matter where we turn, probing and pressing questions about quality schooling confront us. On the national, as well as within state and local settings, people are questioning the effectiveness of our schools in preparing students to meet the standards. **Team 2** has grappled with identifying an adequate educational program to meet the needs of diverse student populations. Keeping in mind practicality and the potential for implementation, Team 2 took into account increasing support at the Pre-K through Grades 3 student population. Additionally, the program design advocates inclusive schooling with special emphasis on push-in/pull-out model of support staff where built-in collaborative time is a priority.

Another priority is to shift guidance, social and psychological support to the elementary level at an increased level. Research has shown how critical it is to reach students and their families during the most formative years to make a significant impact on student learning. Therefore, the program design added another layer of support at the elementary level by utilizing guidance counselors to track the academic life of students in conjunction with other support personnel i.e., social worker (crisis intervention), school psychologists, etc. This encompasses psychological, instructional (character education), and environmental issues.

Special subject teachers (art, music, p.e.), uses an integrated plan of instruction with a focus literacy skill development. Allocating additional time to foster a wholistic approach to educating students within these content areas.

Instructional support roles in reading, math, and technology are geared to strengthen academic intervention services.

ASSUMPTIONS

- Majority of special education students remain in their buildings in inclusion settings except for students identified as extreme handicapping conditions, 3% special education population (statewide average is 6%, but with intensive focused resources, preK for 3 and 4 year olds, and full day kindergarten, expect that this figure can be halved. IEPs guide instructional program).
- Minimum # of self-contained classrooms
- ELL students are mainstreamed into general education classes with extensive ESOL support

Elementary- Program Design



- a. Extensive emphasis on early childhood development
 - 1. Pre-K Programs: Full-day, serves 3 & 4 years old, small class size = 20 students , 10:1 ratio, one teacher/one teacher assistant, offered to half of the students
 - 2. Kindergarten/Full day that serves 5 year olds, small class size = 20 students, 10:1 ratio, one teacher/one teacher assistant
 - 3. Grades 1-3/Small class size 20:1 ratio, (special services, i.e, OT/Pt/Speech)
 - 4. Grades 4-5/Small class size 21:1 ratio,



ASSUMPTION: Parents become less involved as the student progresses through the school system.

- b. Collaborative Professional Development
 - 1. Focus: Know how children learn
 - 2. Job embedded analysis/best practices sharing/self-reflection/instructional planning
 - 3. Extensive coaching in classrooms
 - c. Family Outreach/Parent workshops – Focus on parenting /life skills
 - d. Special education – Inclusion: 94-97% included, 50 students, 34 of whom are LD/speech&language, 10:1 ratio (=3.4 LD teachers), 16 multiple handicapped students with a 6:1:1 ratio = 2.3 teachers with 2.3 aides. (students:teachers:aides).
 - e. LEP – ratio 15:1 = 0.5 ESOL position



ASSUMPTIONS:

- 34% of the students are identified as struggling students (not all free lunch students will be struggling, but we are using this as a rough approximation of the level of need)
- 1% of the students are identified as gift and talented
- Early identification and intervention of special needs (special ed, speech, LEP, gifted, etc). We have doubled the normal staff for the LD speech/language students so that the intervention will remediate the problems early on.
- Specialized reading programs/ Reading Recovery/Wilson Language/ Reading specialists to serve 34% of students, 40:1 ratio (groups of 8 students), = 4.25 teachers
- Gifted/Talented - 1.0 direct services to students/staff development (ratio of 500:1)

ASSUMPTION: Staff shared between school locations should be avoided at all cost!

Staffing for PE, Art, and Music:



	P.E. (1.87 teachers)	Art (1.3 teachers)	Music (1.3 teachers)
K	60 min/wk	30	30
1-3	120 min/wk	60	60
4-5	120 min/wk	75	75



ASSUMPTION: Today's students are dealing with a multitude of social issues that impact their ability to focus on learning, i.e., spousal abuse, divorce, drugs, negative peer pressure, etc.

- Guidance Counselors – Follow the students' academic life/1:250 ratio, 2 guidance counselors
- Psychologists/1:500 ratio, 1 school psychologist, 60 % allocated for special education
- Social Workers/1:500 ratio, 1 school worker



ASSUMPTION: Building administrators need additional support in order to be effective instructional leaders

- f. Other Professional Support (2 total)
 - In lieu of assistant principal, allocate an office manager responsible for building operations
 - Instructional Technology /training teachers, working w/students, knowledge in computer programs/ maintaining computer lab



ASSSUMPTION: Meet the diverse needs of students by providing a multitude of activities focusing on improving student outcomes as it relates to NYS standards.

- Gifted & Talented enrichment for all around interest/skills
- **Student Activities – funds to support the learning standards through experiential learning**
- Instructional program integrates learning, doesn't "sort and select"
- Student support includes community connection
- Hands-on learning, applies to real life
- Technology: educate staff and parents; community access, internet access
- School-based substitutes, to increase discipline and time-on-task
- Administration includes instructional support, discipline, security, coordination of services
- Instruction/Curriculum: character, time on task
- Planning process to coordinate services and avoid fragmentation. Summer school support instructional initiatives from the school year.
- Stability of staff and administration; school-based management
- ESL program is integrated; ESL professional development for all teachers; focus on language acquisition
- Student mobility: vertical team to track students, ownership
- Looping: keep kids, ownership; K-2, 3-5
- Math program: focus on best practice; thinking, how to learn, manipulatives; college collaboration; literacy goal
- AIS: tutors, mentors, experts
- Use of student teachers, college connections
- IEP for all kids, year round
- 180 instructional days, conference days on top of the # of days
- 5 instructional hours per day, excluding lunch
- Summer program: 30 days, 3 hours per day, 100 students, mandatory attendance based on performance; class size of 10 (10 classes, 10 teachers, 3 aides)
- Extended day program is comprised of 100 students, 2 hours a day, 4 days per week for 25 weeks, teacher ratio 10:1 and 2 teacher assistants, with special education incorporated into staffing. \$300 instructional supplies includes snacks.

Staffing Summary

Summary of Core classroom teachers: 20.6 FTE total

- 12.6 for grades 1-3 (4.2 per grade, class size of 20)
- 8.0 for grades 4-5 (4 per grade, class size of 21)

Summary of Other Teachers: 12.3 FTE total

- 0.5 ESOL
- 4.25 Reading specialists/tutors (Wilson or other specialized reading program); serves 34% of students in groups of 8, 40:1.
- Gifted & Talented teacher
- 1.34 Art
- 1.34 Music
- 1.87 PE
- 2 Math specialists

Special Education teachers: 4.8 FTE total. Ratios of 10:1 and 6:1:1 for LD and non-LD students, respectively.

Summary of Special Ed Aides: 9.7 FTE total

- 3.4 program aides for LD/resource
- 2.3 program aides for the non-LD category
- 4.0 one-on-one personal aides (needed for ~25% of the 14 non-LD special ed students)

General Education Aides: 1 per class for kindergarten and preschool. 3 for grades 1-5 for lunchroom, general duties.

Program Note: Drastically reduced class size, provided increased pupil support, in an effort to identify student learning needs early, and reduce the need for special education services. With the exception of very few students, we've gone to a full inclusion model, so those students benefit from the resources built into the general program. Combined with extended day and summer program and individual help, this should drastically reduce special education costs. In other words, inclusion means that special ed costs become folded into general ed costs.

- **Middle - Program Design**



The middle school consists of 800 students divided into 4 cluster houses (200 students per house). Administration is composed of one principal and one assistant principal. Each house has an instructional facilitator to lead the instructional agenda.

Staffing

Core Teaching Staff

- 2 per subject area per cluster (32 total for ELA, Math, Social Studies, Science)

Other Teachers:

- 4 Tech Teachers (1 per cluster)
- 4 Art Teachers (1 per cluster)
- 4 Music Teachers (1 per cluster)
- 4 PE Teachers (1 per cluster)
- 8 Foreign Language (2 per cluster)
- 1 Health Teachers
- 2 Home/Careers
- 1 ESOL teacher
- 1 Attendance (to improve attendance at school)
- 1 Lead/Instructional teacher
- 1 Instructional Coach

Other Staff

- 5 Special Education teachers
- 1 Social worker
- 1 School psychologist
- 4 Guidance (1 per cluster); follow students over 3 years, assist with discipline, interface with home
- 6 special education teacher assistants
- 5 general education teacher assistants
- 4 lunch aides at a ratio 50:1 plus
- 1 additional aide for breakfast

Cluster teams (each house) would organize and structure their schedule maintaining the instructional time allocated for the day. The key piece is a vertical team across grades where teachers know students. Leadership sets tone and expectations for high performance. The assistant principal would be responsible for scheduling or would designate an educator to coordinate scheduling among the houses.

Summer School Program (16% of student population)

- 3 hrs a day
- 30 days

Extended day is a tutorial program for one hour a day, four days a week =25 weeks designed to address AIS needs. This program is for 34% of the student population. Calculated at \$600 per pupil = 3 teachers.

A 3 hour summer school program for 30 days to support approximately 16% of the student population because the school day program has reduced the # of students at-risk in half.

- **High School Program Design**



ASSUMPTION

- Model would allow for enhanced support of students where academic career is followed succinctly throughout the high school years.

The high school model consists of 7 houses with 80:1 teacher ratio in core content areas: (ELA, Math, Science, Social Studies).

Basic vocational classes are offered (electives in business and technology); assumes a vocational high school or regional BOCES is available for students wanting additional vocational training. 15% of juniors and seniors (7% of total student body) will be attending outside vocational

programs for part of the school day, at a cost of \$5,000 per child served. This amounts to \$350 per pupil, which was added to the student activities line item for lack of a better place to put it.

Staffing:

- Core teaching staff: (59 total)
 - 14 per subject for math, English, social studies
 - 17 total for science (including lab)
- Other teachers: (42.5 total)
 - 4 per subject for music, art, tech, business (16 total)
 - 5 PE
 - 10 foreign language
 - 4 for health, home ec/careers/parenting
 - 1 distance learning tech/teacher/coordinator
 - 1.5 ESL
 - 1 attendance teacher to improve attendance at school
 - 4 AIS support teachers (serve as dept. chairs;work w/students; or use as stipends in lieu of additional staff)
 - 4 instructional facilitators, one for each core area; focus on instructional best practices and curriculum alignment
- Special Education teachers: 10 FTE total
 - 4 for LD students (20:1 ratio)
 - 6 for non-LD (6:1:1 students:teacher:aide ratio)
- Support staff: 5 Guidance counselors: track students across grades (vertical assignments by house), focused on getting all students to graduate, incorporate social work duties. 1 social worker, 1 psychologist, for a total of 7 support staff, one for each house.
- 6 Clerical staff: secretaries for principal and assistant principals, 3 for guidance office
- General Ed Aides:
 - 6 clerical aides
 - 1 nurse's aide
 - 1 library TA
 - 1 ISS teaching assistant (in school suspension)
- 10 SPED Aides (teaching assistants)
- 2 Assistant principals (1 assistant principal, 1 dean)
- 1 Other Pupil Support staff to run an alternative ed program for 4% of students

Equipment/Technology: \$600 per pupil (\$400 general + \$200 laptop). Includes all school equipment (instructional, office, custodial) and tech, including allowance for laptops for every student

Student Activities: \$225 (\$75 clubs, \$150 sports). \$350 added for vocational program tuition for students served outside the school (see note on vocational education, above).

Summer School (200 students))

- 3 hrs per day
- 5 days per week
- 15:1 student/teacher ratio
- 30 days

Extended Day (300 students)

- 2 hrs per day
- 4 days a week
- 10:1 student/teacher ratio
- 25 weeks

4. List any additional assumptions that are essential to understanding the program you developed?
5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

The average student would have access to full day Pre-K and Kindergarten instruction. Smaller class size to address individualized needs of the student. Teacher assistants provide additional instructional support during the Pre-K and Kindergarten years . Intermediate years are supported with an increased emphasis on family support and specialized reading programs. Guidance counselor has followed his academic progress throughout the elementary years. Provided exposure in technology and involvement in student activities to support social growth.

Middle years, Student X is placed in a house cluster in which the ratio is small enough to guaranteed close mentoring and guidance services. Student X is in the 40th percentile and was given AIS services which helped student to pass all required assessments.

High School years, Student X continues to be closely mentored with AIS support services with class size at 16 in the core area and no core teacher has more than 80 students, and has successfully passed all Regents requirements during the four years of involvement in a variety of student activities. Student X has been exposed in the business and technology areas which has motivated him to pursue a postsecondary vocational program successfully.

STUDENT Y

Early years comprised of full day Pre-K and Kindergarten with special service intervention for social and psychological support. He was placed in small group classes (inclusion model consisting of general ed, sp. ed. , and teacher assistant) with a ratio of 20:1 to emphasize basic skills. There is alignment to an identified reading program to meet student's individual needs with increase instructional through extended day and summer school opportunities. Focus on parental workshops to help student with academic problems.

Middle years, Student Y is placed in a house cluster and follows the successful procedures identified at the elementary years. AIS classes are added to the schedule to help with academic struggles. Though not successful with test scores, Student Y is doing acceptable classroom work because of the close supervision of cluster and sp. education teachers.

High school years, because of the communication with guidance counselors, his transition to high school is smooth and AIS services are immediately added to his daily schedule. Individual tutoring is offered after school and a special tutor has been assigned to work on a one-to-one basis to help pass the four year English Regents. The high school has offered every service to prepared for being a productive citizen. Student Y may require an additional year of schooling.

STUDENT Z

Early years comprised of full day PreK and Kindergarten with enrichment classes as determined by individual needs. Once identified as a gifted student, instruction throughout the elementary years focus on academic excellence through differentiated instruction. Student Z was helped to develop his/her ability to learn by taking part in extended day and summer programs.

Middle years, Student Z gets close personal attention through advisory counsel and small classes. Student Z is given academic support through the gifted and talented program. Student is encouraged to participate in extracurricular activities and be involved in community work in preparation for college admittance.

High school years, Student Z is exposed to advance placement courses and college bound instruction by early preparation to take PSAT and SATs. In addition, guidance counselor follow student closely recommending an academic program that help student to plan his college career. Student is engaged in peer tutoring, and student government to maintain his interest in school and to encourage his developing portfolio to help with college acceptance. Individual tutoring is available to insure positive results in all academic areas and advanced classes.

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

Have to have quality staff effectively using resources; have to make sure programs aren't competing with programs; special education services need to be fully designed.

MS: very difficult to get MS students to reach standards; great variability in motivation and attention; can't ever address 100% of it. Strong leadership matters.

TASK 3A - 6: Instructional Program

ELEMENTARY

	Task 2	Task 3	Task 4	Task 5	Task 6
F/R	34%	45%	62%	79%	91%
LEP	1.5%	2.6%	2.6%	2.6%	18.8%
PreK	50%	70%	80%	90%	100%
Full K	All	All	All	All	All
Class size	20-21	19	18	17	15
Guidance	2	2	2	2	3
Psych	1	1	3	4	4
Social wrker	1	2	3	4	4
Ext. Day	100	150	200	300	400
ESL	0.5	2	2	2	6 +6 TAs
Summer	100	150	200	300	400
Adm	1+1OM	1+1OM	1+AP	1+AP+OM	1+AP+OM
General TA	3	5	8	12	15
Clerical	2	2	3	3	4
Security	1	2	2	3	4
Nurse	1	1	1	1	1 +clinic
Library	1	1	1	1	1 w/ ass't

OM- Office Manager (budgeted as an “Other Teacher”)

Extended day and extended year show number of students participating.

Rationale for increase monies for instructional supplies and equipment:

- differentiated instruction
- hands-on learning
- traditional textbooks/workbooks
- instructional software
- computers
- updated technology equipment/media materials
- tend to have more lost and broken equipment in disadvantaged communities (in part due to increased student mobility)
- need to bring resources and internet wiring up to adequate levels

Rationale for increased funding for student activities:

- motivate student interest in school

Rationale for increased professional development

- To avoid reduction of instructional time in classroom
- Professional stipends to expand learning
- Workshops
- After and before school professional learning

Reducing class size: improved instruction, provides more individual attention

Increasing percent of students offered extended day: as poverty rate increases, the number of students falling behind increases; we need to ensure sufficient learning time to meet Regents standards.

Increasing percent of students offered summer program: same as above

Increasing security: provide a safe environment. Assumes high-poverty students attend schools in high-poverty, high-crime areas. More security needed because of exposure to more dangerous environment. Video cameras and other security equipment also added to the equipment budget.

Increasing clerical staff: As we're tracking students in terms of cohort data and AIS information, we need additional clerical staff. Professional staff should not be spending time doing clerical work. Want to be more responsive to parents in the community. As the population changes to more LEP, more paperwork is imposed by federal government regulations.

Increasing aides: Provide more individualized attention to students, increase safety, increase clerical support. Deployed to do external jobs like home visits and community outreach, and to work with ESL population.

Nurses: provide space for a community clinic at 79% and 91% poverty levels (requires additional facilities but not funding—funded through community social services). Add nurses: Disadvantaged population faces greater pregnancy and drug abuse risk. At the high school level, nurses provide prevention services.

Task 6: Each classroom teacher gets a half-time TA. Extend job description to include outreach.

MIDDLE

	Task 2	Task 3	Task 4	Task 5	Task 6
F/R	34%	45%	62%	79%	91%
LEP	1.5%	2.6%	2.6%	2.6%	18.8%
Class size	25	24	23	22	21
Attendance	1	1	2	3	3
Inst. Facilitator	4	4	4	4	4
Guidance	4	5	6	7	8
Psych	1	1	1	2	2
Social wrker	1	1	1	2	2
Ext. Day	34%	40%	50%	60%	65%
ESL	1	4	4	5	6
Summer	16%	20%	25%	30%	35%
Adm	1P+1AP	1P+1AP	1P+2AP	1P+3AP	1P+4AP
General TA	15	19	20	22	28
Clerical	4	4	4	5	6
Security	3	4	5	6	8
Nurse	1	1	1	2 clinic	2 clinic
Library	1	1	1	1	1

HIGH

	Task 2	Task 3	Task 4	Task 5	Task 6
F/R	34%	45%	62%	79%	91%
LEP	1.5%	2.6%	2.6%	2.6%	18.8%
Class size	16	16	16	16	16
Inst. Facilitator	4	4	8	8	8
Attendance	1	1	1	2	2
Guidance	5	5	6	7	7
Psych	1	2	2	3	3
Social wrker	1	2	2	3	3
Ext. Day	34% 15:1	40% 15:1	50% 15:1	60% 10:1	65% 10:1
ESL	1.5	1.5	2.0	4.0	7.0
Summer	16%	20%	25%	30%	35%
Adm	1P +2AP	1P+2AP	1P+3AP	1P+3AP	1P+4AP
General TA	9	9	11	12	12
Clerical	8	8	9	10	12
Security	5	6	6	8	10
Nurse	1	1	1	2	2
Library	1	1+TA	1+TA	2	2

Rationale

- Extended day and summer school is variable.
- Ratios are the same for summer school and extended day

- Guidance counselors role includes enhance focus on finding students and support family outreach working collaboratively w/social workers/school psychologists
- Guidance counselors make sure students are staying in school.
- AP assigned one per grade
- Clerical support for houses and guidance counselors

4. List any additional assumptions that are essential to understanding the program you developed?
6. Provide team answers to the following questions.
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
 - b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
 - c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 4A: Instructional Program

4. Elementary
 5. Middle
 6. High
-
4. List any additional assumptions that are essential to understanding the program you developed?
 6. Provide team answers to the following questions.
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
 - b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
 - c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 5A: Instructional Program

4. Elementary
 5. Middle
 6. High
-
4. List any additional assumptions that are essential to understanding the program you developed?
 6. Provide team answers to the following questions.
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
 - b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
 - c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 6A: Instructional Program

4. Elementary
 5. Middle
 6. High
-
4. List any additional assumptions that are essential to understanding the program you developed?
 5. Describe the elementary, middle and high school programs of students X, Y and Z.
 6. Provide team answers to the following questions.
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
 - b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
 - c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

PJP 3: Instructional Program Descriptions

Your program description should be sufficiently detailed for someone who did not participate in the process to understand what you propose. Describe what teachers and students will be doing, any special scheduling considerations, etc

TASK 2A: Instructional Program

- **Elementary**

There is a half-day inclusive pre-school program housed in the elementary school which is available for all four year olds within the district. Transportation is provided to and from the program.

- The teachers will be certified in the area of Special Education whenever possible. Special Education itinerant services will be provided.
- There will be a Speech therapist associated with the Pre-school as a service provider for the program.
- There will be 2 Speech Therapists for the building. One will work primarily with the Pre-School.
- There will be a part-time OT.
- All Special Education students who are in the Pre-School program will receive all related services: OT, PT, Speech, etc.

There is a **full-day Kindergarten** that is inclusive.

The full-time Special Education teacher is to help with early intervention services.

There is an emphasis on Literacy and Math which requires 90 minutes of literacy and 60 minutes of math each day.

Class size would reflect classes:

- Grades 1-3 = 16 students
- Grades 4-5 = 21 students

The school day also includes

- 1.5 hrs. Literacy
- 1 hr. Math
- 3/4 hr. PE/Nutrition

- 3/4 hour SPECIALS
 - Art
 - Music
 - Library/Technology
 - PE
- 3x week @ 3/4 hour Technology/Research
- 1/2 hr. lunch
- 3/4 hr. Social Studies
- Collaborative Team meeting ...to be discussed
- 3/4 hr. Science

AIS Services

Will be incorporated within the design of the regular content areas.

Special Education

The school will reflect a least restrictive environment and will adopt an inclusive philosophy. 1-2% of the identified students will not be in regular education programs (they are in external programs).

.5 Special Education Teacher per grade level. One teacher would take the Special Education students into his/her classroom.

.25 = OT

.25 = PT

The above people will be shared throughout the district

2 speech therapists

Technology

Instructional technology would encompass:

- computer replacement
- equipment replacement

1 general education aide will be added to assist with building security

*The technology budget may not address the licensing costs of software.

Staff Development

We are adding 1 other professional staff to assist with the curriculum writing and program implementation.

- ***Middle School***

Problem: 6th grade operates on an elementary schedule, 7 & 8 operate differently.

It is critical that there will be team planning time (T time) and professional planning /preparation time.

The 7th and 8th grade team will loop.

An advisor and advisee program is critical to enhance the relationships (building) .

The Middle School community should have more of a feel like an elementary school. To create a “softer” structure for developing minds and bodies.

Cooperative learning is a key learning strategy.

Rotating block schedule?

Guidance counselors will loop with students.

PE

2.8 FTE = Regular Ed

.2 FTE = Adaptive PE

2 FTE = Art

2 FTE = Music

2 FTE = Tech (Industrial Arts)

1 FTE = Home and Careers

1 FTE = Health

3 FTE = Language Teachers

1 FTE = Computer Classroom (Teaching Assistant)

The Special Education aides may be higher due to one-on-one aides.

ESL teacher = .5 FTE each for elementary, middle school, high school for 1.5 FTE total for the 3 buildings.

AIS Services

5 teachers working in a lab setting.

Consider utilizing retired teachers to come back and work in one-on-one or small groups to assist struggling students. These teachers are paid on a time sheet basis. Approximately \$30 an hour. This helps to pinpoint specialists for specific students. For example: Chemistry . These TUTORS have their own bargaining unit.

Other support staff

.2 APE
.25 PT
1.5 speech
.5 OT

There will be an additional general education aide to assist in the library. This person will perform clerical tasks to free up the library media specialist to assist with instruction.

Administration

1 principal
1 assistant principal
1 Dean...to help with discipline, overall paperwork/ management /clerical items

There will be grade level teams that will have a Special Education teacher supporting each grade level. Each grade level team will have the support of a Special Education teacher.

Blocks of learning time within the master schedule is advisable so that middle school learners can have hands-on , experiential learning.

Clerical

2 main office clerical
1 guidance office
1 general aide for assistance in the nurse's office

Security

1 person to service the building

Special Education

The support for special education looks differently

- 504 students and IEP students start to look differently
- Who are the service providers?
- The whole program is integrated throughout the different content areas.
- Extremely high needs students would be referred back to the Committee and would be excluded from the regular ed program and would attend another setting

High School Discussion

Supports an inclusion model for its Special Education students.

Promotes a partnership with the community and businesses. Provides internships in these partnerships.

What kind of scheduling?

4x4, block scheduling

9th grade transition problems, mentoring these students
How do we not lose them in the process? An advisor, advisee program is recommended in some format.

Develop houses, academies

Develop an academy in 8th grade and follow them through to 9th grade.

There is support for a supportive system of grouping: academy, clustering, schools within schools.

Discussion indicated a vertical alignment with 3-4 “houses” that are supervised by assistant principals (3) under the supervision of a head principal.

There will be some traveling of specialized teachers between buildings....for example: physics and language teachers

23 teachers

- 3 PE
- 6 LOTE
- 1 Health
- 2 Art
- 3 Music
- 2 Technology
- 3 Business/School to Work
- 1 Computer
- 2 Curriculum Mentors

1 Curriculum Coordinator = **Other Professional Staff**

AIS Services

2 for each house

Athletic Director (Other professional)

Part-time AD

But would also oversee

- District calendar
- Building usage

Special Education teachers

- 6 2 per building

General Education Aides

- 1 Nurse's office
- 1 Library Aide
- 1 Computer technology (TA)

2 Lunch
2 Bus
1 In-school suspension
1 Attendance
1 AV tech support

Department Chairs?

Stipend

In addition to supervising his/her own house, the three assistant principals would supervise the following three areas of curriculum and would report to the principal. For example:

- 1 Math and science
- 2 Humanities (Social Studies, English, foreign language)
- 3 Other – Special

This would also justify the need/expense of the 3 assistant principals.

Who does the data collection and analysis that drives good decision making for the building, houses, district.

There would be the following positions which would be shared between the three houses:

1 school psychologist
1 social worker
1 substance abuse worker
1 at risk counselor (1 FTE)
.5 ESL teacher

In each house:

1 counselor

Special Education Support Services

3.0 FTE
Speech
Adaptive PE
OT
PT

- There needs to be curriculum development/coordination at some level in the district.
This may look like:
- Coordinator of reading K-12
- Would also mentor new teachers, coach, model teaching strategies, coaching throughout the school year

Clerical Staff

- 3 For the assistant principals
- 2 guidance office
- 1 Principal
- 2 attendance
- 1 Athletic director

Security

1 person

The perception of a security guard sends a mixed message .

Transportation Costs

We need to look at the costs of the elementary, middle school, high school field trips, intramurals, etc.

Professional Development

Who scores the tests?

We are suggesting 10 days of staff development per teacher per year. These days are for district initiatives. For example: new textbook series, instructional strategies, differentiated learning, cooperative learning, etc.

We would stipulate that the \$200 per student expense would be considered a high priority in the district and would encourage the staff development to take place during non-instructional hours as much as possible.

Substitute costs for training to administer and score the state tests is a critical factor

Special Education costs during testing

Pay for proctoring for special education students

Food Service

Breakfast should be provided.

Summer Programs

\$6500 x 15 students = Special Education students

- 2 Teachers and 2 aides = includes the costs of related services, and acknowledges that some of these students will be going to more restrictive placements

We are assuming that our Special Education (Other) population is considered 12-1-1 of students. These students are not necessarily emotionally disturbed students, but may have organizational issues and some management needs.

4. List any additional assumptions that are essential to understanding the program you developed?

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

This student will do fine in the elementary school. He will have access to small class sizes and a summer program. This student will have a team concept in the middle school that will provide a number of supports to help him feel successful.

We have created small learning environments throughout the system.

We are assuming that BOCES is in place that would address the vocational training piece for this student. Provisions are made for students who want to pursue pre-vocational training at the regional level.

In the high school, there is not a vocational education program that would meet his tendency to be a true hands-on learner.

STUDENT Y

At all three levels, we have more than adequate special education services, AIS, and counseling and related services and a strong nutritional component. There is a strong component of staff development that assists teachers to identify and implement teaching strategies that meet the needs of high risk students. There is also an advisee/advisor program that provides a network of support. There is a generous amount of money to support clubs and organizations that provide opportunities for social and civic enrichment.

STUDENT Z

This student has had opportunities for rich experiences through AP courses, internship opportunities in the community through business and professional organizations. There will also be opportunities for community service. The commitment to small learning environments has allowed this student to acquire well developed skills in cooperation, leadership , and the ability to be doing independent research.

6. Provide team answers to the following questions.

a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How

confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? ___5___

- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? ___5___
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? ___5___

Comments:

TASK 3A: Instructional Program

NO CHANGE

4. Elementary

5. Middle

6. High

4. List any additional assumptions that are essential to understanding the program you developed?

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? _____

b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? _____

Comments:

TASK 4A: Instructional Program

NO CHANGES except adding a Social Worker who will work a district wide home school program . This person will be housed in the elementary school and will work with the 500 (approximately) families in the district. On the chart, this person will be listed as .5 and .5.

7. Elementary
 8. Middle
 9. High
-
4. List any additional assumptions that are essential to understanding the program you developed?
 5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
 - b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 5A: Instructional Program

7. Elementary
8. Middle
9. High
we
10. List any additional assumptions that are essential to understanding the program you developed?

Because of increased free and reduced lunch, and the slight increase in ESL have

- a. added a social worker to each building.
- b. added an ESL teacher .5 FTE to the district program, but will housed at the elementary level.
- c. added1 AIS to meet the increased needs.

There were few additions to the staffing due to the small class sizes and rich staffing numbers.

Pre-School Discussion

We suggest that a standard be set so that:

A Title I school would be eligible and should have a pre-school program for 3 year-olds.

Summer School

We increased the summer school allocations in order to provide the increased numbers of poverty students the opportunity to experience academic and enrichment opportunities.

We increased the regular ed participation and held the special ed components constant due to the stable number of special education students.

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 6A: Instructional Program

7. Elementary
8. Middle
9. High

10. List any additional assumptions that are essential to understanding the program you developed?

In the high school, we added 3 ESL teachers to accommodate the needs of the increased ESL student numbers.

In the Middle school, we added 2.5 ESL and 1 AIS to meet the increased needs.

In the elementary school, we added 2 ESL teachers.

There were few additions to the staffing due to the small class sizes and rich staffing numbers.

Pre-School Discussion

We suggest that a standard be set so that:

A Title I school would be eligible and should have a pre-school program for 3 year-olds.

Summer School

We increased the summer school allocations in order to provide the increased numbers of poverty students the opportunity to experience academic and enrichment opportunities.

We increased the regular ed participation and held the special ed components constant due to the stable number of special education students.

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

STUDENT Y

STUDENT Z

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

Class size remains small throughout the structure. Needs of students drive the increased staffing.

PJP 4: Instructional Program Descriptions

Your program description should be sufficiently detailed for someone who did not participate in the process to understand what you propose. Describe what teachers and students will be doing, any special scheduling considerations, etc

TASK 2A: Instructional Program

- Elementary
 - Pre-School- art/music exposure, readiness skills, early literacy program, socialization, foreign language for Pre K - 10 minutes/day, 5 days/week)
 - ECC – three year olds, attend 1/2 day session, 5 days/week, class size of <=8 students = 69 student population
 - Pre K – four year olds, attend full day, 5 days/wk, class size of <=18 students = 69 student population
 - K – five year olds, attend full day, class size of <=18 students
 - Grades 1 – 3 classes of 17 max
 - 2 Multi-age classrooms of grades 1 & 2, class size of 18 max – balance with 9 first grade students and 9 second grade students
 - Grades 2 – 3 classes of 17 max
 - Grades 3 – 4 classes of 17 max
 - Grades 4 – 3 classes of 23 max
 - Grades 5 – 3 classes of 23 max

Specialized Support: available for ages 3 through grade 3

Learning specialist - speech, reading, writing math, OT,
Behavioral specialist

Parent Outreach Program. (coordinator = 1 FTE to link [i.e., broker] social and health services with families, plus clerical support)

Nutritional support offered to all students– both breakfast and lunch

On-going staff development to be prepared for these programs, including

- Day to day mentoring
- Peer coaching
- Common planning time for grade levels
- Teaming teachers for learning teams

Language –
Student

- Strong phonetic and phoneme preparation and mastery

- Guided reading with small groups (or other individualized reading program), using scientifically based researched program.
 - Writers workshop daily with emphasis on process writing
 - Daily content area writing and reading (fiction and non-fiction)
 - Technology support for the development of reading and writing skill
- Teacher
- Curriculum alignment (vertically and horizontally) and parallel assessments to the NYS Learning Standards

Math / Science / Social Studies -

Student

- Hands on approach (math/science/social studies)
- Mastery of a strong number sense (math)
- Technology support for the development of math/science/social studies skills
- Using an inquiry approach to problem solving (math/science/social studies)

Teacher

- Familiar with one of the 3 research-based math programs that are aligned to our NYS tests
- Curriculum alignment (vertically and horizontally) and parallel assessments to the NYS standards (math/science/social studies)

Social Curriculum

- Staff training for all employees to implement character education program (include transportation)
- Integrated into the whole school program
- All Areas – Parent involvement (on-going communication)
 - Have a definite plan to meet with each parent at least 3-4 times per year (different from typical 20-minute parent conferences)
 - Parent conferences
- All Areas – Pre-Kindergarten intervention programs

Other Program components – Grades 1-5

- Art – 2 classes per week for 1/2 year (first semester), one class week for 1/2 year (second semester)
- Music -one class week for 1/2 year (first semester), two classes week for 1/2 year (second semester)
- PE – 2 classes per week
- Vocal and Instrumental Music – begin in grade 3, two lessons per week (one group lesson, one individual lesson) 1 FTE
- Foreign Language – 20 minutes K-2, 30 minutes Gr 3-5 (2.5 FTE)
- Gifted/Enrichment Program – implemented in classroom
- Library (1 FTE with 1 day/wk aide support)
- Career Exploration – integrated into the curriculum

Special Education Services

- Full-time special education classroom

16 students served by 2 SPED teachers, 2 teacher aides

- Inclusion driven by individual education plan (IEP)
 - 37 students with 3 SPED teachers
- Co-teaching with regular and special education teachers for inclusion
- Support staff based on student needs (i.e.: social workers, school psychologist, guidance, OT, PT, nurse, speech)
- Year -round services for severe needs student driven by IEP

Academic Intervention Services

- Summer enrichment program (6-week program) – literacy-based program offered to all; transportation available for those attending summer school.

Support Service –

- Café – Café manager (district-wide) and food service helper to offer breakfast and lunch
- Nurse with 1.0 FTE aide support
- Principal with 1.0 FTE clerical support
- Assistant Principal with 1.0 FTE clerical support (duties include pre-K and ECC program)
- 1.0 FTE Teacher Clerical Support for attendance and to address attendance issues
- Technology - 6 computers per classroom, 25 computers in lab, 25 rotating wireless computers
- Transporting all preschool students on separate bus runs, before regular runs. Each school bus has an aide.
- Security – technology to provide security: monitor with cameras at each door and buzzer entry. Rely on main office staff to monitor. (maintenance budget)
- School activities include student council, yearbook, intramurals, dances, roller skating – staff are paid a stipend for chaperoning or advising (per union contract).
- Library – 10 computer stations with internet access

- Middle

Social Curriculum

- Community Service – coordinated through teams.
- Opportunities for much social interaction
- Encourage parent involvement – recognition/awards program
- Prioritize health and social issues (i.e., drug, sex, and alcohol education; nutrition awareness, hygiene, fitness/wellness, peer relationships (mediation), home and careers
- Staff training to implement character education program
- Integrated into the whole-school program
- All Areas – Parent involvement (on-going communication)
 1. Have a definite plan to meet with each parent at least 3-4 times per year (different from typical 20-minute parent conference)

2. Parent conferences

Academic Program

- Interdisciplinary team structure (6 core academic areas) :, 2 teams per grade level (90 students per team w/6 teachers per team)
- Flex block schedule
- Curriculum per Team:
 - 1 ELA
 - 1 Math
 - 1 Science w/stipend for lab
 - 1 Foreign Language
 - 1 Social Studies
 - 1 Health
- Exploratory Subjects: 13 WEEK PROGRAM EACH
 - technology education (.33 FTE)
 - art (.33 FTE),
 - music (.33 FTE)
- Phys Ed. (.5 FTE)
- 2 FTE (total) SPED / Resource Teacher

Before School Program

.16 FTE x 3 Options: Band, Orchestra, Chorus

Honors Program: Accelerated classes (math, science, social studies, foreign language, art), includes lab where needed

Homeroom Advisory Time

Study skills – organizational skills included within all subjects

- Support:
- 1 FTE counselor per grade (total 3 FTE) w/ 1 FTE clerical
 - .5 FTE Social Worker per building
 - 1 FTE Nurse per building
 - 1 FTE Librarian per building w/ 1 FTE clerical
 - .67 FTE Reading specialist/coordinate student center - per grade (total 2 FTE)
 - .33 FTE Math/Science teacher per grade (total 1 FTE)
 - .33 FTE Writing teacher per grade (total 1 FTE)
 - .33 FTE Technology Integration Teacher per grade (total 1 FTE)
 - .33 FTE Principal per grade (total 1 FTE) w/ 1 FTE clerical
 - .33 FTE Vice-Principal (total 1 FTE) w/ 1 FTE clerical
 - 1 clerical aide per grade (total 3)
 - .17 FTE Psychologist (total .5 FTE)
 - .33 FTE Speech (total 1 FTE)
 - 1 FTE SPED per grade (total 3 FTE)
 - 1 FTE School Resource Officer per building

1 FTE Substance Abuse Counselor
1 FTE Network Engineer

At Risk students will have a safety net by using the remedial resources to evaluate and address student needs.

Student Assistance Center available for students before and after school.

Intramurals available after school for all students, modified sports programs available for grades 7 & 8.

Offer Before and After school clubs. Include funding for social curriculum recognition program

Daily Nutritional Component offers breakfast, lunch, and offer snack at end of the school day before sports and clubs meet.

Summer School:

Offer to all students – low and high end achievers included
6 week / half day program
Core subjects only for remedial (science, math, ELA, Social Studies, Foreign Language)

Offer short 3 week program to students attending an accelerated program in the following year. (math, science, ELA, foreign language)

Transportation available for summer school

Library – computer lab with 25 stations in library with internet access

Technology – 6 computers per classroom, 25 in computer lab and 25 wireless computers for each grade level.

There are 6 teachers per team, 6 teams. Core teachers are given parameters of their own time and empowered to develop their own schedule with their own team. Students teams are divided by 5 and rotating them through 6 subjects/teachers. Schedule always has one teacher free for a period. This gives every teacher a group planning time, individual planning time, duty and lunch. Grade 8 accelerated Science teachers do not have duty assigned, they have lab.

- High

Average Class size is <=20 students.

Core Subjects/years needed/tested:

English – 4 years
Social Studies – 4 years
Science – 3 years
Foreign Language – 3 years
Math – 3 years

FTE Calculation for each subject/includes core, electives, and SPED:

English – 5.6 FTE (reg) + 1.4 for electives
Social Studies – 5.6 FTE (reg) + 1.4 for electives
Math – 4.2 FTE (reg) + 1.8 for electives
Foreign Language – 4.2 FTE (reg) + .8 for electives
Science – 5.1 FTE (reg) + 2.4 for electives
Department Chair - .12 FTE stipend

Other Programs:

HealthyLiving	1.4 FTE 1 yr – all students (includes personal finance in curr) / 20 per class
PE	2.8 FTE 2 yrs. – all students / 20 per class
Music	3. FTE Band/Orchestra/Chorus - Optional
Art	2 FTE Optional
Technology	2 FTE Optional
Business	1 FTE Optional
Vocational	1.5 FTE although services are provided by BOCES
Drivers Ed.	PTO Sponsored/Optional

Other Personnel:

Principal plus 1.0 FTE clerical support
Vice Principal plus 1.0 FTE clerical support
Nurse plus 1.0 FTE aide
Librarian plus 1.0 FTE aide
3 FTE Guidance plus 3.0 FTE clerical
1.0 FTE Resource Officer (security)
1.0 FTE Student Resource Center
1.0 FTE Technology Integration Person (for staff)
1.0 FTE Network Engineer
1.0 FTE Substance Abuse Counselor
5.0 FTE SPED plus 3.0 FTE aides
.5 Social Worker
.5 Psychologist

Students at risk will have a safety net by using the student resource room, guidance services to evaluate and address student academic and social needs. Student resource center is open during day and before and after school.

Student Activities:

Athletic Director (district position)

Sports: Varsity and JV offered

Clubs, intramurals, dances, plays, marching band,

Technology in the building should include: 6 computers in each classroom, 1 computer labs, and 2 wireless classrooms (25 computers each)

Nutritional Component – Café offers breakfast, lunch, and snack window open from end of last lunch to time of late bus.

Summer School:

Offer to all students in all core subject areas (math, science, social studies, foreign language, ELA, health).

6 week/half day program

Transporting available for summer school

Library – computer lab with 25 stations in library with internet access.

School / Home Telephone contact is made to parents who's child is at risk.

Behavioral plan is developed for those students whose behavior needs to be addressed - developed by child study team, utilizing parent research center..

3. List any additional assumptions that are essential to understanding the program you developed?

Facility is adequate for adding programs for 3 and 4 year olds, full-day Kindergarten, and Grades 1-12 / 10 month programs.

Transportation is available for all programs

School and District professionals are aware of best practices and have the ability to develop a culture of teaching and learning at each level Professional development applies to all staff – including administrators

Working telephone is available in each classroom.

Teacher computer workstations are equipped with student management system (grade book, attendance, student demographics)

4. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

VoTec. Classes are available to this student. In the early years, the highly structured early intervention program will address this student's needs as they go through the system. The low student to staff ratio is critical to meet the needs of this child, and is incorporated in this program.. The liberal policy for staff development will give the staff the ability to differentiate instruction, preventative strategies, provide support, and provide a nurturing environment. The curriculum offers vocational exposure .

The low class size throughout the programs will assist to allow the staff to evaluate and meet the needs of the student.

STUDENT Y

The highly structured early intervention program will address this student's needs. The low student to staff ratio is critical to meet the needs of this child, and is incorporated in this program. Family support is in place. Intensive social worker, psychologist, family outreach, counselors etc is available. The social skills program will help address behavior issues. Homework advisory time in the middle school component will help staff address the critical needs of the student. The liberal policy for staff development will give the staff the ability to differentiate instruction, preventative strategies, provide support, and provide a nurturing environment. The low class size throughout the programs will assist to allow the staff to evaluate and meet the needs of the student.

Vocational program is also offered.

Academic behavior plan is developed for this student.

STUDENT Z

The program offered in this model addresses the needs of the student by offering advanced placement courses. The fine arts, music and technology offer this student the opportunities to be creative. Through career exploration throughout the program, this prepares the student with the exposure basis to make the correct decision for him/her.

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5

- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

Our group is very confident that the program is adequate for all students with the assumption that the staff are all competent to handle their responsibilities, and that we are able to evaluate the program and make adjustments for unfavorable student outcomes as they become known.

TASK 3A: Instructional Program

7. Elementary

No Change to instructional program – staff development increases by \$200 per teacher, addressed as a district-wide plan.

8. Middle

No Change to instructional program – addressed as a district-wide plan.

9. High

No Change at this level – addressed as a district-wide plan.

10. List any additional assumptions that are essential to understanding the program you developed?

Address district-wide issue of increased poverty level, as a result of the increased free and reduced. Additional professional development will be necessary to address this K-12 issue.

This would increase the professional development budget by \$200/per teacher, and recruitment strategies need to be evaluated so that the proper staff is acquired.

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

Adequate Program Provided

STUDENT Y

Adequate Program Provided

STUDENT Z

Adequate Program Provided

6. Provide team answers to the following questions.

a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

Our group is very confident that the program is adequate for all students with the assumption that the staff are all competent to handle their responsibilities, and that we are able to evaluate the program and make adjustments for unfavorable student outcomes as they become known

TASK 4A: Instructional Program

10. Elementary

To address the LEP students, our educational plan changes by .5 FTE ESL. Students and Families will also be linked to student resource center..

11. Middle

To address the LEP students, our educational plan changes by .5 FTE for ESL. Students and Families will also be linked to student resource center.

12. High

To address the LEP students, our educational plan changes by 1.0 FTE for ESL. Students and Families will also be linked to student resource center.

13. List any additional assumptions that are essential to understanding the program you developed?

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

Adequate Program Provided

STUDENT Y

Adequate Program Provided

STUDENT Z

Adequate Program Provided

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 5A: Instructional Program

11. Elementary

See District-wide program

12. Middle

See District-wide program

"

13. High

Alternate Education Program is established as needed and staffed by existing FTE. (School in a school.)

(An option in providing alternative education may be night classes.)

Vocational Program is expected to increase at a higher level in correlation with increased free and reduced % - existing staff will be accessed as students attend vocational programs (no increase or decrease in FTE.)

The Atl Ed and Vocational programs will have a greater emphasis on career exploration - no additional resources necessary

Increase clubs and activities to include cultural opportunities, many off site opportunities.

14. List any additional assumptions that are essential to understanding the program you developed?

With the free and reduced eligibility at 40% - we feel that a district-wide program should be incorporated into the district to meet the needs of these families. One social worker to work as a case worker for families to access to social programs and agencies to meet the needs of the families.

Establish a relationship with the social programs available to encourage a day care program (on site) for those students who need a safe place before and after school.

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

Adequate Program Provided

STUDENT Y

Adequate Program Provided

STUDENT Z

Adequate Program Provided

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

TASK 6A: Instructional Program

11. Elementary

To address the LEP students, our educational plan changes by .5 FTE ESL. Students and Families will also be linked to student resource center..

14. Middle

To address the LEP students, our educational plan changes by .5 FTE for ESL. Students and Families will also be linked to student resource center.

15. High

To address the LEP students, our educational plan changes by 1.0 FTE for ESL. Students and Families will also be linked to student resource center.

Alternate Education Program is established as needed and staffed by existing FTE.
(School in a school.)

Vocational Program is expected to increase at a higher level in correlation with increased free and reduced % - existing staff will be excessed as students attend vocational programs (no increase or decrease in FTE.)

The Atl Ed and Vocational programs will have a greater emphasis on career exploration - no additional resources necessary

Increase clubs and activities to include cultural opportunities, many off site opportunities.

15. List any additional assumptions that are essential to understanding the program you developed?

With the free and reduced eligibility at 50% - we feel that a district-wide program should be incorporated into the district to meet the needs of these families. One social worker to work as a case worker for families to access to social programs and agencies to meet the needs of the families.

Establish a relationship with the social programs available to encourage a day care program on site for those students who need a safe place before and after school.

5. Describe the elementary, middle and high school programs of students X, Y and Z.

STUDENT X

Adequate Program Provided

STUDENT Y

Adequate Program Provided

STUDENT Z

Adequate Program Provided

6. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the PreK-5 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to the all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 16 above, that the grade 9-12 educational program you designed would be adequate to deliver the learning opportunities specified in Exhibit 1 to all of the school's students? 5

Comments:

APPENDIX E

ACCOUNT OF THE SPECIAL EDUCATION PJPS AND INTERPRETATION

1. Interpreting the K-12 neighborhood school specifications

Presenting the SE PJP results as stand alone for now probably makes the most sense. Their deliberations resulted in a set of general and special education results, just like the GE PJPS. Ultimately, we will have to combine the results of these 10 panels into something more streamlined, so the problem of how to combine disparate results across the panels remains, and is not limited to SE/GE. At the same time, in reviewing the results of the SE panels, it is important to keep a few important differences between them and the GE panels in mind.

First, the primary assignment for the SE PJPs was different than for the GE PJPs. The former was asked to consider the full special education needs of their model district. This was different than the charge given to the GE panels, which were told to think about SE w/in the context of their general education design for a neighborhood school, and to leave other considerations in relation to SE to the SE panel. Just as SE was generally given tertiary consideration by the GE panels, GE was given tertiary consideration by the SE panels. The SE panels started with condensed information about what the general education panels had said, largely in the form of a worksheet showing the mathematical average specification from across the 8 GE PJPs for each of the resources they were asked to specify. They did not change the GE specifications much, assuming that a strong GE program was in place. However, they did carefully rethink all of the special education resources in the school given the specified special education ID rates and the assumed degree of participation in the neighborhood school. Thus, the general education program they build their special education program upon, largely just reflects mathematical averages from the 8 GE PJPs.

Second, the special education identification rates given the SE PJPs was different than those given the GE PJPs. This was not a part of the exercise design, but in fact was the result of an error. The general education panels were given overall SE identification rates of about 9% while the SE PJPs were given an overall rate of about 13%. Both rates represent statewide averages, and both take the total SE population of the state as the numerator. The first rate, however, takes the total school-age population as the denominator, while the second takes total public school enrollment as the denominator. In each case the PJPs generally wanted to take these rates and apply them to the total school enrollments they were given to derive the number of SE students in their model schools. Thus, the SE PJPs were told to assume more SE children in their schools (across the full range of SE severity) than were the GE PJPs. While not in the design, in fact, this variation in the percentages of SE students given the two sets of panels, provides some additional information in regard to how educators think about the needs of SE kids in relation to the percentages of identified students in the school.

Also, the SE PJPs were charged with considering the needs of ALL special education children likely to be enrolled in a district of this type. In contrast, the GE PJPs were only asked to consider the needs of those special education students they would expect to be served within the neighborhood school. At the same time, we also asked all of the PJPs to be as specific as possible

in clarifying the characteristics and/or magnitude of this population. It is worthy of note, that all 10 panels seemed to come up with a fairly similar vision of the sub-population of SE students that should be served locally (within their neighborhood school) as opposed to some more centralized assignment, e.g. a special class in some neighborhood school, a special school just for SE students, or served at home. Nearly all of the panels seemed to place the percentage of special education students that should be served in their neighborhood school at about 90 to 95% (someone should check the notes to assemble this information more exactly). The special education panel made similar assumptions, but generally tended to be a bit higher placing this percentage more in the range of about 98% at the earlier grades and somewhat higher for secondary programs.

Several important points flow from the discussion in the last paragraph. First, the distinction of what special education students will be served centrally and which locally, in their neighborhood school, is perhaps the key element in considering overall program design. Are we designing very strong neighborhood schools to fully address the wide range of needs across students, a range that will be even further expanded through substantial SE integration, or are we assuming more homogenous neighborhood schools with substantial SE resources housed in central locations? Although all PJP seem to opt for the neighborhood option, and specified their resources accordingly, this is very different than what is found in practice around the country, and perhaps especially in NY State, and particularly in NY City. In regard to interpreting the resource specifications found across the 10 PJP, when considering the SE PJP specifications in relation to the other panels, it is important to keep in mind that a) they told to assume a higher percentage of SE students (in both severe and non-severe categories of disability), b) that they specified that a somewhat higher percentage of these students be placed in the neighborhood schools, and c) that the extra few kids they added into the neighborhood school will generally be among the most severe.

The SE resources specified across all schools and across all committees may appear high in relation to schools with which we are familiar. This may be true just because they over-specified their needs, but will also reflect the fact that many districts do not place such a high percentage of their special education students, and therefore their special education resources, into neighborhood schools. Many districts will have a large proportion of their special education resources placed in more centralized locations, which under a model like this would be specified at the district level. The specifications coming from the SE PJP place a lot of SE resources at the schools, and very few at the district level.

2. The district-level SE PJP specifications:

Resource prices should be tied to the district-level specifications and then perhaps this line should just be kept separate. Ultimately these costs will just be tied into the full district-level cost estimate, and/or with special education costs if we decide to break these out separately.

3. Interpreting the Pre-School Specifications:

The SE PJP primarily dealt with special education pre-school. They generally assumed the presence of a GE pre-school, which seemed a reasonable assumption as I believe 7 of 8 GE PJP

specified one. However, we may want to think of GE and SE as conceptually different. While the former is an optional service, the latter is mandated by the IDEA. In the cases of both committees, they tended to think of a 3-year old program and a 4- year old program separately, although these specifications may have come together in the end. In both PJPAs, assumptions were made about the number of students, who would be served in the SE pre-school program, based on the demographics they were given for their district. One committee assumed much broader participation than the other, however, with one assuming 30 SE students and the other 60. Also, one of the SE PJPAs seemed to explicitly specify the GE teachers that would be needed, while the other just assumed that a strong pre-school GE program would be in place. The major importance associated with the assumption of a GE pre-school was that there would be a program in which to integrate the pre-school SE students.

INSTRUCTIONS – SPECIAL EDUCATION PJP

Introduction

Please read this introduction entirely before beginning any of the tasks.

The purpose of this project is for your team to describe educational programs for special education students that, in the professional judgment of its members, will provide an adequate opportunity for the specified student populations to meet the expectations described in Exhibit 1. The program design should define the type and quantity of resources (e.g., personnel, supplies, equipment) necessary to deliver instruction to the students described in the assumptions. MAP/AIR will impute prices for these resources based on the best available market data.

Specifically, your task is to design adequate instructional and support programs as needed for students in special education from pre-school through 12th grade that you are confident will meet the expectations specified in Exhibit 1 for the student populations described in the assumptions listed below. As you move from exercise to exercise, please be mindful of any changes in student populations, no matter how subtle, as you design your instructional and support programs. You should approach this task as if it were a real assignment, in a real school district in which you were employed. The program design should be one that you would reasonably expect to be adopted and funded by a school board or state legislature comprised of knowledgeable, well intentioned lay persons.

With the exception of the constraints imposed by these instructions, you are free to configure your programs in any way that you are confident will deliver the specified capacities. The programs should be founded on your professional judgment and to the extent possible, high quality research. They should be practical and have a reasonable chance of being implemented successfully by competent educators.

You must take the assumptions as given, even if they are not consistent with conditions in your district.

Do not take into account sources of funding as you design your program. For example, the fact that some of the costs of the program you design may be funded through federal categorical programs should not influence your design.

Pacing

From our experience working with other educators on similar projects, the most effective groups first decide the nature of the program they would provide and then proceed with staffing the program and allocating resources accordingly. For example, class size is derived from program design rather than vice versa.

A second characteristic of the more effective groups is that they estimate the total time necessary to complete all of the exercises and allocate their time as necessary. This is particularly important to avoid giving short shrift to secondary program design, which, by its nature can be complex.

Outline of Tasks

Task #1: Confirm the Special Education Program Elements

Task #2: Provide the Narrative of the Special Education Program: School-Level and District-Level

Task #3: Review and Revise GE Panel's Design of the Special Education Program

Task #4: Specify District-Level Resources and Programs

Tasks #5-7: Specify School- and District-Level Resources and Programs Based on New Assumptions

Task #8: Evaluation and Feedback

TASK ASSUMPTIONS

Exhibit 1

Desired Educational Outcomes

The federal No Child Left Behind Act and state law require *all* students in every school district to meet the Regents Learning Standards within the next 11 years and to make steady progress toward that goal each year. As of 2005, all high school students (except for certain special education students) will be required to achieve a passing score of 65 on the Regents' examinations in English, social studies, mathematics, and science to receive a high school diploma. As of the 2005-06 school year, students in grades 3-8 will be tested in English, and mathematics (and shortly thereafter in science) to determine whether they are making satisfactory progress toward meeting the Learning Standards. Rates of yearly progress toward these goals will be disaggregated by racial, economic, disability and limited English proficiency categories.

Your job is to design an instructional program that will provide *all* students in the school a full opportunity to meet the Regents Learning Standards, and to attain a Regents' diploma. For students in the early grades and preschool, this means designing an instructional program that will seek to address any learning problems with which students enter school. For students further along in their educational careers, it means addressing any deep-rooted educational deficiencies that may have developed as thoroughly as possible, and minimizing dropout rates.

School and District Assumptions

15. The elementary school serves children Kindergarten through Grade 5, with an enrollment of 558. Enrollments are 93 students at each grade level.
16. The middle school is comprised of grades 6 through 8, with an enrollment of 792. Enrollments are 264 at each grade level.
17. The high school is comprised of grades 9 through 12, with an enrollment of 944. Enrollments are 236 at each grade level.
18. The district provides special education services, as needed, for students in pre-school through grade 12. The total district enrollment is 4,225.
19. Assume that the student population in each school reflects the demographic characteristics of the district averages.
20. All personnel are state-certified in the subject areas that they are teaching; salaries are adequate to attract and retain certified faculty and staff.

21. Facilities are in place and funding for facilities improvements are not part of this exercise. If, however, the program you are designing would require any major changes in the current general state of facilities in the district, please briefly note what those changes would be.
22. On-going facilities maintenance and operations are considered a district expense, are assumed to continue at their current level and cannot be changed.
23. Assume that the program you are designing is for an existing school that has the amount of supplies, equipment, and textbooks that is typical of schools in New York State today; you may suggest changes or additions to current levels of supplies, equipment, and textbooks, but if you do so, you must describe how these changes will contribute to the specified outcomes.
24. Assume that the school has computer technology existing and that the age of the computers, the amount of software, internet access, and teacher training is typical of schools in New York State today. You may suggest changes or additions to current technology arrangement, but if you do so, you must describe how these changes will contribute to the specified outcomes.
25. The line item budget for district administration is the amount that the district charges these schools, is adequate for district-level operations and cannot be changed.
26. The line item budget for transportation will be assumed to continue at current levels. If, however, the program you are designing would require any major changes in the current level of transportation funding in the district, please briefly note what those changes would be.
27. Multi-grade, multi-level classes, block schedules and other non-traditional organization structures are permissible.
28. You may design part-time or full-day preschool, full-day kindergarten, extended-day programs, summer school, or other support programs if they are necessary to produce the required outcomes. You must define the population who would receive such services and you must justify such services by describing how they will contribute to the specified outcomes. Assume that the total number of preschool age children at each age level is equal to the number of first grade students and that their demographic characteristics are consistent with district averages described in the exercises.

Special education assumptions given the general education PJP's: **Assume statewide average distribution of disability and severity across the district. Based on your professional judgment of what types of special education students should be served and what types of services should be provided at neighborhood schools, design appropriate special education instructional programs at each school level (i.e., elementary, middle, high).**

You need not discuss/design special education programs that you do not believe are best provided at neighborhood schools, e.g., programs in separate facilities or that are clustered only at designated neighborhood schools. A separate special education committee will meet in August to derive a full description of the special education program for each district.

You also do not need to describe services for any special education related services, e.g., speech or physical therapy. The special education committee that will meet in August will cover these on a district-wide basis. Therefore, for the most part, you should be primarily describing special education resource specialist programs and any related need for special education aides at the school level.

Also, please describe the degree to which special education students should be included in general education classrooms and any changes that should be made to the general classroom descriptions, e.g., changes in class size or additional aide time that may be needed. Please be as specific as you can about the types of students (e.g., primary category of disability) you believe should be included and whether this will differ by school level. This specificity in regard to the special education students you believe should be fully, or partly, mainstreamed into general education settings will provide important guidance to the special education panels.

These panels will take what you provide as input to be used in specifying a full set of special education programs and services for the district. As an example, if your general education panel expressed the opinion that all special education students should be fully included in general education classrooms and specified resources within these general education classrooms accordingly, the special education panels would have no need to specify any separate settings (e.g., special education self-contained classes or separate special education facilities.) Being as specific as possible about the special education students you are including within general classroom settings will provide important input for the work of the subsequent special education panels.

Task #1: Confirming Elements

The table below tentatively lists elements typical of special educational programs. Your first task is to review these elements and suggest any additions, deletions, or revisions. In order to make the products of your work more generalizable we prefer more generic descriptions. For example, in many cases it will be possible and desirable to subsume specific elements under a more general category.

Special Education Program Elements

Special Education Personnel
<i>Instructional Program, 3-5 year olds</i>
Preschool/Early Childhood Teacher
Instructional Paraprofessionals
<i>Instructional Program, K-21</i>
Special Class Teacher
Resource Specialist
Instructional Paraprofessionals
<i>Related Services, 3-21 year olds</i>
Adaptive PE
Physical Therapist
Occupational Therapist
Related Services Aides (e.g., PT aide, OT aide)
Speech Pathologist
Audiologist
Psychologist/Diagnostician
Guidance Counselor
School Social Worker
School Nurse
Personal Health Aides
<i>Other Related Services/Programs</i>
Vision Screen Tech
Orientation & Mobility
Interpreter
Home/Hospital Instruction
Community-Based Services/Vocational Ed Specialist
Extended Time (e.g., after-school)
Summer School
Non-Personnel
Instructional Supplies & Materials
Equipment & Technology
Student Activities
Professional Development
Assessment

Task #2: Produce a Narrative Design of the Special Education Program

In the simplest terms, your team is to develop and describe school-level and district- level special education programs and the resources necessary to deliver them. In defining school- and district-level resources, assume that school-level personnel are those who are assigned to and serve only one school, whereas district-level personnel serve multiple schools. For the purposes of this exercise, assume that any services not provided at the neighborhood-school level are provided by the school district. In reality, BOCES, independent contractors, or non-public schools may provide these services. However, we are interested in determining the services to be provided and the resources necessary to provide them rather than the specific entity delivering them. Schools are configured K-5, 6-8, and 9-12. Enrollment is 558 elementary, 792 middle, 943 high school. You should consider 93 students for each grade of preschool for the elementary school program. For your district and at each school level, describe the nature of the instructional and support programs and the specific skills and knowledge that would be introduced or reinforced. Be as specific as possible given the time available. From your description, professional educators who are not part of your discussion should be able to understand the nature of the program you have designed and how it relates to the expectations in Exhibit 1.

The student population in the district:

- 1.5% of the student population is identified English Language Learner (ELL)
- 34.2% of the student population is eligible for free- or reduced-price lunch (FRL)
- 13.8% of the student population is identified as special education
 - 9.5% of enrolled K-12 students have been identified as having a Specific Learning Disability (LD) or Speech & Language Impairment (SL)²⁴
 - 4.3% of enrolled K-12 students have been identified special education with disabilities other than LD and SL

Disability Category	Proportion of K-12 Enrolled Students
Specific Learning Disabled	6.9%
Speech or Language Impairment	2.6%
Autism	0.2%
Serious Emotional Disturbance	1.3%
Mental Retardation	0.5%
Deafness	0.04%
Hearing Impairment	0.1%
Visual Impairments	0.05%
Orthopedic Impairments	0.08%
Other Health Impairments	1.1%
Multiple Disabilities	0.8%
Traumatic Brain Injury	0.02%
TOTAL²⁵	13.8%

Products for Task #2

²⁴ The General Education panels were provided with the following data: 6.7% of the resident population ages 3-21 were identified as having a Specific Learning Disability (SD) or Speech & Language Impairment (SL); 3.1% of the resident population ages 3-21 were identified with disabilities other than LD or SL.

²⁵ Sum of proportions do not add to 13.8 percent because of rounding.

Use the computer provided to your team to record your work.

Provide a narrative description of your overall program design, using the word processing program provided.

Task #3: Review School-Based Special Education Programs Within the General Education PJP Program Designs

In July, each general education PJP was provided with a number of worksheets upon which they reflected their professional judgment of the resources needed to meet the expectations of Exhibit 1. They were asked to use these spreadsheets to record the quantities of each resource necessary to deliver the program they had designed. They also provided narratives underlying these programs on the word processing program provided.

Please review the special education allocations on the summary worksheets from these exercises – labeled Task 3 Elementary, Task 3 Middle, and Task 3 High – found on your computer (of which you also have hard copies) and modify, as you deem appropriate, to reflect the professional judgment of this special education PJP. You may change the general education personnel allocations if you feel that changes must be made to accomplish the expectations in Exhibit 1 consistent with the special -education program designed in Task #1. Please justify any modifications to these worksheets, particularly to general education personnel. For example, if you change the specifications because you believe the rationale provided in the summary needs modification (as well as the quantities), please describe these differences on the word processing and spreadsheet programs on your computer.

Note that these summaries have been prepared for the purposes of this exercise only and are not intended to represent any form of definitive summary of the work of the General Education PJPs for this project. Remember that cells shaded gray (e.g., resource prices) are fixed for the purposes of this exercise, but will be addressed later, as appropriate, through separate analyses in conjunction with this study.

The areas the General Education PJPs addressed:

1. Elementary school grades Kindergarten through grade 5.²⁶
2. Middle school grades 6 through 8.
3. High school grades 9 through 12.

IMPORTANT: When reviewing the summary resource allocations from the General Education PJP exercises, the row labeled “General Education Teachers” includes the “Core Classroom Teachers” and “Other Teachers” from the General Education PJP exercises for the entire instructional program *including* extended-day and extended-year programs.

The results of this exercise should reflect the professional judgment of this special-education PJP as to what types of special education students should be served in neighborhood schools and the types and characteristics of the general and special education programs and services that should be generally housed at all neighborhood schools to sufficiently serve them so as to meet the expectations of Exhibit 1.

You should **not** include programs and personnel who, more appropriately in your professional

²⁶ The General Education PJPs suggested education programs ranging from early childhood (3-year old) services through full-day Kindergarten. Because of the variation in suggested preschool programs, any suggested preschool resource allocations were not included in the averages presented in these exercises.

judgment, operate out of the district office to provide services for students in special education.²⁷ In Task #4, you will be asked to describe district-level resources, programs, and services (e.g., services and programs provided by district personnel serving multiple schools) not included in the school level program. Task #4 will include related services not included in the school-level specifications above, in addition to programs and services for all students you believe are most appropriately served at separate facilities (e.g., at a special education school) or in other separate district programs such as those housed at selected neighborhood schools. All BOCES programs for special education students should also be included in the district-level exercise below.

Products for Task #3

Use the computer provided to your team to record your work.

Your team has been provided with exhibits containing summaries of what was specified by the General Education PJP. These include Task 3 Elementary, Task 3 Middle, and Task 3 High. Use these spreadsheets to make any changes you consider to be needed to the quantities of each resource necessary to deliver the special education program you have designed in Task #2. Record all narrative relating to this work on the word processing program provided.

1. Review and modify the elementary school educational program the general education PJP teams developed as your team feels is needed. Assign teachers and students to grade levels. Describe how other instructional employees (including administrators and pupil support) would be deployed.

In instances where an employee works in this school less than full time, allocate only the fraction of full time (FTE) necessary to deliver the educational program with the resources available. For example a teacher who teaches half time would count as 0.5 FTE. Keep in mind all assumptions listed above.

2. Review and modify the grade 6 through grade 8 educational program the general education PJP teams developed as your team feels is needed.
3. **Review and modify the grade 9 through grade 12 educational program the general education PJP teams developed as your team feels is needed.**
4. List any additional assumptions or concerns that are necessary to understanding the educational program modifications as developed by your team.

²⁷ Again, for the purposes to this exercise, assume that any services not provided at the neighborhood-school level are provided by the school district. In reality, BOCES, independent contractors, or non-public schools may provide these services. However, we are interested in determining the services to be provided and the resources necessary to provide them rather than the specific entity delivering them.

Task #4: Create a District-Level Special Education Program Design

In this task, your team is to develop and describe district-level special education programs and services and specify the resources necessary to deliver them that have not been included in the modified specifications from Task #3. Again, assume that school-level personnel are those who are assigned to and serve one school, and district-level personnel serve multiple schools. Be as specific as possible given the time available. From your description, professional educators who are not part of your discussion should be able to understand the nature of the program you have designed and how it relates to the expectations in Exhibit 1.

The student population in the district:

- 1.5% of the student population is identified English Language Learner (ELL)
- 34.2% of the student population is eligible for free- or reduced-price lunch (FRL)
- 13.8% of the student population are identified as special education
 - 9.5% of enrolled K-12 students have been identified as having a Specific Learning Disability (LD) or Speech & Language Impairment (SL)²⁸
 - 4.3% of enrolled K-12 students have been identified special education with disabilities other than LD and SL

Disability Category	Proportion of K-12 Enrolled Students
Specific Learning Disabled	6.9%
Speech or Language Impairment	2.6%
Autism	0.2%
Serious Emotional Disturbance	1.3%
Mental Retardation	0.5%
Deafness	0.04%
Hearing Impairment	0.1%
Visual Impairments	0.05%
Orthopedic Impairments	0.08%
Other Health Impairments	1.1%
Multiple Disabilities	0.8%
Traumatic Brain Injury	0.02%
TOTAL²⁹	13.8%

In this task, you should only include programs and services for students in special education that, in your professional judgment, you believe should be provided more appropriately at the district level. District level resources, programs, and services should include all those not included at the school-level as well as all programs and services for student in special education who you believe is not most appropriately served in neighborhood schools. This will include all related services not included in the school-level specifications above, as well as programs and services for all

²⁸ The General Education panels were provided with the following data: 6.7% of the resident population ages 3-21 were identified as having a Specific Learning Disability (SD) or Speech & Language Impairment (SL); 3.1% of the resident population ages 3-21 were identified with disabilities other than LD or SL.

²⁹ Sum of proportions do not add to 13.8 percent because of rounding.

students you believe are most appropriately served at separate facilities (e.g., at a special education school) or in other separate programs for students, even if they happen to be housed at selected neighborhood schools.

The sum of the resources specified in Task #3 and in this task should equal the full range of resources needed for all special education students in this district to meet the expectations of Exhibit 1. For the purposes of this exercise assume BOCES programs do not exist and that the full range of special education students generally found across the state would be represented, and served, in this district. If there are certain classifications of students for whom you believe this assumption is not viable or realistic, please be as specific as possible as to the types of students you have excluded from this task, and the estimated cost to the district of serving this type of student in some form of program external to the district (BOCES, or otherwise).

Products for Task #4

Use the computer provided to your team to record your work.

Each team is provided with a Task #4 electronic spreadsheet. Use this spreadsheet to record the quantities of each resource necessary to deliver the program you design. Record all other work on the word processing program provided.

1. Specify resources for any district-level preschool through age 21 educational programs or services your team has developed in Task #2. Assign teachers and students as appropriate. Describe how other instructional employees (including administrators and pupil support) would be deployed. In instances where an employee works less than full time, allocate only the fraction of full time (FTE) necessary to deliver the educational program with the resources available. For example a therapist who works half time would count as 0.5 FTE. Keep in mind all assumptions listed above.
2. Specify resources for any district-level extended-day programs or other support programs your team has developed as necessary to produce the required outcomes in Task #2. Define the population who would receive such services and justify such services by describing why they are necessary and how they will contribute to the specified outcomes. Refer to research results wherever possible.
3. List any additional assumptions or concerns that are necessary to understanding the district-level special educational program developed by your team.

Task #4A: Programs for Prototypical Students

As a check on the adequacy of the program you have designed (through Tasks #3 and #4), describe the educational experience of three prototypical students who would be educated in this school district. Beginning with kindergarten (or preschool) and progressing through grade 12, describe specifically where and how the opportunity to meet the expectations described in Exhibit 1 will be provided to each of the students described below. Keep in mind that *all* students are entitled to an educational program consistent with these expectations.

Prototypical Students

Student X has a learning disability. X's academic test scores are typically less than the 30th percentile. X's goals are to begin working immediately after high school or to attend a post-secondary vocational program.

Student Y has moderate mental retardation. Y's goals are to live independently and work in a community setting.

Student Z has a progressive hearing loss. Z is highly motivated and plans to enroll at a major university, but is struggling with the curriculum.

Products for Task #4A

1. Describe the elementary, middle, and high school educational programs experienced by students X, Y, and Z indicating where each would acquire the skills and knowledge specified in the Exhibit 1.

2. Provide team answers to the following questions.
 - a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the K-5 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to the all of the school's students? _____

 - b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? _____

 - c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 9-12 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? _____

Comments:

Task #5: New District Assumptions Varying Percent Specific Learning Disabled & Speech/Language Impaired

Assume that all of the conditions described in the Assumptions 1-14 remain unchanged; consider a district with the following student demographics:

The student population in the district:

- 1.5% of the student population is identified English Language Learner (ELL)
- 34.2% of the student population is eligible for free- or reduced-price lunch (FRL)
- 18.6% of the student population are identified as special education
 - 14.3% of enrolled K-12 students have been identified as having a Specific Learning Disability (LD) or Speech & Language Impairment (SL)³⁰
 - 4.3% of enrolled K-12 students have been identified special education with disabilities other than LD and SL

Disability Category	Proportion of K-12 Enrolled Students
Specific Learning Disabled	10.4%
Speech or Language Impairment	3.9%
Autism	0.2%
Serious Emotional Disturbance	1.3%
Mental Retardation	0.5%
Deafness	0.04%
Hearing Impairment	0.1%
Visual Impairments	0.05%
Orthopedic Impairments	0.08%
Other Health Impairments	1.1%
Multiple Disabilities	0.8%
Traumatic Brain Injury	0.02%
TOTAL³¹	18.6%

Do these changes in assumptions affect your confidence levels stated in Tasks #2 - 4?

yes no

If no, please proceed to Task #6. Otherwise, please continue with Task #5.

³⁰ The General Education panels were provided with the following data: 6.7% of the resident population ages 3-21 were identified as having a Specific Learning Disability (SD) or Speech & Language Impairment (SL); 3.1% of the resident population ages 3-21 were identified with disabilities other than LD or SL.

³¹ Sum of proportions do not add to 18.6 percent because of rounding.

Products for Task #5 (Use Exhibits Task 5 Elementary, Task 5 Middle, Task 5 High, and Task 5 District as appropriate)

What changes, if any, would you make to the programs you have just designed as a result of this changed assumption? Specifically:

1. Describe the kindergarten (or preschool) through grade 5 educational program your team developed. Assign teachers and students to grade levels. Describe how other instructional employees (including administrators and pupil support) would be deployed.
2. Describe the grade 6 through grade 8 educational program your team developed.
3. Describe the grade 9 through grade 12 educational program your team developed.
4. Describe any preschool, extended-day programs, or other support programs necessary to produce the required outcomes. You must define the population who would receive such services, and you must justify such services by describing why they are necessary and how they will contribute to the specified outcomes. Refer to research results wherever possible.
5. Describe any district-level programs and resources developed.
6. List any additional assumptions or concerns that are necessary to understanding the educational program developed by your team.

Task #6: New District Assumptions Varying Percent NON-Specific Learning Disabled & Speech/Language Impaired

Assume that all of the conditions described in the Assumptions 1-14 remain unchanged; consider a district with the following student demographics:

The student population in the district:

- 1.5% of the student population is identified English Language Learner (ELL)
- 34.2% of the student population is eligible for free- or reduced-price lunch (FRL)
- 15.9% of the student population are identified as special education
 - 9.5% of enrolled K-12 students have been identified as having a Specific Learning Disability (LD) or Speech & Language Impairment (SL)³²
 - 6.4% of enrolled K-12 students have been identified special education with disabilities other than LD and SL

Disability Category	Proportion of K –12 Enrolled Students
Specific Learning Disabled	6.9%
Speech or Language Impairment	2.6%
Autism	0.3%
Serious Emotional Disturbance	2.0%
Mental Retardation	0.8%
Deafness	0.06%
Hearing Impairment	0.15%
Visual Impairments	0.08%
Orthopedic Impairments	0.12%
Other Health Impairments	1.7%
Multiple Disabilities	1.2%
Traumatic Brain Injury	0.03%
TOTAL³³	15.9%

Do these changes in assumptions affect your confidence levels stated in Tasks #2 - 4?

yes no

If no, please proceed to Task #7. Otherwise, please continue with Task #6.

Products for Task #6 (Use Exhibits Task 6 Elementary, Task 6 Middle, Task 6 High, and Task 6 District as appropriate)

What changes, if any, would you make to the programs you have just designed as a result of this changed assumption? Specifically:

³² The General Education panels were provided with the following data: 6.7% of the resident population ages 3-21 were identified as having a Specific Learning Disability (SD) or Speech & Language Impairment (SL); 3.1% of the resident population ages 3-21 were identified with disabilities other than LD or SL.

³³ Sum of proportions do not add to 15.9 percent because of rounding.

1. Describe the kindergarten (or preschool) through grade 5 educational program your team developed. Assign teachers and students to grade levels. Describe how other instructional employees (including administrators and pupil support) would be deployed.
2. Describe the grade 6 through grade 8 educational program your team developed.
3. Describe the grade 9 through grade 12 educational program your team developed.
4. Describe any preschool, extended-day programs, or other support programs necessary to produce the required outcomes. You must define the population who would receive such services, and you must justify such services by describing why they are necessary and how they will contribute to the specified outcomes. Refer to research results wherever possible.
5. Describe any district-level programs and resources developed.
6. List any additional assumptions or concerns that are necessary to understanding the educational program developed by your team.

Task #7A-B: New District Assumptions Varying Percent ELL and FRL

Assume that all of the conditions described in the Assumptions 1-14 remain unchanged; consider a district with the following student demographics:

The student population in the district:

- 17.2% of the student population is identified English Language Learner (ELL)
- 91.9% of the student population is eligible for free- or reduced-price lunch (FRL)
- 13.8% of the student population is identified as special education
 - 9.5% of enrolled K-12 students have been identified as having a Specific Learning Disability (LD) or Speech & Language Impairment (SL)³⁴
 - 4.3% of enrolled K-12 students have been identified special education with disabilities other than LD and SL

Disability Category	Proportion of K-12 Enrolled Students
Specific Learning Disabled	6.9%
Speech or Language Impairment	2.6%
Autism	0.2%
Serious Emotional Disturbance	1.3%
Mental Retardation	0.5%
Deafness	0.04%
Hearing Impairment	0.1%
Visual Impairments	0.05%
Orthopedic Impairments	0.08%
Other Health Impairments	1.1%
Multiple Disabilities	0.8%
Traumatic Brain Injury	0.02%
TOTAL³⁵	13.8%

Task #7A: Given the same special education population from Tasks #2-4, but a larger proportion of students participating in the free- or reduced-price lunch (FRL) program and who are identified as English Language Learner (ELL), do you anticipate a change in resource allocations?

yes no

If no, please proceed to Task #7B. Otherwise, please continue with Task #7A.

Products for Task #7A (Use Exhibits Task 7 Elementary, Task 7 Middle, Task 7 High, and Task 7 District as appropriate)

What changes, if any, would you make to the programs you have just designed as a result of this changed assumption? Specifically:

³⁴ The General Education panels were provided with the following data: 6.7% of the resident population ages 3-21 were identified as having a Specific Learning Disability (SD) or Speech & Language Impairment (SL); 3.1% of the resident population ages 3-21 were identified with disabilities other than LD or SL.

³⁵ Sum of proportions do not add to 13.8 percent because of rounding.

1. Describe the kindergarten (or preschool) through grade 5 educational program your team developed. Assign teachers and students to grade levels. Describe how other instructional employees (including administrators and pupil support) would be deployed.
2. Describe the grade 6 through grade 8 educational program your team developed.
3. Describe the grade 9 through grade 12 educational program your team developed.
4. Describe any preschool, extended-day programs, or other support programs necessary to produce the required outcomes. You must define the population who would receive such services, and you must justify such services by describing why they are necessary and how they will contribute to the specified outcomes. Refer to research results wherever possible.
5. Describe any district-level programs and resources developed.
6. List any additional assumptions or concerns that are necessary to understanding the educational program developed by your team.

Task #7B: Based on the larger proportion of students participating in the free- or reduced-price lunch (FRL) program and who are identified as English Language Learner (ELL), would you anticipate changes in the identification of special education students and the distribution of LD/SL and non-LD/SL students, cited above?

yes no

If no, please proceed to Task #8. Otherwise, please continue with Task #7B.

Product for Task #7B

Use the computer provided to your team to record your work.

Using the word processing program provided, provide a narrative description of the impact you believe the increase in the percentages of students participating in FRL and who are identified as ELL has on the overall special education identification rate as well as the distribution of LD/SL and non-LD/SL students.

Task #8: Evaluation and Feedback

This task also is to be completed independently by individual participants.

Each participant is asked to answer the following questions. On a scale of 1 to 5, with 5 being *strongly agree* and 1 being *do not agree*.

- a) The facilities and other meeting arrangements were adequate. _____
- b) This was a rewarding professional experience. _____
- c) The programs designed and the responses to the various questions represent the professional consensus of the team members. _____
- d) I was given the opportunity to express my professional opinion on all of the products produced by my team. _____
- e) The facilitators did not impose their values or opinions on me. _____
- f) No one, other than team members, tried to influence the team's deliberations or its conclusions. _____
- g) The programs developed by my team would be realistic in the context of the school district where I work. _____

If your answer to any of the above was less than 3, please explain.

Comments:

Name

Social Security Number
(Necessary for honorarium processing)

SPECIAL EDUCATION PJP #1 RESPONSE

Task #1: Confirming Elements

Is the list provided in the instructions fully inclusive of all special education elements necessary to design a special education program?

YES NO

If NO, what other elements should be added? If YES, proceed to Task #2.

- **Behavioral specialist** – typically psychologist certifications – develop behavioral modification programs – can be rolled into some other category (out-of-classroom teacher, psych, social worker, etc.)
- **State Certified Reading Coordinator/Teacher**
- **Teacher for Hearing Impaired**
- **APPLIED BEHAVIORAL ANALYSIS (ABA) – provides coordinated family support services; train teachers and staff**
- **Notetaker – for hearing impaired students**
- **Psychiatrist – provides the mental health services at \$150,000 salary**

- **Orientation and Mobility** – specify that this is teacher of visually impaired

Task #2: Narrative Design of Special Education Program

Provide a narrative description of your overall program design, using the word processing program provided.

This is our school program:

- Have a belief (culture) that *all* students will learn and will meet the specified standards
- Effective special education program is prefaced by a strong pre-referral (intervention) program – provide the necessary support/resources behind it
- Bolster general education
- Staff development for all to deal with issues related to student needs
- Provide appropriate resources in the general education classroom – differentiated classroom) and the need for support
- Availability of sound instructional programs (Direct Instruction, etc.)
- How is the day/week going to be designed for all students and families?
- Time for teaming/collaboration among staff members
- Clearly define special education
- Define the specific resources for all kids

Program Components

- Early intervention

- Screening – Summer Program
- Full-day, half-size class ~ extra year of school
- Isolate kids who needed help
- Treat all kids as having an IEP
- Speech/Language program at early grades

Task #3: Review of General Education PJP Program Designs

Elementary School

- Agree that full-day Kindergarten for all students should be offered

General Education Teachers

- 24 Classroom Teachers
- Average class size of 23 across the school – Kindergarten (14-20), grades 3-5 (18-25)
- NO COMMENT (seems Kindergarten of class size of 14 is too generous)

General Education Paraprofessionals

- NO COMMENT

Special Education population

- 52 - Learning Disabled/Speech/Language Impairment
- 25 – Non LD/SLI disabled

Special Education Teachers

ADD 1.0 FTE to SPECIAL EDUCATION TEACHERS TO EQUAL 7.05 FTE TO ACCOMMODATE THE ADDITIONAL PROPORTION OF SPECIAL EDUCATION TEACHERS

- 20:1– 1.0 FTE Special Education Teachers
- 12:1 – 3.0 FTE Special Education Teachers
- Consultant Teacher – 3.0 FTE Special Education Teachers (Itinerant special education teachers)
- Speech – 1.0 FTE (add 1.0 FTE under the Special Education Other Pupil Support)
- Speech/Language pupil support is necessary for total school population

Special Education Paraprofessionals

- No change

Guidance Counselors

- No change

Psychologists

- Keep at current levels for both psychologists and special education psychologists
- Would rather have them at the district level for assessments and evaluations. Currently feels that these staff members are not well utilized in the schools.

Social Workers

- 1.0 FTE Social Worker

- 0.0 FTE Special Education Social Worker
No need to differentiate responsibilities between general ed and special ed.

Other Pupil Support

- Currently 1.19 FTE – group believes that this would be a Reading Teacher/Coordinator
Keep the same – no need to change

Professional Development

- Increase to \$350 per pupil, to accommodate \$2,000 per staff member
Additional staff training to meet diverse needs, staff re-training.

Middle School

Special education population

- 112 Total Special Education Students
- 78 students LD/SLI
- 34 students Other

Special Education Teachers

To serve “non-severe” students

- 20:1 – 2.0 FTE Special Education Teachers
- 12:1 – 3.0 FTE Special Education Teachers

To serve “severe” students

- 8:1:1 – 4.0 FTE Special Education Teachers

Total 9.34 FTE Special Education Teachers – an increase from 7.34 FTE to accommodate the increase in proportion of special education students.) The additional 0.34 can be used for additional time (extended-day/year).

Special Education Paraprofessionals

- NO CHANGE

Guidance Counselors

- NO CHANGE

Social Worker

- Combine into general education social worker – no need to differentiate into special education responsibilities – TOTAL 1.10 FTE (0.85 FTE + 0.25 FTE)

Other Pupil Support

- NO CHANGE

Special Education Other Pupil Support

- NO CHANGE

Professional Development

- Increase to \$260 per pupil, to serve \$2,000 per staff member

High School

Special education population

- 90 SLD/SLI
- 40 non-SLD/SLI

Special Education Teachers

To serve “non-severe” students

- 25:1 – 2.0 FTE Special Education Teachers
- 12:1 – 4.0 FTE Special Education Teachers

To serve “severe” students

- 6:1:1 – 6.0 FTE Special Education Teachers

Special education paraprofessionals

- NO CHANGE

Guidance Counselors

- NO CHANGE

Psychologists

- NO CHANGE

Social Workers

- Combine general ed and special ed social workers to 1.19 FTE; no need to differentiate between general ed and special ed responsibilities

Assistant Principals

- Feel that 2.41 FTE assistant principals

Professional Development

- Increase to \$235 per pupil, to serve \$2,000 per staff member

Task #4: Create a District-Level Special Education Program

In this task, your team is to develop and describe district-level special education programs and services and specify the resources necessary to deliver them that have not been included in the modified specifications from Task #3.

Related Services

- OT – 1.0 FTE
- PT – 1.0 FTE
- OTA – 1.0 FTE
- PTA – 1.0 FTE
- ABA – 0.5 FTE (APPLIED BEHAVIORAL ANALYSIS) or FBA – (Functional Behavioral Assessment and Plans) – could be the psychologist (assigned under Psychologist line item)
- Audiologist – 0.2 FTE – for assessment/evaluation only
- Notetaker – 2.0 FTE for hearing impaired – assigned to Personal Health Aides
- Psychiatrist – 0.10 FTE at \$150,000 salary
- Teacher for Hearing Impaired – 1.0 FTE
- Teacher for Visually Impaired – 1.0 FTE
- Interpreter – 1.0 FTE for severely hearing impaired (deaf)
- Home/Hospital – 1.0 FTE Teachers to provide services
- Add a social worker as an inter-agency coordinator -- *Commentary: Need an inter-agency coordinator – to be able to articulate educational needs to outside agencies.*

PRESCHOOL

Question of whether this should be school-funded versus county-funded programs. It's a school responsibility with no school funding. There is a problem in ownership/coordinating/articulating preschool (3-year old and 4-year old) special education programs through the public education program. Too many services provided in preschool, but those same level of services not warranted or unable to continue to provide the intensity of services once in the public school system.

Already incorporated 4-year-old preschool into the public school programs. There are a variety of models available; if provided in the school, have to combine funding sources in order to afford it. Most 3-year-old programs in NYC are contracted out to the private sector.

Assume that the pupil support staff allocations are sufficient within the elementary school to provide for preschool students.

Commentary: space is a consideration; would prefer to have the preschool programs within the elementary schools, if possible. If the preschool is not co-located, then some of the administration and support staff allocations may be problematic.

Age 3

Offer a half-day program for special education students only

Special Education Program Description: ~325 total students at this age (grade) level – 9% of population – serving approximately 30 students

- Half-day program, four days per week for special education students
 - Fifth day is for home visits
 - Extended year
- Attempt to integrate with other preschool, non-disabled students
 - Non-special ed 3-yr old preschool should be provided on an economically viable basis (non-FRL parents pay tuition)
- Four groups – assume approximate class size of 7-8
 - 2 special education teachers (2.0 FTE)
 - One special education paraprofessional per class (2.0 FTE)
- Strong speech/language component (1.0 FTE)
- OT/PT intervention (0.5 FTE TOTAL)
 - 0.4 FTE OT
 - 0.1 FTE PT
- Developmental play usually done by counselor/social worker (play therapy) – works with parents (visits home) to have therapy at home as well

Age 4

Special Education Program Description: ~325 total students at this age (grade) level – 9% of population – approximately 30 students served

- Would prefer full-day program, five days per week
 - Free to FRL students, free to special education
 - Prefer to offer a sliding scale fee-based to non-FRL parents
- Four groups – assume approximate class size of 7-8 students
 - 4 special education teachers (4.0 FTE)
 - One special education paraprofessional per class (4.0 FTE)
- Strong speech/language component (1.0 FTE)
- OT/PT intervention (0.5 FTE TOTAL)
 - 0.4 FTE OT
 - 0.1 FTE PT

Developmental play usually done by counselor/social worker (play therapy) – works with parents (visits home) to have therapy at home as well

Age 18-21

Services provided to these students capably covered under the school-level and district-level allocations. No additional resources needed to be defined to serve this subgroup of special education students.

Task #4A: Prototypical Students

1. Prototypical Students

Student X

Elementary:

Intensive program with very favorable class sizes. There are several opportunities for curriculum modifications, vocational transition piece in place, extended-day and extended-year opportunities. There is extensive professional development to address variety of needs. There are several pupil support staff members (social workers, guidance, and psychologist) to attend to student needs.

Early assessments in phonemic awareness

Early assessment for social skills

Early literacy intervention – several curricular strategies

Small group (one-to-one) intervention when necessary

Secondary:

Push-in support

Special education staff receives cross-curricular training

General education staff receives cross-curricular training

Taking general ed classes with goal of Regents' Diploma with understanding of vocational plans.

Student Y

Elementary:

Early assessment as MR and begin intervention early

Adhere to state standards with regards to specific disabilities

Secondary:

Focus at the middle and high school would revolve around functional skills, life skills programming. Additional vocational exposure, school-to-work programs. Awareness, community-based. Opportunity for community service and transition planning – linkages beyond the school.

Student Z

Elementary:

Speech and language therapy since preschool

Audiologist intervention early

Augmentative hearing devices provided, if necessary

Full inclusion, fully mainstreamed/integrated

One hour per day with Teacher for Hearing Impaired

One hour per day with Speech/Language, if necessary

Secondary:

Some after-school help

Has a Notetaker to assist

One hour per day with Teacher for Hearing Impaired

2. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the K-5 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to the all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? 5
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 9-12 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? 5

Comments:

Task #5: New District Assumptions – Vary Percent SLD and Speech/Language Impaired

This kind of variability is a product of inconsistency in identification/assessments. The state has quantified what is learning disabled (50 percent discrepancy). *One argument is that the increase could be identified with Speech. But, another argument is that you can wait long enough to get the 50 percent discrepancy.* Reading awareness is key component to referrals to special education.

There are ways for “out-of-line” districts to “come back into line.” Make sure that professional development money is focused, aimed directly at the needs of students.

Commentary: An increase in “high-incidence, low-cost” categories would not uniformly increase across both categories. Speech/Language Impairment tends to decrease as students progress through the system (secondary incidence lower than elementary incidence).

Do these changes in assumptions affect your confidence levels stated in Tasks #2 - 4?

yes no

Elementary School

Commentary: An elementary school of this size may be able to absorb this kind of increase in special education students (of this kind). However, as schools become larger, the schools may not be able to absorb this kind of increase and may require an increase in the number and type of staff.

Middle School

- Add a special education teacher (1.0 FTE) as a 20:1 teacher

High School

- Add two special education teachers (2.0 FTE)
- Increase guidance counselors to a full 4.0 FTE from 3.39 FTE to ensure full guidance support for the increase in LD students

District

PRESCHOOL

To accommodate more special education students (~11 more students)

- Assign 7.5 special education teachers (2.5 FTE 3-yr old; 5.0 FTE 4-yr old)
- Assign 7.5 special education paraprofessionals (2.5 FTE 3-yr old; 5.0 FTE 4-yr old)
- Keep 3.0 FTE Special Education Other Pupil Services
 - 1.0 FTE Speech (3-yr old)
 - 1.0 FTE Speech (4-yr old)
 - 0.4 FTE OT (3-yr old)
 - 0.4 FTE OT (4-yr old)
 - 0.1 FTE PT (3-yr old)
 - 0.1 FTE PT (4-yr old)

Task #6: New District Assumptions – Vary Non-SLD and Speech/Language Impaired

Do these changes in assumptions affect your confidence levels stated in Tasks #2 - 4?

 X yes _____ no

Elementary School

- Add two special education teachers (2.0 FTE)
- Add a special education paraprofessional (1.0 FTE)
- Add 0.12 FTE guidance counselors to equal 1.0 FTE

Middle School

- Add 3.5 FTE special education teachers (from base); include 0.5 consultant teacher
- Add 1.0 FTE special education paraprofessionals

High School

- NO CHANGES

District

PRESCHOOL

To accommodate more special education students (~11 more students)

- Assign 7.5 special education teachers (2.5 FTE 3-yr old; 5.0 FTE 4-yr old)
- Assign 7.5 special education paraprofessionals (2.5 FTE 3-yr old; 5.0 FTE 4-yr old)
- Keep 3.0 FTE Special Education Other Pupil Services
 - 1.0 FTE Speech (3-yr old)
 - 1.0 FTE Speech (4-yr old)
 - 0.4 FTE OT (3-yr old)
 - 0.4 FTE OT (4-yr old)
 - 0.1 FTE PT (3-yr old)
 - 0.1 FTE PT (4-yr old)

Task #7A: New District Assumptions – Vary Percent FRL and ELL

Given the same special education population from Tasks #2-4, but a larger proportion of students participating in the free- or reduced-price lunch (FRL) program and who are identified as English Language Learner (ELL), do you anticipate a change in resource allocations?

yes X no

There are enough bodies – the number of bodies would not change. Certification, training, characteristics, responsibilities, and resource deployment would revolve around the student needs.

Task #7B: Impact of %FRL and %ELL on Special Education Identification Rates

As poverty goes up, one can assume that there has not been prenatal care that would lead to learning difficulties and greater chance of being identified special education, particularly if there is little concentration on interventions.

Poverty exacerbates/amplifies problems: mental health needs, transient families, abnormal behavior, etc.

“Severe” population remains somewhat consistent across poverty levels – may increase slightly. The “grey-area” populations become more dependent on poverty.

Need for inter-agency support increases as poverty increases.

Basic health issues (e.g., asthma) increases as concentrations of poverty increase.

Absenteeism and related problems (tardiness) increase as concentrations of poverty increase.

Poor nutrition (and lack of meals) and associated problems increase as concentrations of poverty increase.

SPECIAL EDUCATION PJP #2 RESPONSE

Task #1: Confirming Elements

Is the list provided in the instructions fully inclusive of all special education elements necessary to design a special education program?

 YES X NO

If NO, what other elements should be added? If YES, proceed to Task #2.

- Family Liaison/Outreach – (typically included in Social Worker line personnel)
- Behavioral Consultant – who is designing the behavioral program (smaller districts typically use psychologist/guidance counselor, larger districts use separate line person)
- School-level special education coordinator – senior lead teacher (again, this seems to be a matter of size, larger districts have them, smaller districts do not)
- Chairperson (Committee on Special Education – CSE) – larger districts have this as a administrator, smaller districts have this as primarily a teaching position

Task #2: Narrative Design of Special Education Program

Provide a narrative description of your overall program design, using the word processing program provided.

- Hope that we could serve almost all disabilities; perhaps not autistic, severe emotional disturbed, traumatic brain injury – all is entirely dependent on the SEVERITY of the disabilities
- ~ 90-95 percent of K-2 students served in the neighborhood school
- Severity of students will determine placement
 - Serve autism students K-2, but not grade 3-5, typically
 - Autism, severely emotional disturbed, traumatic brain injury, and certain levels of mental retardation are outsourced (BOCES or private placement); utilize PMHI (Primary Mental Health Intervention) Team
 - Five subcategories of autism – more severe subcategories served outside
- Special Education Regulations seem to dictate philosophy and placements
 - Special Class
 - Consultant Teacher
 - Resource Teacher
- **Service provision regulations dictate minimums that may not be necessary**
- Would much rather see a system that allows flexibility of placements and services with an emphasis on outcomes – not process-oriented outcomes as is currently the case
- Overall need for professional development for all staff members
- Break the “myths” that surround special education
- Training around staff coordination

Elementary School

STUDENT BODY:

- 93 total students per grade level
- 12.8 special education students per grade level – consider 13 students

Grades K-2:

- ~ 98 percent of classified students can probably be served in neighborhood school
- ~ Two (2) K-2 students not served in the neighborhood school; ~ 11 K-2 students served in the neighborhood school
- Do not envision any self-contained classrooms at the primary grades

Grades 3-5:

- ~ 95 percent of classified students can probably be served in neighborhood school
- Start to see the need for self-contained classrooms
- More prevalence of differentiated programs and services, e.g., AIS (Academic Intervention Services), resource specialists, to meet state assessments at these grades

Middle School

- See less need for speech/language services
- 95 percent of classified students will be served in the neighborhood school
- Special education teachers specified will used for self-contained classroom.

High School

- ~90 percent of classified students will be served in the neighborhood school
- Allow students to take the test early
- Retention policies must be revisited
- Alternative educational placements to serve the range of students (e.g., vocational education)

Task #3: Review of General Education PJP Program Designs

ELEMENTARY SCHOOL

Assumptions:

Grades K-2: Assume class sizes of 15, including special education students

Grades 3-5: Assume class sizes of 18, including special education students

No more than 1/3 of students should be special education per classroom

Personnel Resources:

Special Education Teachers: 7.0 FTE TOTAL for the day program

- 1.0 FTE per grade level, 6.0 FTE total

- 1.0 FTE for Resource Room (grades 3-5)

Special Education Paraprofessionals: 8.0 FTE TOTAL

- 1.0 FTE per grade level, 6.0 FTE total
- 1.0 FTE for primary grades (K-2)
- 1.0 FTE for intermediate grades (3-5)

Psychologists:

- 0.6 FTE for general education (consistent with “inclusionary” model – as an early intervention technique)

Special Education Psychologists:

- 0.4 FTE for special education services

Social Workers:

- 0.8 FTE for general education services (i.e., for the entire school)

Special Education Social Workers:

- 0.2 FTE dedicated to special education services (typically consistent with developed IEPs)

Other Pupil Support:

- The current allocation (1.19 FTE) may be sufficient for Family Liaison/Outreach, Behavioral Specialist, or other related services as an intervention service (e.g., speech for general education population ~0.4 FTE), especially in conjunction with 1.51 FTE Other Professional Staff

Special Education Other Pupil Support:

- 0.6 FTE Speech Therapy support for special education population

Non-Personnel Resources:

NO CHANGES

MIDDLE SCHOOL

Personnel:

Special Education Teachers: 9.0 FTE – 3.0 FTE per grade level

Special Education Paraprofessionals: 6.0 FTE

- 4.0 FTE teaching assistants
- 2.0 FTE aides – personal services

Psychologists:

- 0.5 FTE for general education services

Special Education Psychologists:

- 0.5 FTE for special education services

Social Workers:

- No change

Special Education Social Workers:

- No change

Special Education Other Pupil Support:

- 0.25 FTE for speech therapy services

Non-Personnel:

HIGH SCHOOL

STUDENT BODY:

117 special education students

Personnel:

Special Education Teachers: 10.0 FTE

- To retain a 12:1 ratio – to serve 117 special education students

Special Education Paraprofessionals: 7.0 FTE

- 4.0 FTE Teaching Assistants
- 2.0 FTE Teaching Aides
- 1.0 FTE Paraprofessional for job coaching

Psychologists:

- 0.5 FTE

Special Education Psychologists:

- 0.5 FTE

Social Workers

- 1.25 FTE

Special Education Social Workers

- 0.5 FTE

Other Pupil Support:

- Would like to see a staff person would be dedicated to student outreach/dropout prevention.

Special Education Other Pupil Support:

- NO CHANGE

Non-Personnel:

NO CHANGES

Task #4: Create a District-Level Special Education Program

In this task, your team is to develop and describe district-level special education programs and services and specify the resources necessary to deliver them that have not been included in the modified specifications from Task #3.

DISTRICT

Elementary School students: the “other” two percent of students not served in the schools (about 9.4 students given 325 students per grade level * 13.8% * 2% for K-2 and 5% for 3-5)

- Severely autistic
- Severely emotionally disturbed
- Medically fragile

These students costs between \$25,000-\$40,000 per student to serve these students = ~\$329,000 (average of \$35,000 per student).

Middle School students: the “other” five percent of students not served in the schools (about 6.73 students given 325 students per grade level * 13.8% Spec Ed * 5%)

Assume \$35,000 per student

High School students: the “other” 10 percent of students not served in the schools (about 17.94 students given 325 students per grade level *13.8% * 10%)

Assume \$35,000 per student

Commentary: special education pupil support for private school students that the school district is responsible to serve puts additional pressures on school district resources

Resources:

Special Class Teacher: 0.25 FTE

- 0.25 FTE to serve nonpublic school students required to be served by the district

Adaptive Physical Education: 0.0 FTE

- Typically taken care of by school gym teacher

Physical Therapy: 1.0 FTE

Occupational Therapy: 1.0 FTE

Related Services Aide: 2.0 FTE

- 2.0 FTE OT Aide

Audiologist: 0.20 FTE

Psychologist/Diagnostician: 0.20 FTE

- 0.20 FTE for supplemental psychiatrist services (~ one day per week)

Orientation and Mobility: 0.40 FTE

- 0.20 FTE Orientation and Mobility
- 0.20 FTE Teacher of Visually Impaired

Interpreter: 2.5 FTE

- 0.5 FTE Teacher of the Hearing Impaired (teacher salary)
- 2.0 FTE Interpreter (typically a much lower salary ~\$20-\$25,000)

Home/Hospital Instruction: 1.0 FTE

- 1.0 FTE to serve both general and special education populations (the panelists did not specify what proportion of FTE is for special education)

Summer School: 1.18 FTE

- TBI, MD, OHI, VI, Deaf, MR, ED, Autistic would be served through summer school programs (118 students)
- Six-week summer school programs
- Average class size of 10 students
- 10.0 Teachers
- 2.0 Speech/PT/OT
- Administrators from general education (principals and assistant principals) cover the summer program
- 10.0 Paraprofessionals assigned to teachers

Assumption: Certified person for job coaching/placement for special education services. May have someone within the current high school allocations.

Preschool

Commentary: district revenues currently do not serve preschool for 3- and 4-year olds

Commentary: would ideally like to see the preschool programs in the regular schools, but group also understands that this runs into the assumption that space is not to be considered an issue

Assume that the proportion of students in this age group classified as special education is higher – many of these students will be declassified by the time they get to Kindergarten.

Assume 20 percent incident rate for these age groups.

Program Design:

- Recommend preschool programs (three- and four-year olds) to be under the jurisdiction of the school district
 - Prefer to deliver program at the school site; special education preschool program continues to be served in the “natural environment” consistent with federal regulations
 - Having this type of program allows for better articulation between preschool and school curriculum
 - Allows for pre-referral intervention for entire population (not just special ed)
 - Equal access for all – remains a voluntary program (except for special ed)
- Three-hour day, five days per week for three-year olds
- Five-hour day, five days per week for four-year olds

Three-Year Old Preschool Program – assume 325 potential students at school site

- Assume 60 percent participation rate of general participation
- 195 students overall – approximately 64 of 65 students are students with disabilities (20 percent of overall students considered special education) who are served at the school site

Resources: Personnel

- 8.0 FTE Teachers given a 12:1:2 ratio as a maximum (12 students, 1 teacher, 3 paraprofessionals)
 - General education teacher certification
- 16.0 FTE Paraprofessionals given the same staffing ratio
- 1.0 FTE Special Education Teacher for “push-in” services
 - Assume 20-24 students will need special education teacher services
 - Focus on readiness skills
- 2.0 FTE Speech Therapist
 - 0.5 FTE General Education
 - 1.5 FTE Special Education
- 0.10 FTE Occupational Therapist
 - Assume for one day per week
- 0.10 FTE Physical Therapist
 - Assume for one day per week
- 0.75 Social Worker/Parent Coordinator
 - 0.375 Special Education/0.375 General Education
- 0.50 FTE Nurse if this is a district-based program, but not in the school
- 0.50 FTE Principal if this is a district-based program, but not in the school
- 0.50 FTE Clerical if this is a district-based program, but not in the school
- 0.50 FTE Psychologist
 - 0.25 Special Education/0.25 General Education
- No new allocation for Teacher of Hearing Impaired or Visually Impaired

Resources: Non-Personnel

Supplies and Materials: \$50 per pupil

Equipment and Technology: \$50 per pupil

Student Activities: Same as elementary school per pupil allocation

Professional Development: Same as elementary school per pupil allocation

Assessment: \$33 per pupil

Four-Year Old Preschool Program – assume 325 potential students at school site

- Assume 80 percent participation rate of general population
- 265 students overall – approximately 64 of 65 students are students with disabilities (20 percent of overall students considered special education) who are served at the school site

Resources: Personnel

- 22.0 FTE Teachers given a 12:1:1 ratio as a maximum (12 students, 1 teacher, 1 paraprofessional)
 - General education teacher certification
- 22.0 FTE Paraprofessionals given the same staffing ratio
- 1.0 FTE Special Education Teacher for “push-in” services
 - Assume 20-24 students will need special education teacher services
- 2.0 FTE Speech Therapist
 - 0.5 FTE General Education
 - 1.5 Special Education
- 0.10 FTE Occupational Therapist
 - Assume for one day per week
- 0.10 FTE Physical Therapist
 - Assume for one day per week
- 0.75 Social Worker/Parent Coordinator
 - 0.375 Special Education/0.375 General Education
- 0.50 FTE Nurse if this is a district-based program, but not in the school
- 0.50 FTE Principal if this is a district-based program, but not in the school
- 0.50 FTE Clerical if this is a district-based program, but not in the school
- 0.50 FTE Psychologist
 - 0.25 Special Education/0.25 General Education
- No new allocation for Teacher of Hearing Impaired or Visually Impaired

Resources: Non-Personnel

Supplies and Materials: \$50 per pupil

Equipment and Technology: \$50 per pupil

Student Activities: Same as elementary school per pupil allocation

Professional Development: Same as elementary per pupil allocation

Assessment: \$33 per pupil

Severe Needs Preschool

Assume one student per age group who receive full-day programs (more severe categories of disabilities).

- Assume approximately \$35,000 for contracted services per student

Task #4A: Prototypical Students

1. Prototypical Students

Student X

Student X attends the preschool starting at three years old. Takes advantage of family services. Professional development focuses around differentiated learning. Takes advantage of support services.

Elementary: full access to the general education program. Is provided early exposure to alternative career paths besides the 4-year higher education track. Is provided a variety of services within (push-in) and outside (pull-out) of the general education classroom. Teachers are provided professional development to fully integrate curriculum. Full exposure to learning disability interventions – extended-day and extended-year programs.

Middle: exposure to learning disability interventions – extended-day and extended-year programs. Further exposure to support labs.

High: Very good chance of attaining a Regents Diploma. Further exposure to support labs and to alternative educational programs if they choose not to pursue academic programs.

Student Y

Student Y attends the preschool starting at three years old. Takes full advantage of support services.

Elementary: full access to the general education program. Is provided early exposure to alternative career paths besides the 4-year higher education track. Is provided a variety of services within (push-in) and outside (pull-out) of the general education classroom. Teachers are provided professional development to fully integrate curriculum. Teachers are provided small classes to accommodate these students. Student is provided with peer role modeling. Full exposure to interventions – extended-day and extended-year programs.

Middle: exposure to interventions – extended-day and extended-year programs. Further exposure to support labs. More exposure to transition services.

High: Further exposure to support labs and to alternative educational programs if they choose not to pursue academic programs. More exposure to transition services.

Student Z

Student Z has full access to the preschool program starting at three years old. Exposure to general education peers.

Elementary, Middle, and High: small class sizes allow for Z to access the general ed classroom. There is a teacher of the hearing impaired as well an interpreter.

2. Provide team answers to the following questions.

- a) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the K-5 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to the all of the school's students? 5
- b) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 6-8 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? 5
- c) On a scale of 1 to 5, with 5 being *very confident* and 1 being *not at all confident*: How confident are you (team), given the assumptions listed in 1 through 14 above, that the grade 9-12 educational program you designed would be adequate to deliver the capacities specified in Exhibit 1 to all of the school's students? 5

Comments:

High school confidence is contingent on the inclusion of a credentialed community-based/vocation ed staff member within the general ed staff allocations.

Task #5: New District Assumptions – Vary Percent SLD and Speech/Language Impaired

Do these changes in assumptions affect your confidence levels stated in Tasks #2 - 4?

YES NO

Task #6: New District Assumptions – Vary Non-SLD and Speech/Language Impaired

Do these changes in assumptions affect your confidence levels stated in Tasks #2 - 4?

YES NO

Task #7A: New District Assumptions – Vary Percent FRL and ELL

Given the same special education population from Tasks #2-4, but a larger proportion of students participating in the free- or reduced-price lunch (FRL) program and who are identified as English Language Learner (ELL), do you anticipate a change in resource allocations?

YES NO

ELEMENTARY SCHOOL:

ELL:

A student who is classified as special education and is an English language learner, the special education provider must be a dual-certified special education and ELL provider. This is a regulatory requirement. Panelists believe that getting a person who has this type of dual certification is very difficult and there are often interim plans put into place to get around these regulations.

There is a desire for professional development in second language-acquisition skills critical with ELL services for all staff, especially special education providers.

Make sure that there is greater emphasis on parent/community outreach.

Want to ensure that extended-day and extended-year programs are made available.

POVERTY:

There is a need for greater emphasis on parent/community outreach for the entire school.

There is a need for greater emphasis on school-service provider outreach (e.g., hospital) for the entire school.

There is a need for greater emphasis on health (nutrition and mental) issues for the entire school. There is a need for much greater emphasis on specialized diagnosticians who understand the differences between the symptoms associated with poverty or language and those symptoms that are associated with special education.

Resources:

This school faces the potential for greater need to address emotional/behavior management problems – both general and special education.

Given the increase in poverty and ELL, the group would redirect the existing resources towards a greater emphasis on behavior/mental health issues and intervention. An example is the existence of an assistant principal for a school of this size. This assistant principal could be trained more in intervention strategies rather than the traditional disciplinary role. There would need to be extended-day and extended-year programs; these programs include: study skills, enrichment programs, some academic/tutorial, self-esteem, and character education.

Special Education Paraprofessionals: increase 0.5 FTE for a mental health/behavior management paraprofessional.

To provide extended-day programs must take transportation into account. Group feels that without providing for transportation that those that need these services the most may not participate.

MIDDLE SCHOOL:

The need for extended-day and extended-year programs is especially needed given this level of FRL and ELL; these programs include: study skills, enrichment programs, some academic/tutorial, self-esteem, and character education. There should be the start to include some dropout prevention programs into these extended-day programs at the middle school level.

To provide extended-day programs must take transportation into account. Group feels that without providing for transportation that those that need these services the most may not participate.

Resources: NO CHANGE

HIGH SCHOOL:

The need for extended-day and extended-year programs is especially needed given this level of FRL and ELL; these programs include: study skills, enrichment programs, some academic/tutorial, self-esteem, and character education. There should be dropout prevention programs into these extended-day programs at the high school level. There should also be additional job-readiness and job-placement programs. There should also be exposure to career counseling and career exposure/options. There should also be job-shadowing opportunities.

To provide extended-day programs must take transportation into account. Group feels that without providing for transportation that those that need these services the most may not participate.

There is a need for individualized tutoring and intervention for those students who do not pass the Regents Exams and need additional assistance to help them pass one or more of the Regents Exams or for the RCT's.

Resources:

Special Education Teachers: 1.37 FTE for tutorial support (1 hour of seven hours * 4 months of 10 months * 24 students) – may not be a special education teacher but would serve special education students almost exclusively

Other Pupil Support Staff: 1.0 FTE additional to existing for Career/Vocational Counseling certified personnel.

COMMENTARY: THERE APPEARS TO BE CONTENT DISCONNECT BETWEEN THE REGENTS EXAMS AND THE RCT'S FOR THE LOCAL DIPLOMA. REGENTS PREP SEQUENCES ARE NOT PROPERLY PREPPING FOR THE RCT ONCE THE STUDENTS HAVE FAILED THE REGENTS EXAMS.

Task #7B: Impact of %FRL and %ELL on Special Education Identification Rates

Yes, it would be expected that the overall identification rate would increase given increases in %FRL and %ELL; environmental factors associated with poverty may contribute to higher incidences of special education (e.g., health, nutrition, prenatal care, drug use, lead paint, etc.). Poverty is not a causal factor, but the environmental conditions associated with poverty may have causal factors.

However, there is also feeling that the types of interventions presented through these exercises would probably lead to a decrease in identification rates at all levels of poverty.

Commentary: There were funding incentives in place that encouraged identification of special education students. However, the recent policy changes have the opposite effect. There are now identification caps in place and so districts are encouraged to de-classify students, even if they feel that some of those students still require services.

APPENDIX F



AMERICAN INSTITUTES FOR RESEARCH



Management Analysis and Planning, Inc.

February 19, 2004

Dear Stakeholder,

The AIR/MAP team appreciates your participation in the stakeholder and/or summary professional judgment panel (PJP) meetings held on December 11, 2003 and December 12, 2003. We have had some time to review and synthesize the notes that were taken at the meetings. At this time, we would like to share these notes with you, and we ask that you review them for accuracy and clarity of the messages being conveyed during the meetings.

We would like to incorporate your feedback into the final version of these meeting notes and include the revised version as an appendix in the final report of the study, as a means of recording the essence of the stakeholder meeting for the readers of the report.

In the following pages, you will find the notes from the stakeholder meeting, followed by the notes from the three break-out sessions, with each session led by either Drs. Guthrie, Chambers, or Parrish. All sessions addressed the same set of questions about the output from the summer PJP sessions. In the synthesis notes here, we have grouped the responses of the break-out sessions by question; however, you will easily be able to find the notes from individual sessions in the notes. Given the complex nature of this study and the questions related to it, some sessions' discussions may have overlapped a number of questions that were addressed during the session. Where that occurred, we tried to put the response in the most appropriate question section; however, we welcome your thoughts if you believe they should be placed under a different heading or if more comments were made on the question topic than appears evident from this synopsis. Occasionally, some comments from the sessions do not clearly fit into any category, so we have included a couple additional pages of comments from these sessions at the end.

Please review the following pages for accuracy and bear in mind that the final version of these notes will be included in an appendix of the final report of the study. Again, we greatly appreciate your involvement in this very important study to provide adequate resources to all public school students in New York State.

Sincerely,

Dr. Jay G. Chambers
Dr. Thomas B. Parrish
American Institutes for Research

Dr. James R. Smith
Dr. James W. Guthrie
Management Analysis and Planning, Inc.

STAKEHOLDERS MEETING NOTES

December 11, 2003

PJP Commentary: Oliver Robinson

Overarching goal was to determine the adequate level of resources – not optimal or minimal. A programmatic, sound, educational strategy drove the decisions.

Key elements:

- ALL students – no differentiation
- Attainment of the Regents Diploma – not less than, not more than
- Reached consensus by considering ALL students
- Equity does not mean equality – equal treatment of equals and differential treatment of “unequals”
- Accommodate various learning systems (“from NYC to the Adirondacks”)
- Treat it as an integrated and fluid K-12 system – elementary school integrated with the middle school integrated with the high school
- Emphasis on early intervention (preschool and early childhood development [ECD]) – yields a significant return versus remedial action
- Ample flexibility required to meet needs – flexibility is the key component to accompany the fiscal capacity

THE RESULT: A K-12 system that can be provided across the state, regardless of the types of students.

Index of Per-Pupil Expenditure for the Base Program

Question of why the “Base” is computed at the 34.2-percent level (state median) or whether the base should be something else.

34.2 % is the pupil-weighted state median over the four year period of 1998-1999 to 2001-2002.

Index of Total Expenditure Per Pupil by Percent of Special Education

Joan Colvin: emphasize that special education personnel and resources are in the BASE program and that the incremental costs of special education should be considered IN THE CONTEXT of the educational program of the base program.

Even though the resources are designated in the PJP programs, there must be flexibility in how those resources are ultimately allocated at the local level, dependent on the local circumstances. These specifications are not prescriptive.

Michelle Cahill: Question of processes, how successful schools relate to EdTrust, etc.

English Language Learners (ELL):

Michael Rebell: Question of availability of bilingual teachers, especially for NYC. Are there cost implications associated with training ESL teachers to deliver ELL services?

Helen Santiago: This was raised several times. It is addressed through training, what type of training, and the design of programs around the training of the staff.

Question: Would ELL students not still cost more and are their needs addressed? But, don't they cost more? Did this not drive one of the conditions that got us in this situation? If there are no more resources needed when ELL rises, then have the panels not gone beyond the “provide no more than necessary” charge in the base program? *This seems counterintuitive.*

Frank Herstek: The quality of the base program captures the ability to address those needs regardless of the type of need.

Oliver Robinson: As ELL increases, poverty is typically increasing at the same time...which has an increase in resources. ELL, for the most part, cannot be considered in total isolation.

Miriam Jurado: These are inclusive schools to address the needs of all students.

Question: What is the relationship between the “successful schools” and the results of the professional judgment panel results? Are there not district conditions that affect the “success” of schools?

Jesse Levin: District conditions controlled for by performing analysis by PJP category.

Question: Is there not some inherent weakness of the successful schools approach in that you are necessarily looking for outliers and that those outliers may be due to other factors outside of quantifiable resources?

Jay Chambers: The successful schools analysis is a question of “what is?” versus a question of “what ought to be?” which is the question posed to the PJP groups.

Question (Michael Rebell): Was the number of successful schools deemed “not statistically significant?”

Jay Chambers and Jesse Levin: There were five different outcome measures. Analysis was performed on all outcome measures controlling for their student needs. Success was determined to be one standard deviation above the expected outcome measure. Unsuccessful was determined to be one standard deviation below the expected outcome measure. Had to be successful in general education and at least one subgroup, and not unsuccessful in any subgroup.

Question: How many panelists? And how did you determine the characteristics of the PJP categories?

Jay Chambers: There were approximately 60 total panelists. Characteristics of the PJP categories were taken directly from the NY state data.

Oliver Robinson: I want to re-emphasize the consensus that came out of the PJP process. The multitude of perspectives would tend to lead to disparate agendas, but that was not the result. The results of the PJP process were a result of consensus that can be applied to the entire state based on educational needs of students. There were no individuals who dominated the agenda at any point in the process.

Question: What were the instructions given to the panelists and why was instructional program emphasis detailed in the elementary school but not as detailed in the middle school and high school?

Helen Santiago and Joan Colvin: The skeletal outline of the summaries does not reflect the fullness of the middle school and high school programs that were developed by the individual panels.

Question: Have you run the model for the Geographic Cost Index (GCI) yet?

Yes, it's in the materials.

Index = 1.0, the average teacher teaching the average student in the state

The range is from approximately 0.7 to 1.2.

There is about a 50-point spread in the Regents model (professional wage index – 1.0 to 1.49).

The Regents model studies the average compensation, but loses the differences in qualifications.

Question: Do you anticipate reporting district-by-district numbers?

Yes, for both the educational program and for the GCI.

Question: Need explanation of what the comparison numbers are going to be and what costs are going to included (e.g., debt service).

There will be comparable numbers across districts as best as we can establish.

Stakeholder Meeting Breakout Sessions

December 11, 2003

- Session 1: Facilitator – J. Guthrie, recorder– R. Seder
- Session 2: Facilitator – J. Chambers, recorder – J. Levin
- Session 3: Facilitator – T. Parrish, recorder – J. Worona

The education outcome goal stated for this project is *Provide all students a full opportunity to meet the Regent's Learning Standards and to obtain a Regent's diploma.* With this goal in mind, please provide us with your thoughts on the following recommendations for an *adequate education* as generated through the PJP process:

1. General education resources that increase fairly substantially in alignment with district poverty.

Session 1 comments:

- *There appears to be a relationship between poverty and educational needs of students. This relationship appears very evident in the panels' consideration of the elementary school years. There are needs in middle and high schools as well, which do relate to poverty, but those needs are not as great as in the elementary schools.*

Session 2 comments:

- Pleased to see that common sense prevails. Question on use of free/reduced lunch as a proxy for poverty. Separation of need and fiscal capacity. Separate question: student need is what we're interested in. Other question is how it will be paid for. Want to establish a foundation formula: establish the cost side rather than the revenue side.
- Dropout rate question: Yes, model intends to provide resources to achieve (eventually) a 100% pass rate.
- Points out the model intends to provide opportunity for all students, not only high school students.
- Talked about class size, intervention services, etc. Also, organization such as block schedules that aren't represented in the raw resource figures.
- Does the charge assume that resources are not necessarily constant, but rather taper off once objective is reached?
- Not only quantity of resources, but also quality and types of resources that may vary over time in order to achieve objective.
- There will be a higher need for the older kids (Middle or High schools). This should taper off with time. Current cohort that is behind might need extraordinary resources.
- Must add specific resources such as reading specialists (which don't generally exist at high school level) as well as social workers to deal with the older children.
- Model is for the immediate. The process should be redone in 5-10 years to evaluate younger children that will have gone through complete adequate system.
- Also evaluate the older cohort that was given extraordinary resources.
- This should address the current (2003-2004, 2004-2005) school years.
- Extended Day and Year Add-Ons were included.
- Trade-offs between extended day and year programs versus other student activities.

Session 3 comments:

- Foundation begins with lots of appropriate resources, like the foundation of a house. Not rich, but adequate based program which provides necessary and related services.
 - If resources are to be put into pre-school – does base sufficiently fund present H.S. student who will not have benefits of new focus on providing preventative services in early years?
 - Yes, extended day program is provided in H.S. (AIS) in base.
 - Need of students currently in Middle & H.S. is provided in base.
 - Relationship between PJP model and successful school model.
 - Unfortunate if we mislead folks. This is a PJP model not an amalgam. Successful schools helped us pick panel members, etc., but we don't have faith in it. Relying on outlying data is indeed not appropriate. It is not used for indexing – research team may use it as a reality check.
2. Special education very integrated with general education services, for the most part at neighborhood schools. Ample special education resources, but base resources do not rise proportionate to expansion in special education enrollments (i.e., districts with 14% SE identification do not get twice the special education funding as districts with 7% SE identification).

Session 1 comments:

- *High inclusion of special education students.*
- *Approximately five percent of students are served in the local schools. The low-incidence, high-cost students not necessarily served in the schools. They are served in the districts or BOCES. High-functioning special education students are accommodated in the base program.*
- *Would you expect identification to go down?*
- *The elementary school program would mitigate the identification of students and would expect to see fewer special education needs at the higher grades.*
- *If everything is put into the base operating aid, what about that extreme-need student who shows up at the district?*
- *There will not be immediate dividends. This is a system built on the premise of a continuous model. You will probably not see the 10th grader who is struggling today to see immediate dividends. Afraid of the impatience of the public and taxpayer.*

Session 2 comments:

- Problem with not integrating special into general education programs. SE is not a place! “Special education is ruining my school!” They are children with disabilities, kids first, not a condition first. Identified kids are predominantly served in the “normal” program. Therefore, resources particular to identified children must be integrated thusly.
- What about the lower than proportional increase in expenditures with respect to increases in identification?
- High cost SE children vary mostly with poverty.
- Why wouldn't there be a greater than proportionate increase?
- Once integration is achieved, there would be no separate classification.

- 50% of NY children with IEPs cannot read. Get to these kids early to avoid later necessity for special resources, decreased need for specific types of professional development, equipment, etc.
- What portion of SE identification is school district policy versus “real” special need.
- Significant location decision on part of parents into districts with high quality/quantity services.
- These are predominantly parents with low-incidence special education kids.
- Many states use census-based services. Most identification is Specific Learning Disability with reading the number one classification.
- Concern with very low incidence children that need catastrophic aid.
- This is above and beyond the scope of the “normal” adequate program.
- Wants to update district SE expenditures to reflect possible residential needy extra-low incidence children.

Session 3 comments:

- Q. If hypothetically, each integrated special education student needed a one-on-one aid, how could costs not be directly proportionate to expansion in special education enrollments?
- A. Research does not bear this out.
3. Resources that generally do not increase with rising percentages of English learners (ELs) at the school.

Session 1 comments:

- ***What about those ELL students? Don't they cost more and how do you not account for those costs?***
- ***The base program does accommodate those needs. Accounting for poverty and the costs associated with those students. The base program treats students through a whole educational program. If you separated those programs for each of the different types of students, you would see differential costs, but that may be the wrong way to think about the needs of these students.***

Session 2 comments:

- Many of the resources are already built into the base programs.
- How do we explain this phenomenon? Will result in loss of ELL resources altogether. Member remains unconvinced that there is no significant relationship. Interested in legal compliance issue with respect to serving ELL populations.
- How does one independently isolate or disentangle the resource needs for higher poverty versus ELL?
- Panels have expressed resource needs in a very integrated/comprehensive rather than categorical way.
- Empirical research on relationship between poverty and SE incidence. There is no reason to believe that the relationship between poverty and ELL is any different. There is a correlation between all three (they overlap).
- Regarding the amount each district gets for SE and ELL, creating a formula based on just poverty will cause parents of special children to think resources will be robbed

- and spent on general education resources. (This ignores that special ed kids benefit and use general education resources).
- Never had any argument from these parents.
 - Children with special needs are legally entitled (guaranteed) to services. Parents just want a good quality program, especially in early intervention for special-needs kids.
 - Must convey the idea of integration of special needs and other children. Some statements are misleading regarding lack of resource/ELL relationship. Must ensure that ELL and poverty are not perceived as distinct; that resources for ELL will be available.

Session 3 comments:

- *Resources do not generally increase with rising percentages of English Learners (ELs) at the school.*
- *What if EL student is not poor? Will district be in harms way based upon this model?*

4. A full day kindergarten program.

Session 1 comments: no comments specifically addressed this question from this session; however, there may be some discussion on other topics that relates to this question elsewhere in the comments from this session under other questions.

Session 2 comments: no comments specifically addressed this question from this session; however, there may be some discussion on other topics that relates to this question elsewhere in the comments from this session under other questions.

Session 3 comments:

- Full day K (Built into K-12 model)
- Availability of a full-day pre-school program, funded at the district level proportionate to their percentage of students in poverty.
- If full day program is provided to all, gap between haves & have-nots might not be bridged.

5. Availability of a full-day pre-school program, funded at the district level, proportionate to their percentage of students in poverty.

Session 1 comments:

- *What criteria were used to determine ECD or preschool eligibility?*
- *Free and reduced-price lunch (FRL) was used as the proxy to determine funding eligibility, but not necessarily the eligibility requirements for program participation.*
- *Did not want to be prescriptive about eligibility requirements for participation. Emphasize flexibility to the local districts.*
- *Sliding scale was considered so that more student interaction could participate and interact.*

Session 2 comments:

- Should kindergarten, pre-school and ECD be in the foundation?
- Are these encompassed in public education (foundation program for all students)?
- Districts can choose to fund these programs for different target populations (i.e., based on poverty).

- Kindergarten is not mandatory, but universally provided. Question is whether these programs are necessary to satisfy Regents standards later.
- Do we intend to provide funding for a program even though it is a local choice whether to implement this program? Are we prescribing these programs?
- Here is what funding would be necessary for a particular set of students, those that would need the program to achieve objectives (determined by PJP). No, local schools should be autonomous in their resource allocations, but whether or not to implement a program that is funded is a state policy decision.
- Statement on pre-K shouldn't be lesser than current state policy.
- Should only get pre-K component funding if you have it.
- Resounding full day pre-kindergarten was chosen.
- What about ECD?
- Requires a state policy decision whether to implement or not.

Session 3 comments: no comments specifically addressed this question from this session; however, there may be some discussion on other topics that relates to this question elsewhere in the comments from this session under other questions.

6. Availability of a half-day toddler program (for 3 year olds), funded at the district level, proportionate to their percentage of students in poverty.

Session 1 comments: no comments specifically addressed this question from this session; however, there may be some discussion on other topics that relates to this question elsewhere in the comments from this session under other questions.

Session 2 comments: no comments specifically addressed this question from this session; however, there may be some discussion on other topics that relates to this question elsewhere in the comments from this session under other questions.

Session 3 comments:

- Availability of a ½ day, toddler program for 3yr. olds, funded at the district level, proportionate to their percentage of students in poverty.
- Comment: If this is not coupled w/ ½ day care, it may not be practical.
- Kids in Poverty needed extra help over their more wealthy peers.
- A rich pre-school program ratchets up the base # and this may be problematic if # is based on need and not those that take advantage of this program.
- Sliding scale is probably necessary.
- K-12 is probably the base
- 3-4 year program brings in issues related to private providers etc.

7. If the state needs to provide some, but not all, of these services to meet the outcome standard listed above, how should they be prioritized? (e.g., possible trade-offs regarding school-age services (items 1-3 above) versus early intervention services (items 4-6 above).

Session 1 comments:

Priorities:

- **Rich base with inclusion of special education**

- ***Full-day Kindergarten***
- ***ECD and Preschool***
- ***Reason to put ECD and preschool number three: Without the base, there is not anything to send these three- and four-year olds. There is no doubt that these are beneficial.***
- ***Early intervention should be a part of that base.***
- ***Dollars should be driven by those students in high-poverty situations.***
- ***Access must be made available to those schools where poverty is your key indicator of need.***

Session 2 comments: no comments specifically addressed this question from this session; however, there may be some discussion on other topics that relates to this question elsewhere in the comments from this session under other questions.

Session 3 comments:

- Would instead ask – could constitutional standard still be met by lopping off any of 1-3, 4-6? If not, then prioritizing is irrelevant.
 - Discussion points 4-6: for poverty kids these are critical !!
8. Are there other elements you believe should be added, subtracted, or traded off, to meet the education outcome standard listed above?

Session 1 comments:

- ***Is there anything in the high schools that could be sacrificed to make room for the early intervention strategies? Could you get rid of the 12th grade?***
- ***Oliver: If I had the resources and had the kid from the start, I would be confident that the 15 or 16 year old would be prepared for college and 12th grade could go away.***
- We feel that we elevated the floor. Created a program that serves ALL students, particularly those at the lower end of the performance spectrum.
- Cross country analogy: your team score is determined by the performance of all of your runners, not just the score of the first one to cross the finish line.
- ***The rich base program ensures the safety net for even the lowest performers in every school.***
- “An ounce of prevention...”
- The ECD and Preschool programs were tempered on the “need” versus the “wants” of the groups. Would all kids benefit? YES. Do all kids need it? NO.
- Create a re-definition of the minimum. This is a “what ought to be” in accordance with the Regents standard as the outcome goal.

Session 2 comments:

- The earlier, the better. PJP concurs.
- Does size matter?
- Yes. Matters conditional on good leadership. Size interacts with other resources. Doesn’t have to be a proportionately scaled-down program.
- Differentiation between small schools and classes. Based on number of students contacted, more long-term contact is better.

- School size seems to be important. This is, however less costly to do at the high school level and increasingly costly at the lower grades.
- Did PJP's talk about class size?
- Yes, in the core programs there was a class size target.

Session 3 comments: no comments specifically addressed this question from this session; however, there may be some discussion on other topics that relates to this question elsewhere in the comments from this session under other questions.

Additional comments from Session 1

Clarify how those resources are to be allocated and how those resources could be used.

- *Districts have autonomy to create educational programs that serve the needs of the local school/district. Albany should be less restrictive about how those funds should be used.*
- *The programs developed are not prescriptive as to how educational services are to be delivered.*
- *Allow districts to perform an “educational triage.”*
- *Must emphasize that this is a “NEEDS” and not a “WANTS” list.*
- *The elementary school program creates the intervention and the safety nets that spillover into the allocations in the middle schools and high schools.*
- *Was the question of “how to pay for this” ever come up?*
- “The tail did not wag the dog.” Educational system was created to meet the Regents Standard. Costs of programs were not necessarily considered.

Do you see any weaknesses?

There will be some frustration by those school and district leaders who will not be able to work without the present system. Any implementation would require a training of the leaders as to what needs are necessary, how the resources are to be deployed, and what accountability means for those resources.

Is the program mandated on all schools? Understand that there is some room for resource re-allocation, but don't quite understand if all schools must offer the preschool, ECD, full-day Kindergarten programs if those are the things that are funded? So is there accountability for the inputs (having those programs) or the outcomes only?

The more prescriptive Albany is, the more the leaders become strictly managers and not leaders. This type of system requires real leadership.

Where is the transition period to allow for capacity building that this type of system requires?

This is a system. You can't necessarily tinker with the fringes without affecting the entire system.

Additional comments from Session 3

Background

- Comment regarding: “rich” base program – (John Yegelski –United Teachers) troubled that this may mean optimum and not merely “adequate”.
- PJP responds: If base program incorporated all essential ingredients, then all will be capable of being adequately and properly educated.
- Focus should be K-12; let’s stop separating out special education.
- PJP contains underlying assumption: Program must provide opportunity, not guarantee success.
- Report should state this so there is no misunderstanding what is being costed out.
- What happens to funding as it relates to kids who are sent to BOCES or to private placements (i.e., 2-5 xx)?
- Panel needs to recommend that: an emergency special ed fund should be set up from the state to aid a small district that has a \$150,000 hit for a privately placed special education student.
- Nothing appears to have been allocated for BOCES tuition. If not, this presents a problem. If so, it needs to be spelled out.
- Is the model based upon traditional school day and year? Answer: Yes.

Will base recognize that some kids need more time than standard school (day and year)?

Answer: Yes.

APPENDIX G

ELEMENTARY SCHOOL RAW DATA FROM PJPS INCLUDING GENERAL AND SPECIAL EDUCATION PANELS

Identification of Professional Judgment Panels		Total FTEs per school																																							
		PJP Category: 1=NYC, 2=Oth Urban, 3=Suburban,		Type of panel: GE=General Ed, SE=Special Ed		4=Rural, 5=RepsWeek: from PJPs 1 thru 1=Jul21, 2=Jul 28		1. Core Classroom Teachers		2. Special Education Teachers		3. Other Teachers		5. General Education		6. Special Education Aides		7. Guidance Counselors		8. Special Education		10. Special Education Psychologists		11. Social Workers		12. Special Education Social Workers		13. Other Pupil Support		14. Special Education Other Pupil Support		15. Nurses		16. Librarians/Media Specialists		17. Principals		18. Assistant Principals		19. Other Prof. Clerical/Data Entry	
GE	1	1	38.18	7.20	7.90	3.83	-	5.00	2.00	-	0.60	0.40	1.00	-	1.00	4.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.50	8.00	2.00												
GE	1	1	38.18	7.20	8.00	2.27	-	5.00	2.00	-	1.00	-	1.00	-	1.00	4.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.50	8.00	2.00												
GE	1	1	38.18	7.20	8.00	2.27	-	5.00	2.00	-	1.00	-	1.00	-	1.00	4.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.50	8.00	2.00												
GE	1	1	38.18	7.20	8.00	2.27	-	5.00	2.00	-	1.00	-	1.00	-	1.00	4.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.50	8.00	2.00												
GE	1	1	51.60	7.20	8.00	2.94	-	5.00	2.00	-	1.00	-	1.00	-	1.00	4.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.50	8.00	2.00												
GE	1	2	50.60	4.40	0.60	3.98	-	1.10	1.10	-	-	-	1.10	-	-	-	-	-	-	-	1.10	1.10	1.00	1.00	2.00	2.20	6.00	3.00													
GE	1	2	50.60	4.40	0.60	3.98	-	1.10	1.10	-	-	-	1.10	-	-	-	-	-	-	-	1.10	1.10	1.00	1.00	2.00	2.20	6.00	3.00													
GE	1	2	50.60	4.40	0.60	3.98	-	1.10	1.10	-	-	-	1.10	-	-	-	-	-	-	-	1.10	1.10	1.00	1.00	2.00	2.20	6.00	3.00													
GE	1	2	50.60	4.40	0.60	3.98	-	1.10	1.10	-	-	-	1.10	-	-	-	-	-	-	-	1.10	1.10	1.00	1.00	2.00	2.20	6.00	3.00													
GE	1	2	50.60	4.40	0.60	3.98	-	1.10	1.10	-	-	-	1.10	-	-	-	-	-	-	-	1.10	1.10	1.00	1.00	2.00	2.20	6.00	3.00													
GE	2	1	27.00	6.00	15.50	2.95	13.00	6.00	-	-	1.00	-	1.00	-	1.00	-	-	-	-	-	1.00	1.50	1.00	-	1.00	4.00	1.00														
GE	2	1	27.00	6.00	15.50	2.95	13.00	6.00	-	-	1.00	-	1.00	-	1.00	-	-	-	-	-	1.00	1.50	1.00	-	1.00	4.00	1.00														
GE	2	1	27.00	6.00	16.50	3.00	13.00	6.00	-	-	1.00	-	2.00	-	-	-	-	-	-	-	1.00	1.50	1.00	-	1.00	4.00	1.00														
GE	2	1	27.00	6.00	18.50	3.10	13.00	6.00	-	-	1.00	-	2.00	-	-	-	-	-	-	-	1.00	1.50	1.00	1.00	1.00	4.00	1.00														
GE	2	1	30.00	6.00	22.50	3.45	19.00	6.00	-	-	1.00	-	2.00	-	-	-	-	-	-	-	2.00	1.50	1.00	1.00	1.00	5.00	1.00														
GE	2	2	20.60	4.77	12.30	2.56	3.00	9.70	2.00	-	0.40	0.60	1.00	-	-	-	-	-	-	-	1.00	1.00	1.00	-	2.00	2.00	-														
GE	2	2	26.80	4.77	13.80	2.94	3.00	9.70	2.00	-	0.40	0.60	2.00	-	-	-	-	-	-	-	1.00	1.00	1.00	-	2.00	2.00	-														
GE	2	2	28.00	4.77	13.80	3.00	3.00	9.70	2.00	-	1.20	1.80	3.00	-	-	-	-	-	-	-	1.00	1.00	1.00	1.00	2.00	3.00	2.00														
GE	2	2	29.60	4.77	13.80	3.08	12.00	9.70	2.00	-	1.60	2.40	4.00	-	-	-	-	-	-	-	1.00	1.00	1.00	1.00	2.00	3.00	3.00														
GE	2	2	33.60	4.77	16.80	3.43	15.00	9.70	3.00	-	1.60	2.40	4.00	-	-	-	-	-	-	-	1.00	1.00	1.00	1.00	2.00	4.00	4.00														
GE	3	1	25.00	4.00	6.40	2.04	3.00	5.00	-	-	0.30	0.50	0.50	0.50	0.50	0.50	0.50	0.75	1.00	1.00	1.00	-	-	2.00	0.50																
GE	3	1	25.00	4.00	6.60	2.05	3.00	5.00	-	-	0.30	0.50	0.50	0.50	0.50	0.50	0.50	0.75	1.00	1.00	1.00	-	-	2.00	0.50																
GE	3	1	28.00	4.00	7.10	2.23	3.00	5.00	-	-	0.30	0.50	0.50	0.50	0.50	0.50	0.50	0.75	1.00	1.00	1.00	-	-	2.00	0.50																
GE	3	1	30.00	4.00	7.60	2.35	3.00	5.00	-	-	0.30	0.50	0.50	0.50	0.50	0.50	0.50	0.75	1.00	1.00	1.00	-	-	2.00	0.50																
GE	3	1	30.00	4.00	7.60	2.35	3.00	5.00	-	-	0.30	0.50	0.50	0.50	0.50	0.50	0.50	0.75	1.00	1.00	1.00	-	-	2.00	0.50																
GE	3	2	23.00	2.50	8.00	2.63	6.00	2.00	0.50	-	0.25	0.70	-	-	-	-	-	-	-	0.50	2.50	1.00	1.00	1.00	2.00	-															
GE	3	2	23.00	2.50	8.00	2.63	6.00	2.00	0.50	-	0.25	0.70	-	-	-	-	-	-	-	0.50	2.50	1.00	1.00	1.00	2.00	-															
GE	3	2	23.00	2.50	8.00	2.63	6.00	2.00	0.50	-	0.30	0.70	0.50	-	-	-	-	-	-	0.50	2.50	1.00	1.00	1.00	2.00	-															
GE	3	2	23.00</																																						

ELEMENTARY SCHOOL RAW DATA FROM PJPS INCLUDING GENERAL AND SPECIAL EDUCATION PANELS

Identification of Professional Judgment Panels		Expenditures per pupil						Demographics and Enrollment						Kindergarten Pgm			FTEs per school			\$ per pupil	
PJP Category: 1=NYC, 2=Oth Urban, 3=Suburban, 4=Rural, Week: 5=Reps from PJPs 1 thru 4 1=Jul21, 2=Jul 28																					
Type of panel: GE=General Ed, SE=Special Ed	5=Reps from PJPs 1 thru 4	1	1 \$ 325.00	\$ 65.00	\$ 150.00	\$ 207.68	\$ 100.00	\$ -	%FRL	%LEP	%SpecEd1	%SpecEd2	Enroll	Full Day K	Full K Students	K-Teachers	K-SpecEd Teachers	K-Aides	K-SpecEdAides	K-Supplies Materials	
GE		1	1 \$ 325.00	\$ 265.00	\$ 150.00	\$ 207.94	\$ 100.00	\$ -	34.2%	1.5%	6.7%	3.1%	774	1	129	8.6	1.2	7	1 \$ 150.00		
GE		1	1 \$ 325.00	\$ 265.00	\$ 150.00	\$ 207.94	\$ 100.00	\$ -	65.8%	9.7%	6.7%	3.1%	774	1	129	8.6	1.2	7	1 \$ 150.00		
GE		1	1 \$ 325.00	\$ 265.00	\$ 150.00	\$ 207.94	\$ 100.00	\$ -	85.3%	9.7%	6.7%	3.1%	774	1	129	8.6	1.2	7	1 \$ 150.00		
GE		1	1 \$ 325.00	\$ 265.00	\$ 150.00	\$ 207.94	\$ 100.00	\$ -	93.0%	9.7%	6.7%	3.1%	774	1	129	8.6	1.2	7	1 \$ 150.00		
GE		1	1 \$ 325.00	\$ 265.00	\$ 175.00	\$ 242.61	\$ 100.00	\$ -	96.6%	26.7%	6.7%	3.1%	774	1	129	8.6	1.2	7	1 \$ 150.00		
GE		1	2 \$ 200.00	\$ 400.00	\$ 10.00	\$ 110.00	\$ 10.00	\$ -	34.2%	1.5%	6.7%	3.1%	774	1	129	6.6	1.1	0	0 \$ 155.04		
GE		1	2 \$ 200.00	\$ 400.00	\$ 10.00	\$ 110.00	\$ 10.00	\$ -	65.8%	9.7%	6.7%	3.1%	774	1	129	6.6	1.1	0	0 \$ 155.04		
GE		1	2 \$ 200.00	\$ 400.00	\$ 10.00	\$ 110.00	\$ 10.00	\$ -	85.3%	9.7%	6.7%	3.1%	774	1	129	6.6	1.1	0	0 \$ 155.04		
GE		1	2 \$ 200.00	\$ 400.00	\$ 10.00	\$ 110.00	\$ 10.00	\$ -	93.0%	9.7%	6.7%	3.1%	774	1	129	6.6	1.1	0	0 \$ 155.04		
GE		1	2 \$ 200.00	\$ 250.00	\$ 25.00	\$ 125.00	\$ 26.00	\$ -	34.2%	1.5%	6.7%	3.1%	504	1	84	5	1	2	1 \$ 200.00		
GE		2	1 \$ 200.00	\$ 250.00	\$ 25.00	\$ 125.00	\$ 26.00	\$ -	45.9%	2.6%	6.7%	3.1%	504	1	84	5	1	2	1 \$ 200.00		
GE		2	1 \$ 200.00	\$ 250.00	\$ 25.00	\$ 125.00	\$ 26.00	\$ -	62.5%	2.6%	6.7%	3.1%	504	1	84	5	1	2	1 \$ 200.00		
GE		2	1 \$ 200.00	\$ 250.00	\$ 25.00	\$ 125.00	\$ 26.00	\$ -	79.7%	2.6%	6.7%	3.1%	504	1	84	5	1	2	0 \$ 200.00		
GE		2	1 \$ 200.00	\$ 250.00	\$ 25.00	\$ 125.00	\$ 26.00	\$ -	91.9%	18.8%	6.7%	3.1%	504	1	84	5	1	2	1 \$ 200.00		
GE		2	2 \$ 200.00	\$ 320.00	\$ 25.00	\$ 120.00	\$ 30.00	\$ -	34.2%	1.5%	6.7%	3.1%	504	1	84	4.2	0.96	4.2	0 \$ 100.00		
GE		2	2 \$ 250.00	\$ 380.00	\$ 30.00	\$ 150.00	\$ 30.00	\$ -	45.9%	2.6%	6.7%	3.1%	504	1	84	4.2	0.96	4.2	0 \$ 100.00		
GE		2	2 \$ 300.00	\$ 420.00	\$ 35.00	\$ 200.00	\$ 30.00	\$ -	62.5%	2.6%	6.7%	3.1%	504	1	84	4.2	0.96	4.2	0 \$ 100.00		
GE		2	2 \$ 350.00	\$ 450.00	\$ 40.00	\$ 220.00	\$ 30.00	\$ -	79.7%	2.6%	6.7%	3.1%	504	1	84	4.2	0.96	4.2	0 \$ 100.00		
GE		2	2 \$ 400.00	\$ 500.00	\$ 50.00	\$ 240.00	\$ 40.00	\$ -	91.9%	18.8%	6.7%	3.1%	504	1	84	4.2	0.96	4.2	0 \$ 100.00		
GE		3	1 \$ 120.00	\$ 5.00	\$ 8.00	\$ 113.00	\$ 9.00	\$ -	4.5%	0.9%	6.7%	3.1%	492	1	82	4.55	0.5	0	0.5 \$ 120.00		
GE		3	1 \$ 120.00	\$ 5.00	\$ 8.00	\$ 113.00	\$ 9.00	\$ -	11.7%	0.9%	6.7%	3.1%	492	1	82	4.55	0.5	0	0.5 \$ 120.00		
GE		3	1 \$ 120.00	\$ 5.00	\$ 8.00	\$ 113.00	\$ 9.00	\$ -	23.6%	0.9%	6.7%	3.1%	492	1	82	4.55	0.5	0	0.5 \$ 120.00		
GE		3	1 \$ 120.00	\$ 5.00	\$ 8.00	\$ 113.00	\$ 9.00	\$ -	34.2%	1.5%	6.7%	3.1%	492	1	82	4.55	0.5	0	0.5 \$ 120.00		
GE		3	1 \$ 120.00	\$ 5.00	\$ 8.00	\$ 113.00	\$ 9.00	\$ -	36.0%	6.9%	6.7%	3.1%	492	1	82	4.55	0.5	0	0.5 \$ 120.00		
GE		3	2 \$ 120.00	\$ 75.00	\$ 35.00	\$ 200.00	\$ 5.00	\$ 50.00	4.5%	0.9%	6.7%	3.1%	492	1	82	5	1	1	0 \$ 100.00		
GE		3	2 \$ 120.00	\$ 75.00	\$ 35.00	\$ 200.00	\$ 5.00	\$ 50.00	11.7%	0.9%	6.7%	3.1%	492	1	82	5	1	1	0 \$ 100.00		
GE		3	2 \$ 120.00	\$ 75.00	\$ 35.00	\$ 200.00	\$ 5.00	\$ 50.00	23.6%	0.9%	6.7%	3.1%	492	1	82	5	1	1	0 \$ 100.00		
GE		3	2 \$ 120.00	\$ 75.00	\$ 35.00	\$ 200.00	\$ 5.00	\$ 50.00	34.2%	1.5%	6.7%	3.1%	492	1	82	5	1	1	0 \$ 100.00		
GE		4	1 \$ 125.00	\$ 90.00	\$ 50.00	\$ 215.00	\$ 50.00	\$ -	18.1%	0.0%	6.7%	3.1%	414	1	69	5	0.5	2.5	0 \$ 100.00		
GE		4	1 \$ 125.00	\$ 90.00	\$ 55.00	\$ 215.00	\$ 50.00	\$ -	30.6%	0.0%	6.7%	3.1%	414	1	69	5	0.5	2.5	0 \$ 100.00		
GE		4	1 \$ 125.00	\$ 95.00	\$ 55.00	\$ 220.00	\$ 50.00	\$ -	34.2%	1.5%	6.7%	3.1%	414	1	69	5	0.5	2.5	0 \$ 100.00		
GE		4	1 \$ 125.00	\$ 90.00	\$ 55.00	\$ 215.00	\$ 50.00	\$ -	40.4%	0.0%	6.7%	3.1%	414	1	69	5	0.5	2.5	0 \$ 100.00		
GE		4	1 \$ 125.00	\$ 95.00	\$ 55.00	\$ 220.00	\$ 50.00	\$ 90.00	49.7%	1.8%	6.7%	3.1%	414	1	69	5	0.5	2.5	0 \$ 100.00		
GE		4	2 \$ 136.00	\$ 94.00	\$ 16.00	\$ 130.00	\$ 25.00	\$ -	18.1%	0.0%	6.7%	3.1%	414	1	69	4	0	2	0 \$ 136.00		
GE		4	2 \$ 136.00	\$ 94.00	\$ 16.00	\$ 200.00	\$ 25.00	\$ -	30.6%	0.0%	6.7%	3.1%	414	1	69	4	0	2	0 \$ 136.00		
GE		4	2 \$ 136.00	\$ 94.00	\$ 16.00	\$ 200.00	\$ 25.00	\$ -	34.2%	1.5%	6.7%	3.1%	414	1	69	4	0	2	0 \$ 136.00		
GE		4	2 \$ 136.00	\$ 94.00	\$ 17.00	\$ 200.00	\$ 25.00	\$ -	40.4%	0.0%	6.7%	3.1%	414	1	69	4	0	2	0 \$ 136.00		
GE		4	2 \$ 136.00	\$ 94.00	\$ 17.00	\$ 200.00	\$ 25.00	\$ -	49.7%	1.8%	6.7%	3.1%	414	1	69	4	0	2	0 \$ 136.00		
SE	5	1 \$																			

ELEMENTARY SCHOOL RAW DATA FROM PJPS INCLUDING GENERAL AND SPECIAL EDUCATION PANELS

Identification of Professional Judgment Panels			Preschool specifications								Early Childhood Development Program								Extended Day Program specifications							
Type of panel: GE=General Ed, SE=Special Ed	PJP Category: 1=NYC, 2=Oth Urban, 3=Suburban, 4=Rural, 5=Reps from PJP 1 thru 4	Week: 1=Jul21, 2=Jul 28	Preschool	F=full day, H=half day	Preschool Students	PreK Teachers	PreK SpecEd Teachers	PreK Aides	PreK SpecEd Aides	PreK Supplies	ECD Program	ECD Students	ECD Teachers	ECD SpecEd Teachers	ECD Aides	ECD SpecEd Aides	ECD Supplies	ExtDay Program	ExtDay Students	ExtDay Teachers	ExtDay SpecEd Teachers	ExtDay Aides	ExtDay SpecEd Aides	ExtDay Supplies		
GE			1	1	1 F	129	10.8	1.2	9	1	\$ 348.84	0	0	0	0	0	\$ -	1	129	1.6	0	0	0	\$ 25.00		
GE			1	1	1 F	129	10.8	1.2	9	1	\$ 348.84	0	0	0	0	0	\$ -	1	129	1.6	0	0	0	\$ 25.00		
GE			1	1	1 F	129	10.8	1.2	9	1	\$ 348.84	0	0	0	0	0	\$ -	1	129	1.6	0	0	0	\$ 25.00		
GE			1	1	1 F	129	10.8	1.2	9	1	\$ 348.84	0	0	0	0	0	\$ -	1	129	1.6	0	0	0	\$ 25.00		
GE			1	1	1 F	129	10.8	1.2	9	1	\$ 348.84	1	65	4.333333333	1	4.333333333	\$ 35.00	1	129	3.2	0	0	0	\$ 25.00		
GE			1	2	1 H	22	2.2	0	2.2	0	\$ 227.27	0	0	0	0	0	\$ -	1	387	14	0	0	0	\$ 51.68		
GE			1	2	1 H	42	4.2	0	2.2	0	\$ 119.05	0	0	0	0	0	\$ -	1	387	14	0	0	0	\$ 51.68		
GE			1	2	1 H	55	5.5	0	2.2	0	\$ 90.91	0	0	0	0	0	\$ -	1	387	14	0	0	0	\$ 51.68		
GE			1	2	1 H	60	6	0	2.2	0	\$ 83.33	0	0	0	0	0	\$ -	1	387	14	0	0	0	\$ 51.68		
GE			1	2	1 H	62	6.2	0	2.2	0	\$ 80.65	0	0	0	0	0	\$ -	1	387	14	0	0	0	\$ 51.68		
GE			2	1	1 F	29	2	0	2	0	\$ 25.00	1	14	1	0	1	\$ 25.00	1	50	0.43	0	0	0	\$ 20.00		
GE			2	1	1 F	39	2	0	2	0	\$ 25.00	1	19	1	0	1	\$ 25.00	1	50	0.43	0	0	0	\$ 20.00		
GE			2	1	1 F	53	4	0	4	0	\$ 25.00	1	26	2	0	2	\$ 25.00	1	126	1.1	0	0	0	\$ 20.00		
GE			2	1	1 F	67	4	0	4	0	\$ 25.00	1	33	3	0	3	\$ 25.00	1	252	2.14	0	0	0	\$ 20.00		
GE			2	1	1 F	84	6	0	6	0	\$ 25.00	1	42	3	0	3	\$ 25.00	1	328	2.75	0	0	0	\$ 20.00		
GE			2	2	1 F	42	2.1	0	2.1	0	\$ 100.00	1	42	2.1	0	2.1	\$ 100.00	1	100	3.4	0	0.04	0	\$ 300.00		
GE			2	2	1 F	58.8	3	0	3	0	\$ 100.00	1	58.8	3	0	3	\$ 100.00	1	150	5.1	0	0.06	0	\$ 300.00		
GE			2	2	1 F	67.2	3.3	0	3.3	0	\$ 100.00	1	67.2	3.3	0	3.3	\$ 100.00	1	200	6.8	0	0.08	0	\$ 300.00		
GE			2	2	1 F	76	3.8	0	3.8	0	\$ 100.00	1	76	3.8	0	3.8	\$ 100.00	1	300	10.2	0	0.12	0	\$ 300.00		
GE			2	2	1 F	84	4.2	0	4.2	0	\$ 100.00	1	84	4.2	0	4.2	\$ 100.00	1	400	13.6	0	0.16	0	\$ 300.00		
GE			3	1	0 .	0	0	0	0	\$ -	0	0	0	0	0	\$ -	1	25	0.26	0.13	0	0	\$ 20.00			
GE			3	1	0 .	0	0	0	0	\$ -	0	0	0	0	0	\$ -	1	25	0.26	0.13	0	0	\$ 20.00			
GE			3	1	0 .	0	0	0	0	\$ -	0	0	0	0	0	\$ -	1	25	0.26	0.13	0	0	\$ 20.00			
GE			3	1	0 .	0	0	0	0	\$ -	0	0	0	0	0	\$ -	1	25	0.26	0.13	0	0	\$ 20.00			
GE			3	1	0 .	0	0	0	0	\$ -	0	0	0	0	0	\$ -	1	25	0.26	0.13	0	0	\$ 20.00			
GE			3	2	1 H	41	2	1	3	0	\$ 100.00	0	0	0	0	0	\$ -	0	0	0	0	0	\$ -			
GE			3	2	1 H	41	2	1	3	0	\$ 100.00	0	0	0	0	0	\$ -	0	0	0	0	0	\$ -			
GE			3	2	1 H	41	2	1	3	0	\$ 100.00	0	0	0	0	0	\$ -	0	0	0	0	0	\$ -			
GE			3	2	1 H	41	2	1	3	0	\$ 100.00	0	0	0	0	0	\$ -	0	0	0	0	0	\$ -			
GE			3	2	1 H	41	2	1	3	0	\$ 100.00	0	0	0	0	0	\$ -	0	0	0	0	0	\$ -			
GE			4	1	1 H	6	1	0	1	0	\$ 50.00	0	0	0	0	0	\$ -	1	83	1	0	0.2	0	\$ 10.00		
GE			4	1	1 H	11	1	0	1	0	\$ 50.00	0	0	0	0	0	\$ -	1	124	1.5	0	0.3	0	\$ 10.00		
GE			4	1	1 H	12	1	0	2	0	\$ 50.00	0	0	0	0	0	\$ -	1	149	2	0	0.5	0	\$ 10.00		
GE			4	1	1 H	14	2	0	2	0	\$ 50.00	1	14	1	0	1	\$ 50.00	1	166	2	0	0.4	0	\$ 10.00		
GE			4	1	1 H	17	2	0	2	0	\$ 50.00	1	17	1	0	1	\$ 50.00	1	215	2.8	0	0.8	0	\$ 10.00		
GE			4	2	1 F	69	4	0	2	0	\$ 136.00	1	35	2	0	1	\$ 136.00	0	0	0	0	0	\$ -			
GE			4	2	1 F	69	4	0	2	0	\$ 136.00	1	35	2	0	1	\$ 136.00	0	0	0	0	0	\$ -			
GE			4	2	1 F	69	4	0	2	0	\$ 136.00	1	35	2	0	1	\$ 136.00	0	0	0	0	0	\$ -			
GE			4	2	1 F	69	4	0	2	0	\$ 136.00	1	35	2	0	1	\$ 136.00	0	0	0	0	0	\$ -</			

ELEMENTARY SCHOOL RAW DATA FROM PJPS INCLUDING GENERAL AND SPECIAL EDUCATION PANELS

Identification of Professional Judgment Panels		Extended Year Program Specifications							
Type of panel:	PJP Category: 1=NYC, 2=Oth	Week: Urban, 3=Suburban, 4=Rural, 5=Reps from PJPs 1 thru 4	ExtYear Students	ExtYear Teachers	ExtYear SpecEd Teachers	ExtYear Aides	ExtYear SpecEd Aides	ExtYear Supplies	
GE	1	1	0	0	0	0	0	0 \$	-
GE	1	1	0	0	0	0	0	0 \$	-
GE	1	1	0	0	0	0	0	0 \$	-
GE	1	1	0	0	0	0	0	0 \$	-
GE	1	1	1	387	3.06382979	0	0	0 \$	35.00
GE	1	2	0	0	0	0	0	0 \$	-
GE	1	2	0	0	0	0	0	0 \$	-
GE	1	2	0	0	0	0	0	0 \$	-
GE	1	2	0	0	0	0	0	0 \$	-
GE	1	2	0	0	0	0	0	0 \$	-
GE	2	1	1	202	1	0	0.15	0 \$	20.00
GE	2	1	1	202	1	0	0.15	0 \$	20.00
GE	2	1	1	328	1.4	0	0.19	0 \$	20.00
GE	2	1	1	403	1.74	0	0.26	0 \$	20.00
GE	2	1	1	504	2.25	0	0.26	0 \$	20.00
GE	2	2	1	100	0.7	0	0.45	0 \$	50.00
GE	2	2	1	150	1.05	0	0.7	0 \$	50.00
GE	2	2	1	200	1.4	0	0.9	0 \$	50.00
GE	2	2	1	300	2.1	0	1.4	0 \$	50.00
GE	2	2	1	400	2.8	0	1.8	0 \$	50.00
GE	3	1	1	10	0	0	0	0 \$	-
GE	3	1	1	10	0	0	0	0 \$	-
GE	3	1	1	10	0	0	0	0 \$	-
GE	3	1	1	34	0.16	0	0	0 \$	-
GE	3	1	1	34	0.16	0	0	0 \$	-
GE	3	2	1	64	4	2	1	2 \$	10.00
GE	3	2	1	64	4	2	1	2 \$	10.00
GE	3	2	1	64	4	2	1	2 \$	10.00
GE	3	2	1	113	8	2	2	2 \$	10.00
GE	3	2	1	113	8	2	2	2 \$	10.00
GE	4	1	1	83	1	0.3	0	0 \$	25.00
GE	4	1	1	124	1.5	0	0	0 \$	25.00
GE	4	1	1	149	2	0	0	0 \$	25.00
GE	4	1	1	166	2	0.3	0	0 \$	25.00
GE	4	1	1	215	2.8	0.3	0	0 \$	25.00
GE	4	2	1	124	0.75	0	1	0 \$	50.00
GE	4	2	1	124	0.75	0	1	0 \$	50.00
GE	4	2	1	124	0.75	0	1	0 \$	50.00
GE	4	2	1	124	0.75	0	1	0 \$	50.00
SE	5	1							
SE	5	1							
SE	5	1							
SE	5	1							
SE	5	2							
SE	5	2							
SE	5	2							
SE	5	2							

MIDDLE SCHOOL RAW DATA FROM PJPS INCLUDING GENERAL AND SPECIAL EDUCATION PANELS

			Identification of Professional Judgment Panels																			Total FTEs per school		
Type of panel: GE-General Ed, SE-Special Ed	PJP Category: 1-NYC, 2-Olh Urban, 3-Suburban, 4-Rural, 5=Reps from PJPs, 1 thru 4	Week: 1-Jul21, 2-Jul 28	1. Core Classroom Teachers	2. Special Education Teachers	3. Other Teachers	4. Substitutes	5. General Education Aides	6. Special Education Aides	7. Guidance Counselors	8. Special Education Guidance Counselors	9. School Psychologists	10. Special Education Psychologists	11. Social Workers	12. Special Education Social Workers	13. Other Pupil Support	14. Special Education Other Pupil Support	15. Nurses	16. Librarians/Media Specialists	17. Principals	18. Assistant Principals	19. Other Prof. Staff	20. Clerical/Data Entry	21. Security	
GE		1	1	53.26	11.40	10.00	4.03	-	3.00	3.00	-	1.20	0.80	1.00	-	1.00	1.00	1.00	1.00	3.00	2.00	11.00	3.00	
GE		1	1	53.26	11.40	10.00	3.23	-	3.00	3.00	-	2.00	-	1.00	-	1.00	1.00	1.00	1.00	3.00	2.00	11.00	3.00	
GE		1	1	53.26	11.40	10.00	3.23	-	3.00	3.00	-	2.00	-	1.00	-	1.00	1.00	1.00	1.00	3.00	2.00	11.00	3.00	
GE		1	1	53.26	11.40	10.00	3.23	-	3.00	3.00	-	2.00	-	1.00	-	1.00	1.00	1.00	1.00	3.00	2.00	11.00	3.00	
GE		1	1	66.57	11.40	10.00	3.90	-	3.00	3.00	-	2.00	-	1.00	-	1.00	1.00	1.00	1.00	3.00	2.00	11.00	3.00	
GE		1	2	65.00	9.40	1.70	4.61	11.60	2.20	6.60	-	-	-	-	-	-	-	1.00	1.10	1.00	3.00	2.20	6.00	4.00
GE		1	2	65.00	9.40	1.70	4.61	11.60	2.20	6.60	-	-	-	-	-	-	-	1.00	1.10	1.00	3.00	2.20	6.00	4.00
GE		1	2	65.00	9.40	1.70	4.61	11.60	2.20	6.60	-	-	-	-	-	-	-	1.00	1.10	1.00	3.00	2.20	6.00	4.00
GE		1	2	65.00	9.40	1.70	4.61	11.60	2.20	6.60	-	-	-	-	-	-	-	1.00	1.10	1.00	3.00	2.20	6.00	4.00
GE		2	1	36.00	5.00	16.20	2.93	3.00	2.00	3.00	-	0.30	0.70	1.50	-	-	-	1.07	2.07	1.08	3.00	1.00	5.05	4.00
GE		2	1	36.00	5.00	16.20	2.93	3.00	2.00	3.00	-	0.30	0.70	1.50	-	-	-	1.07	2.07	1.08	3.00	1.00	5.05	4.00
GE		2	1	36.00	5.00	19.20	3.15	3.00	2.00	3.00	-	0.30	0.70	2.50	-	-	-	1.07	2.07	1.08	3.00	1.00	6.05	4.00
GE		2	1	36.00	5.00	21.20	3.29	5.00	2.00	3.00	-	0.30	0.70	2.50	-	-	-	1.07	2.07	1.08	3.00	1.00	6.05	4.00
GE		2	1	36.00	5.00	28.20	3.67	8.00	2.00	4.00	-	0.30	0.70	2.50	-	-	-	2.07	2.07	1.08	3.00	1.00	6.05	4.00
GE		2	2	32.00	5.00	31.00	3.60	11.00	6.00	4.00	-	0.40	0.60	1.00	-	-	-	1.00	1.00	1.00	1.00	-	4.00	3.00
GE		2	2	32.00	5.00	34.00	3.79	19.00	6.00	5.00	-	0.40	0.60	1.00	-	-	-	1.00	1.00	1.00	1.00	-	4.00	4.00
GE		2	2	47.00	5.00	35.00	4.65	20.00	6.00	6.00	-	0.40	0.60	1.00	-	-	-	1.00	1.00	1.00	1.00	-	4.00	5.00
GE		2	2	32.00	5.00	37.00	4.06	22.00	6.00	7.00	-	0.80	1.20	2.00	-	-	-	2.00	1.00	1.00	1.00	-	5.00	6.00
GE		2	2	32.00	5.00	38.00	3.95	28.00	6.00	8.00	-	0.80	1.20	2.00	-	-	-	2.00	1.00	1.00	1.00	-	6.00	8.00
GE		3	1	31.00	7.00	17.00	2.77	5.00	9.00	2.40	0.60	0.50	0.50	1.00	0.50	0.70	0.50	1.00	1.00	1.00	1.00	0.20	3.50	3.00
GE		3	1	31.00	7.00	17.25	2.78	5.00	9.00	2.40	0.60	0.50	0.50	1.50	0.50	0.70	0.50	1.00	1.00	1.00	1.00	0.20	3.50	3.00
GE		3	1	31.00	7.00	17.50	2.79	5.00	9.00	2.40	0.60	0.50	0.50	1.50	0.50	0.70	0.50	1.00	1.00	1.00	1.00	0.20	3.50	3.00
GE		3	1	31.00	7.00	18.00	2.83	5.00	9.00	2.40	0.60	0.50	0.50	2.00	0.50	0.90	0.50	1.00	1.00	1.00	1.00	0.20	3.50	3.00
GE		3	1	31.00	7.00	18.00	2.83	5.00	9.00	2.40	0.60	0.50	0.50	2.00	0.50	0.90	0.50	1.00	1.00	1.00	1.00	0.20	3.50	3.00
GE		3	2	36.00	6.00	15.80	3.29	9.00	4.00	3.00	-	0.30	0.70	-	-	5.50	2.45	1.00	1.00	1.00	1.00	1.00	3.00	1.00
GE		3	2	36.00	6.00	15.80	3.29	9.00	4.00	3.00	-	0.30	0.70	-	-	5.50	2.45	1.00	1.00	1.00	1.00	1.00	3.00	1.00
GE		3	2	36.00	6.00	15.80	3.29	9.00	4.00	3.00	-	0.30	0.70	0.50	-	5.50	2.50	1.00	1.00	1.00	1.00	1.00	3.00	1.00
GE		3	2	36.00	6.00	15.80	3.59	9.00	4.00	3.00	-	0.30	0.70	1.00	-	6.50	2.50	1.00	1.00	1.00	1.00	1.00	3.00	1.00
GE		3	2	36.00	6.00	15.80	3.59	9.00	4.00	3.00	-	0.30	0.70	1.00	-	9.00	2.50	1.00	1.00	1.00	1.00	1.00	3.00	1.00
GE		4	1	30.00	3.00	11.70	2.46	10.00	2.00	2.00	-	0.50	0.50	0.50	0.50	4.30	0.30	1.00	1.00	1.00	1.00	1.00	3.50	-
GE		4	1	30.00	3.00	11.70	1.65	10.00	2.00	2.00	-	0.50	0.50	0.50	0.50	4.30	0.30	1.00	1.00	1.00	1.00	1.00	3.00	-
GE		4	1	30.00	3.00	12.30	1.65	11.00	2.00	2.00	-	0.50	0.50	0.50	0.50	4.30	0.30	1.00	1.00	1.00	1.00	1.00	3.00	-
GE		4	1	30.00	3.00	11.70																		

MIDDLE SCHOOL RAW DATA FROM PJPS INCLUDING GENERAL AND SPECIAL EDUCATION PANELS

MIDDLE SCHOOL RAW DATA FROM PJPS INCLUDING GENERAL AND SPECIAL EDUCATION PANELS

Identification of Professional Judgment Panels		Extended Year Program Specifications								
Type of panel: GE=General Ed, SE=Special Ed	PJP Category: 1=NYC, 2=Oth Urban, 3=Suburban, 4=Rural, 5=Reps from PJP's 1 thru 4	Week: 1=Jul21, 2=Jul 28	ExtYear	Ext Year Students	ExtYear Teachers	ExtYear SpecEd Teachers	ExtYear Aides	SpecEd Aides	ExtYear Supplies	
GE		1	1	1	317	1.873522459	2	0	0 \$	30.00
GE		1	1	1	317	1.873522459	2	0	0 \$	30.00
GE		1	1	1	317	1.873522459	2	0	0 \$	30.00
GE		1	1	1	317	1.873522459	2	0	0 \$	30.00
GE		1	1	1	317	1.873522459	2	0	0 \$	30.00
GE		1	2	0	0	0	0	0	0 \$	-
GE		1	2	0	0	0	0	0	0 \$	-
GE		1	2	0	0	0	0	0	0 \$	-
GE		1	2	0	0	0	0	0	0 \$	-
GE		1	2	0	0	0	0	0	0 \$	-
GE		2	1	1	200	0.58	0.06	0.06	0 \$	20.00
GE		2	1	1	200	0.58	0.06	0.06	0 \$	20.00
GE		2	1	1	239	1.03	0.06	0.06	0 \$	20.00
GE		2	1	1	279	1.22	0.3	0.3	0 \$	20.00
GE		2	1	1	319	1.35	0.36	0.36	0 \$	20.00
GE		2	2	1	128	1	0	0.25	0 \$	50.00
GE		2	2	1	160	1.25	0	0.3	0 \$	50.00
GE		2	2	1	200	1.6	0	0.4	0 \$	50.00
GE		2	2	1	239	1.9	0	0.5	0 \$	50.00
GE		2	2	1	128	1	0	0.25	0 \$	50.00
GE		3	1	1	15	0	0	0	0 \$	-
GE		3	1	1	15	0	0	0	0 \$	-
GE		3	1	1	15	0	0	0	0 \$	-
GE		3	1	1	54	0.16	0	0	0 \$	-
GE		3	1	1	54	0.16	0	0	0 \$	-
GE		3	2	1	77	6	2	0	2 \$	10.00
GE		3	2	1	77	6	2	0	2 \$	10.00
GE		3	2	1	77	6	2	0	2 \$	10.00
GE		3	2	1	132	12	2	0	2 \$	10.00
GE		3	2	1	132	12	2	0	2 \$	10.00
GE		4	1	1	109	2.5	0.5	0	0 \$	25.00
GE		4	1	1	163	3.8	0.8	0	0 \$	25.00
GE		4	1	1	195	4.2	0.8	0.2	0 \$	25.00
GE		4	1	1	217	5	0.5	0	0 \$	25.00
GE		4	1	1	282	6.8	0.5	0.4	0 \$	25.00
GE		4	2	1	163	1	0.5	1	0.5 \$	50.00
GE		4	2	1	163	1	0.5	1	0.5 \$	50.00
GE		4	2	1	163	1	0.5	1	0.5 \$	50.00
SE		5	1							
SE		5	1							
SE		5	1							
SE		5	1							
SE		5	2							
SE		5	2							
SE		5	2							
SE		5	2							

HIGH SCHOOL RAW DATA FROM PJPS INCLUDING GENERAL AND SPECIAL EDUCATION PANELS

		Identification of Professional Judgment Panels																				Total FTEs per school			
		PJP Category: 1=NYC, 2-Oth Urban, 3=Suburban, 4=Rural,																				Total FTEs per school			
Type of panel: GE=General Ed, SE=Special Ed	I thru 4	Week: 1=Jul21, 2=Jul 28	1. Core Classroom Teachers	2. Special Education Teachers	3. Other Teachers	4. Substitutes	5. General Education Aides	6. Special Education Aides	7. Guidance Counselors	8. Special Education Guidance Counselors	9. School Psychologists	10. Special Education Psychologists	11. Social Workers	12. Special Education Social Workers	13. Other Pupil Support	14. Special Education Other Pupil Support	15. Nurses	16. Librarians/Media Specialists	17. Principals	18. Assistant Principals	19. Other Prof. Staff	20. Clerical/Data Entry	21. Security		
GE		1	1	81.66	6.00	8.20	4.88	-	3.00	6.00	-	1.20	0.80	1.00	-	1.00	1.00	1.00	2.00	1.00	5.00	2.00	13.00	4.00	
GE		1	1	81.66	6.00	8.00	4.38	-	3.00	6.00	-	1.00	-	1.00	-	1.00	1.00	1.00	2.00	1.00	5.00	2.00	13.00	4.00	
GE		1	1	81.66	6.00	8.00	4.38	-	3.00	6.00	-	1.00	-	1.00	-	1.00	1.00	1.00	2.00	1.00	5.00	2.00	13.00	4.00	
GE		1	1	81.66	6.00	8.00	4.38	-	3.00	6.00	-	1.00	-	1.00	-	1.00	1.00	1.00	2.00	1.00	5.00	2.00	13.00	4.00	
GE		1	1	81.66	6.00	8.00	4.38	-	3.00	6.00	-	1.00	-	1.00	-	1.00	1.00	1.00	2.00	1.00	5.00	2.00	13.00	4.00	
GE		1	2	83.25	8.00	2.13	5.67	14.50	2.75	8.25	-	-	-	-	-	-	-	-	2.00	1.38	1.00	3.00	3.50	7.50	5.00
GE		1	2	83.25	8.00	2.13	5.67	14.50	2.75	8.25	-	-	-	-	-	-	-	-	2.00	1.38	1.00	3.00	3.50	7.50	5.00
GE		1	2	83.25	8.00	2.13	5.67	14.50	2.75	8.25	-	-	-	-	-	-	-	-	2.00	1.38	1.00	3.00	3.50	7.50	5.00
GE		1	2	83.25	8.00	2.13	5.67	14.50	2.75	8.25	-	-	-	-	-	-	-	-	2.00	1.38	1.00	3.00	3.50	7.50	5.00
GE		2	1	36.00	9.00	36.00	4.20	4.00	4.00	4.00	-	0.10	0.90	2.00	-	-	-	-	1.07	2.07	1.08	4.00	2.00	7.05	5.00
GE		2	1	36.00	9.00	36.50	4.23	4.00	4.00	4.00	-	0.10	0.90	2.00	-	-	-	-	1.07	2.07	1.08	4.00	2.00	7.05	5.00
GE		2	1	36.00	9.00	36.50	4.45	4.00	4.00	4.00	-	0.10	0.90	3.00	-	-	-	-	1.07	2.07	1.08	4.00	2.00	8.05	5.00
GE		2	1	40.20	9.00	40.70	4.99	4.00	4.00	4.00	-	0.10	0.90	3.00	-	-	-	-	1.07	2.07	1.08	4.00	2.00	8.05	5.00
GE		2	1	40.20	9.00	45.20	5.30	8.00	4.00	4.00	-	0.10	0.90	3.00	-	-	-	-	2.07	2.07	1.08	4.00	2.00	8.05	5.00
GE		2	2	59.00	10.00	46.50	5.98	9.00	10.00	5.00	-	0.40	0.60	1.00	-	1.00	-	-	1.00	1.00	1.00	2.00	-	8.00	5.00
GE		2	2	59.00	10.00	46.50	6.14	10.00	10.00	5.00	-	0.80	1.20	2.00	-	1.00	-	-	1.00	1.00	1.00	2.00	-	8.00	6.00
GE		2	2	59.00	10.00	51.00	6.45	12.00	10.00	6.00	-	0.80	1.20	2.00	-	1.00	-	-	1.00	1.00	1.00	3.00	-	9.00	6.00
GE		2	2	59.00	10.00	54.00	6.94	12.00	10.00	7.00	-	1.20	1.80	3.00	-	1.00	-	-	2.00	2.00	1.00	3.00	-	10.00	8.00
GE		2	2	59.00	10.00	57.00	7.15	12.00	10.00	7.00	-	1.20	1.80	3.00	-	1.00	-	-	2.00	2.00	1.00	4.00	-	12.00	10.00
GE		3	1	39.20	9.00	23.00	3.57	5.00	10.00	3.20	0.80	0.20	0.80	1.00	0.50	5.20	0.30	1.00	1.00	1.00	2.00	0.40	6.00	5.00	
GE		3	1	39.20	9.00	23.00	3.57	5.00	10.00	3.20	0.80	0.20	0.80	1.50	0.50	5.20	0.30	1.00	1.00	1.00	2.00	0.40	6.00	5.00	
GE		3	1	39.20	9.00	24.00	3.62	5.00	10.00	3.20	0.80	0.20	0.80	1.50	0.50	5.20	0.30	1.00	1.00	1.00	2.00	0.40	6.00	5.00	
GE		3	1	39.20	9.00	26.00	3.81	5.00	10.00	3.20	0.80	0.20	0.80	2.50	0.50	5.40	0.30	1.00	1.00	1.00	2.00	0.40	6.00	5.00	
GE		3	1	39.20	9.00	26.00	3.81	5.00	10.00	3.20	0.80	0.20	0.80	2.50	0.50	8.20	0.30	1.00	1.00	1.00	2.00	0.60	6.00	5.00	
GE		3	2	40.00	6.00	23.00	3.95	10.00	6.00	4.00	-	0.30	0.70	1.00	-	7.50	3.00	1.00	1.00	1.00	3.00	1.50	9.00	1.00	
GE		3	2	40.00	6.00	23.00	3.95	10.00	6.00	4.00	-	0.30	0.70	1.00	-	7.50	3.00	1.00	1.00	1.00	3.00	1.50	9.00	1.00	
GE		3	2	40.00	6.00	23.00	3.95	10.00	6.00	4.00	-	0.30	0.70	1.00	-	7.50	3.00	1.00	1.00	1.00	3.00	1.50	9.00	1.00	
GE		3	2	40.00	6.00	23.00	3.95	10.00	6.00	4.00	-	0.30	0.70	1.00	-	7.50	3.00	1.00	1.00	1.00	3.00	1.50	9.00	1.00	
GE		3	2	40.00	6.00	23.00	4.30	10.00	6.00	4.00	-	0.30	0.70	1.00	-	7.50	3.00	1.00	1.00	1.00	3.00	1.50	9.00	1.00	
GE		3	2	40.00	6.00	23.00	4.30	10.00	6.00	4.00	-	0.30	0.70	1.00	-	7.50	3.00	1.00	1.00	1.00	3.00	1.50	9.00	1.00	
GE																									

HIGH SCHOOL RAW DATA FROM PJPS INCLUDING GENERAL AND SPECIAL EDUCATION PANELS

Identification of Professional Judgment Panels			Expenditures per pupil						Demographics and Enrollment				Extended Day Program specifications					
PJP Category: 1=NYC, 2=Oth Urban, 3=Suburban, 4=Rural, 5=Reps from PJPs Type of panel: GE=General Ed, SE=Special Ed 1 thru 4 Week: 1-Jul21, 2-Jul 28																		
1. Instructional Supplies & Materials	2. Equipment & Technology	3. Student Activities	4. Professional Development	5. Assessment	6. Food Service %FRL	%LEP	%SpecEd1	%SpecEd2	Enroll	ExtDay Program	ExtDay Students	ExtDay Teachers	ExtDay SpecEd Teachers	ExtDay Aides	ExtDay SpecEd Aides	ExtDay Supplies		
GE 1 \$ 500.00	\$ 150.00	\$ 450.00	\$ 231.92	\$ 100.00	\$ -	34.2%	1.5%	6.7%	3.1%	1,184	1	107	0.919148936	0	0	0 \$	35.00	
GE 1 \$ 500.00	\$ 350.00	\$ 450.00	\$ 231.58	\$ 100.00	\$ -	65.8%	9.7%	6.7%	3.1%	1,184	1	107	0.919148936	0	0	0 \$	35.00	
GE 1 \$ 500.00	\$ 350.00	\$ 450.00	\$ 231.58	\$ 100.00	\$ -	85.3%	9.7%	6.7%	3.1%	1,184	1	107	0.919148936	0	0	0 \$	35.00	
GE 1 \$ 500.00	\$ 350.00	\$ 450.00	\$ 231.58	\$ 100.00	\$ -	93.0%	9.7%	6.7%	3.1%	1,184	1	107	0.919148936	0	0	0 \$	35.00	
GE 1 \$ 500.00	\$ 350.00	\$ 475.00	\$ 231.58	\$ 100.00	\$ -	96.6%	26.7%	6.7%	3.1%	1,184	1	107	0.919148936	0	0	0 \$	35.00	
GE 1 \$ 348.00	\$ 800.00	\$ 40.00	\$ 110.00	\$ 10.00	\$ -	34.2%	1.5%	6.7%	3.1%	1,184	1	592	20	0	0	0 \$	64.19	
GE 1 \$ 348.00	\$ 800.00	\$ 40.00	\$ 110.00	\$ 10.00	\$ -	65.8%	9.7%	6.7%	3.1%	1,184	1	592	20	0	0	0 \$	64.19	
GE 1 \$ 348.00	\$ 800.00	\$ 40.00	\$ 110.00	\$ 10.00	\$ -	85.3%	9.7%	6.7%	3.1%	1,184	1	592	20	0	0	0 \$	64.19	
GE 1 \$ 348.00	\$ 800.00	\$ 40.00	\$ 110.00	\$ 10.00	\$ -	93.0%	9.7%	6.7%	3.1%	1,184	1	592	20	0	0	0 \$	64.19	
GE 1 \$ 348.00	\$ 800.00	\$ 40.00	\$ 110.00	\$ 10.00	\$ -	96.6%	26.7%	6.7%	3.1%	1,184	1	592	20	0	0	0 \$	64.19	
GE 2 \$ 300.00	\$ 350.00	\$ 200.00	\$ 150.00	\$ 30.00	\$ -	34.2%	1.5%	6.7%	3.1%	1,156	1	289	9.1	0.3	0.3	0 \$	20.00	
GE 2 \$ 300.00	\$ 350.00	\$ 200.00	\$ 150.00	\$ 30.00	\$ -	45.9%	2.6%	6.7%	3.1%	1,156	1	289	9.1	0.3	0.3	0 \$	20.00	
GE 2 \$ 300.00	\$ 350.00	\$ 200.00	\$ 150.00	\$ 30.00	\$ -	62.5%	2.6%	6.7%	3.1%	1,156	1	289	9.1	0.3	0.3	0 \$	20.00	
GE 2 \$ 300.00	\$ 350.00	\$ 200.00	\$ 150.00	\$ 30.00	\$ -	79.7%	2.6%	6.7%	3.1%	1,156	1	289	9.1	0.3	0.3	0 \$	20.00	
GE 2 \$ 300.00	\$ 350.00	\$ 200.00	\$ 150.00	\$ 30.00	\$ -	91.9%	18.8%	6.7%	3.1%	1,156	1	289	9.1	0.3	0.3	0 \$	20.00	
GE 2 \$ 320.00	\$ 600.00	\$ 575.00	\$ 150.00	\$ 50.00	\$ -	34.2%	1.5%	6.7%	3.1%	1,156	1	751	16	0	5	0 \$	50.00	
GE 2 \$ 420.00	\$ 650.00	\$ 650.00	\$ 200.00	\$ 50.00	\$ -	45.9%	2.6%	6.7%	3.1%	1,156	1	751	16	0	5	0 \$	50.00	
GE 2 \$ 480.00	\$ 700.00	\$ 800.00	\$ 225.00	\$ 50.00	\$ -	62.5%	2.6%	6.7%	3.1%	1,156	1	751	16	0	5	0 \$	50.00	
GE 2 \$ 520.00	\$ 750.00	\$ 950.00	\$ 250.00	\$ 50.00	\$ -	79.7%	2.6%	6.7%	3.1%	1,156	1	751	16	0	5	0 \$	50.00	
GE 2 \$ 640.00	\$ 800.00	\$ 1,100.00	\$ 300.00	\$ 60.00	\$ -	91.9%	18.8%	6.7%	3.1%	1,156	1	751	16	0	5	0 \$	50.00	
GE 3 \$ 150.00	\$ 10.00	\$ 230.00	\$ 113.00	\$ 5.00	\$ -	4.5%	0.9%	6.7%	3.1%	992	1	992	0.12	0.12	0	0 \$	0.76	
GE 3 \$ 150.00	\$ 10.00	\$ 230.00	\$ 113.00	\$ 5.00	\$ -	11.7%	0.9%	6.7%	3.1%	992	1	992	0.12	0.12	0	0 \$	0.76	
GE 3 \$ 150.00	\$ 10.00	\$ 230.00	\$ 113.00	\$ 5.00	\$ -	23.6%	0.9%	6.7%	3.1%	992	1	992	0.12	0.12	0	0 \$	0.76	
GE 3 \$ 150.00	\$ 10.00	\$ 230.00	\$ 113.00	\$ 5.00	\$ -	34.2%	1.5%	6.7%	3.1%	992	1	992	0.12	0.12	0	0 \$	0.76	
GE 3 \$ 150.00	\$ 10.00	\$ 230.00	\$ 113.00	\$ 5.00	\$ -	36.0%	6.9%	6.7%	3.1%	992	1	992	0.12	0.12	0	0 \$	0.76	
GE 3 \$ 270.00	\$ 175.00	\$ 600.00	\$ 200.00	\$ 5.00	\$ 50.00	4.5%	0.9%	6.7%	3.1%	992	0	0	0	0	0	0 \$	-	
GE 3 \$ 270.00	\$ 175.00	\$ 600.00	\$ 200.00	\$ 5.00	\$ 50.00	11.7%	0.9%	6.7%	3.1%	992	0	0	0	0	0	0 \$	-	
GE 3 \$ 270.00	\$ 175.00	\$ 600.00	\$ 200.00	\$ 5.00	\$ 50.00	23.6%	0.9%	6.7%	3.1%	992	0	0	0	0	0	0 \$	-	
GE 3 \$ 270.00	\$ 175.00	\$ 600.00	\$ 200.00	\$ 5.00	\$ 50.00	34.2%	1.5%	6.7%	3.1%	992	0	0	0	0	0	0 \$	-	
GE 3 \$ 270.00	\$ 175.00	\$ 600.00	\$ 200.00	\$ 5.00	\$ 50.00	36.0%	6.9%	6.7%	3.1%	992	0	0	0	0	0	0 \$	-	
GE 4 \$ 190.00	\$ 175.00	\$ 365.00	\$ 220.00	\$ 30.00	\$ -	18.1%	0.0%	6.7%	3.1%	576	1	300	5.5	0	0.6	0 \$	-	
GE 4 \$ 190.00	\$ 175.00	\$ 375.00	\$ 220.00	\$ 30.00	\$ -	30.6%	0.0%	6.7%	3.1%	576	1	300	5.5	0	0.6	0 \$	-	
GE 4 \$ 190.00	\$ 180.00	\$ 375.00	\$ 225.00	\$ 30.00	\$ -	34.2%	1.5%	6.7%	3.1%	576	1	300	5.5	0	0.6	0 \$	-	
GE 4 \$ 195.00	\$ 195.00	\$ 375.00	\$ 220.00	\$ 30.00	\$ -	40.4%	0.0%	6.7%	3.1%	576	1	300	5.5	0	0.6	0 \$	-	
GE 4 \$ 195.00	\$ 195.00	\$ 375.00	\$ 225.00	\$ 30.00	\$ 90.00	49.7%	1.8%	6.7%	3.1%	576	1	300	5.5	0	0.6	0 \$	-	
GE 4 \$ 136.00	\$ 155.00	\$ 350.00	\$ 130.00	\$ 40.00	\$ -	18.1%	0.0%	6.7%	3.1%	576	1	115	3.6	0	0	0 \$	230.00	
GE 4 \$ 136.00	\$ 155.00	\$ 350.00	\$ 200.00	\$ 40.00	\$ -	30.6%	0.0%	6.7%	3.1%	576	1	115	3.6	0	0	0 \$	230.00	
GE 4 \$ 136.00	\$ 155.00	\$ 350.00	\$ 200.00	\$ 40.00	\$ -	34.2%	1.5%	6.7%	3.1%	576	1	115	3.6	0	0	0 \$	230.00	
GE 4 \$ 136.00	\$ 155.00	\$ 361.00	\$ 200.00	\$ 40.00	\$ -	40.4%	0.0%	6.7%	3.1%	576	1	115	3.6	0	0	0 \$	230.00	
GE 4 \$ 136.00	\$ 155.00	\$ 361.00	\$ 200.00	\$ 40.00	\$ -	49.7%	1.8%	6.7%	3.1%	576	1	115	3.6	0	0	0 \$	230.00	
SE 5 \$ 303.30	\$ 302.50	\$ 352.50	\$ 235.00	\$ 33.75		34.2%	1.5%	9.5%	4.3%	943								

HIGH SCHOOL RAW DATA FROM PJPS INCLUDING GENERAL AND SPECIAL EDUCATION PANELS

Identification of Professional Judgment Panels			Extended Year Program Specifications					
Type of panel:	PJP Category: 1=NYC, 2=Olh	Week:	Ext Year Students	ExtYear Teachers	ExtYear SpecEd Teachers	ExtYear Aides	ExtYear SpecEd Aides	ExtYear Supplies
GE=General Ed,	Urban, 3=Suburban, 4=Rural,	1=Jul21, 2=Jul 28	ExtYear					
SE=Special Ed	5=Reps from PJPs 1 thru 4							
GE	1	1	1	237	1.008510638	0	0	0 \$ 50.00
GE	1	1	1	237	1.008510638	0	0	0 \$ 50.00
GE	1	1	1	237	1.008510638	0	0	0 \$ 50.00
GE	1	1	1	237	1.008510638	0	0	0 \$ 50.00
GE	1	1	1	237	1.008510638	0	0	0 \$ 50.00
GE	1	2	0	0	0	0	0	0 \$ -
GE	1	2	0	0	0	0	0	0 \$ -
GE	1	2	0	0	0	0	0	0 \$ -
GE	1	2	0	0	0	0	0	0 \$ -
GE	2	1	1	462	2.13	0.14	0.07	0 \$ 20.00
GE	2	1	1	462	2.13	0.14	0.07	0 \$ 20.00
GE	2	1	1	462	2.13	0.14	0.07	0 \$ 20.00
GE	2	1	1	462	2.13	0.14	0.07	0 \$ 20.00
GE	2	1	1	462	2.13	0.14	0.07	0 \$ 20.00
GE	2	2	1	200	1	0	1	0 \$ 50.00
GE	2	2	1	200	1	0	1	0 \$ 50.00
GE	2	2	1	200	1	0	1	0 \$ 50.00
GE	2	2	1	200	1	0	1	0 \$ 50.00
GE	3	1	1	268	1.7	0	0	0 \$ -
GE	3	1	1	268	1.7	0	0	0 \$ -
GE	3	1	1	268	1.7	0	0	0 \$ -
GE	3	1	1	268	1.7	0	0	0 \$ -
GE	3	1	1	268	1.7	0	0	0 \$ -
GE	3	2	1	169	14	3	0	3 \$ 10.00
GE	3	2	1	169	14	3	0	3 \$ 10.00
GE	3	2	1	169	14	3	0	3 \$ 10.00
GE	3	2	1	169	14	3	0	3 \$ 10.00
GE	4	1	0	0	0	0	0	0 \$ -
GE	4	1	0	0	0	0	0	0 \$ -
GE	4	1	0	0	0	0	0	0 \$ -
GE	4	1	0	0	0	0	0	0 \$ -
GE	4	1	0	0	0	0	0	0 \$ -
GE	4	2	1	115	3.6	0.075	1	0 \$ 50.00
GE	4	2	1	115	3.6	0.075	1	0 \$ 50.00
GE	4	2	1	115	3.6	0.075	1	0 \$ 50.00
GE	4	2	1	115	3.6	0.075	1	0 \$ 50.00
SE	5	1						
SE	5	1						
SE	5	1						
SE	5	1						
SE	5	2						
SE	5	2						
SE	5	2						
SE	5	2						

SUMMARY PJP SPECIFICATIONS – STAGE 1

ELEMENTARY SCHOOL Alternative a - Total FTEs			Poverty Change			Special Education Change	ELL Change	Small School	Very Small School
			Base Models (No Free/Reduced Lunch or ELL)		Model I	Model II	Model III	Model IV	Model V
			Base Model - Small Schools	Base Model - Average School Size	Base Model - Large Schools	Low poverty, low ELL, average special education	Average poverty, low ELL, average special education	High poverty, low ELL, average special education	Average poverty, high ELL, average special education
ENROLLMENT	Students	Students	Students	Students	Students	Students	Students	Students	Students
Total Enrollment (K-5)	414	558	774	558	558	558	558	414	120
District Enrollment	4,225	4,225	4,225	4,225	4,225	4,225	4,225		
STUDENT DEMOGRAPHICS	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Eligible for Free and Reduced Price Lunch Program	0.0%	0.0%	0.0%	4.5%	34.2%	91.6%	34.2%	34.2%	34.2%
English Language Learners	0.0%	0.0%	0.0%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Special Education (Specific Learning Disability & Speech Language)	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	9.8%	6.7%	6.7%
Special Education (All other disabilities)	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	4.4%	3.1%	3.1%
Special Education Overall	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%

KINDERGARTEN PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served (1/6 th of Total Enrollment)			Pupils Served		Pupils Served													
Pupils Served	69	93	129	93		93		93		93		93		93		69		20	
Personnel																			
Core Classroom Teachers	4.09	5.51	7.65	5.51	5.51	5.51	5.51	5.51	5.51	5.51	5.51	5.51	5.51	4.09	4.09	1.19	1.19		
Special Education Teachers	0.46	0.69	1.11	0.70	0.70	0.75	0.75	0.86	0.86	0.75	0.75	0.75	0.75	0.51	0.51	0.12	0.12		
Substitutes	0.23	0.31	0.44	0.31	0.31	0.31	0.31	0.32	0.32	0.31	0.31	0.31	0.31	0.23	0.23	0.01	0.01		
General Education Aides	1.07	0.96	0.32	1.09	1.09	1.93	1.93	3.58	3.58	1.93	1.93	1.93	1.93	1.79	1.79	0.73	0.73		
Special Education Aides	0.20	0.27	0.37	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.20	0.20	0.06	0.06		
Non-Personnel Expenditures																			
Instructional Supplies & Materials	\$7,434	\$10,685	\$16,202	\$10,843	\$10,843	\$11,884	\$11,884	\$13,899	\$13,899	\$11,884	\$11,884	\$11,884	\$11,884	\$8,325	\$8,325	\$2,121	\$2,121		

GRADES 1-5 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served (5/6 th of Total Enrollment)			Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served	
Pupils Served	345	465	645	465		465		465		465		465		465		345		100	
Personnel																			
Core Classroom Teachers	20.04	27.39	38.83	27.71	27.71	29.57	29.57	33.29	33.29	29.57	29.57	29.57	29.57	21.62	21.62	6.10	6.10		
Special Education Teachers	0.93	0.33	0.00	4.00	4.00	4.60	4.60	5.81	5.81	6.23	6.23	4.60	4.60	4.07	4.07	1.60	1.60		
Other Teachers	9.87	5.67	0.00	6.18	6.18	9.63	9.63	16.32	16.32	9.63	9.63	9.63	9.63	12.82	12.82	7.07	7.07		
Substitutes	1.54	1.67	1.94	1.89	1.89	2.19	2.19	2.77	2.77	2.27	2.27	2.19	2.19	1.93	1.93	0.74	0.74		
General Education Aides	6.93	2.09	0.00	2.60	2.60	5.86	5.86	12.14	12.14	5.86	5.86	5.86	5.86	9.69	9.69	5.99	5.99		
Special Education Aides	0.00	0.00	0.00	2.28	2.28	3.44	3.44	5.63	5.63	5.25	5.25	3.44	3.44	3.45	3.45	1.49	1.49		
Non-Personnel Expenditures																			
Instructional Supplies & Materials	\$31,964	\$53,810	\$96,956	\$57,121	\$57,121	\$78,985	\$78,985	\$121,249	\$121,249	\$78,985	\$78,985	\$78,985	\$78,985	\$50,643	\$50,643	\$9,970	\$9,970		

GRADES K-5 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served (Total Enrollment)			Pupils Served		Pupils Served											
Pupils Served	414	558	774	558		558		558		558		558		414		120	
Personnel																	
Guidance Counselors	0.70	0.95	1.32	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.70	0.70	0.20	0.20
School Psychologists	0.75	0.45	0.00	0.45	0.45	0.84	0.84	1.62	1.62	0.78	0.78	0.84	0.84	1.14	1.14	0.58	0.58
Social Workers	0.95	0.61	0.00	0.39	0.39	1.00	1.00	2.23	2.23	0.84	0.84	1.00	1.00	1.19	1.19	0.66	0.66
Other Pupil Support	1.66	1.40	0.15	1.40	1.40	1.28	1.28	1.06	1.06	1.28	1.28	1.28	1.28	1.61	1.61	0.82	0.82
Special Education Other Pupil Support	0.87	1.90	4.02	1.56	1.56	1.12	1.12	0.22	0.22	1.00	1.00	1.12	1.12	0.34	0.34	0.00	0.00
Nurses	0.91	0.95	0.77	0.95	0.95	1.06	1.06	1.23	1.23	1.06	1.06	1.06	1.06	1.06	1.06	0.41	0.41
Librarians/Media Specialists	0.95	1.00	0.77	1.00	1.00	1.12	1.12	1.23	1.23	1.12	1.12	1.12	1.12	0.95	0.95	0.42	0.42
Principals	0.95	1.06	1.01	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	0.95	0.95	0.38	0.38
Assistant Principals	0.25	0.61	1.32	0.61	0.61	0.78	0.78	1.12	1.12	0.78	0.78	0.78	0.78	0.43	0.43	0.02	0.02
Other Prof. Staff	0.75	0.61	0.08	0.73	0.73	1.23	1.23	2.23	2.23	1.23	1.23	1.23	1.23	1.12	1.12	0.50	0.50
Clerical/Data Entry	1.78	2.68	4.41	2.79	2.79	3.46	3.46	4.74	4.74	3.46	3.46	3.46	3.46	2.34	2.34	0.54	0.54
Security	0.00	0.00	0.62	0.11	0.11	0.73	0.73	1.90	1.90	0.73	0.73	0.73	0.73	0.26	0.26	0.00	0.00
Non-Personnel Expenditures																	
Equipment & Technology	\$1,147	\$15,194	\$49,466	\$23,933	\$23,933	\$81,619	\$81,619	\$193,107	\$193,107	\$81,619	\$81,619	\$81,619	\$81,619	\$50,425	\$50,425	\$8,625	\$8,625
Student Activities	\$17,562	\$23,670	\$32,833	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$17,562	\$17,562	\$5,090	\$5,090
Professional Development	\$75,824	\$102,198	\$141,758	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$75,824	\$75,824	\$21,978	\$21,978
Assessment	\$13,302	\$17,929	\$24,869	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$13,302	\$13,302	\$3,856	\$3,856
Food	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PRESCHOOL PROGRAM INCLUDING SPECIAL EDUCATION																		
Does educational program require a preschool component (Type Y for yes or N for no)?				Require Preschool	Y													
Which reference numbers would you like to see, those corresponding to universal coverage or only those that are targeted the free/reduced lunch eligible population (A=all, F=free/reduced lunch)?		Base Model Reference Numbers		F	Model I Reference Numbers	F	Model II Reference Numbers	F	Model III Reference Numbers	F	Model IV Reference Numbers	F	Model V Reference Numbers	F	Model VI Reference Numbers	F	Model VII Reference Numbers	F
If yes, will preschool be full or half-day program (type F for full or H for half)?				F	Full or Half-Day	F												
If yes, what percentage of the four-year old population is to be served?				28.0%	Percentage of Four-Year Old Population Served	46.8%	Percentage of Four-Year Old Population Served	83.2%	Percentage of Four-Year Old Population Served	46.8%	Percentage of Four-Year Old Population Served	46.8%	Percentage of Four-Year Old Population Served	46.8%	Percentage of Four-Year Old Population Served	46.8%	Percentage of Four-Year Old Population Served	46.8%
Pupils Served			Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	
Pupils Served	17	23	32	26	26	44	44	77	77	44	44	44	44	32	32	9	9	
Personnel																		
Core Classroom Teachers	1.31	1.77	2.46	2.00	2.00	3.38	3.38	5.92	5.92	3.38	3.38	3.38	3.38	2.46	2.46	0.69	0.69	
Special Education Teachers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Substitutes	0.07	0.09	0.12	0.10	0.10	0.17	0.17	0.30	0.30	0.17	0.17	0.17	0.17	0.12	0.12	0.03	0.03	
General Education Aides	1.29	1.74	2.42	1.97	1.97	3.33	3.33	5.83	5.83	3.33	3.33	3.33	3.33	2.42	2.42	0.68	0.68	
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$1,344	\$1,818	\$2,530	\$2,055	\$2,055	\$3,478	\$3,478	\$6,087	\$6,087	\$3,478	\$3,478	\$3,478	\$3,478	\$2,530	\$2,530	\$711	\$711	

EARLY CHILDHOOD DEVELOPMENT (ECD)																		
Does educational program require an early childhood component (Y=yes or N=no)?		Require Early Childhood Development	Y	Require Early Childhood Development	Y	Require Early Childhood Development	Y	Require Early Childhood Development	Y	Require Early Childhood Development	Y	Require Early Childhood Development	Y	Require Early Childhood Development	Y	Require Early Childhood Development	Y	
Which reference numbers would you like to see, those corresponding to universal coverage or only those that are targeted the free/reduced lunch eligible population (A=all, F=free/reduced lunch)?	Base Model Reference Numbers	F	Model I Reference Numbers	F	Model II Reference Numbers	F	Model III Reference Numbers	F	Model IV Reference Numbers	F	Model V Reference Numbers	F	Model VI Reference Numbers	F	Model VII Reference Numbers	F		
If yes, will preschool be full or half-day program (type F for full or H for half)?		Full or Half-Day	F	Full or Half-Day	F	Full or Half-Day	F	Full or Half-Day	F	Full or Half-Day	F	Full or Half-Day	F	Full or Half-Day	F	Full or Half-Day	F	
If yes, what percentage of the three-year old population is to be served?		Percentage of Three-Year Old Population Served	8.6%	Percentage of Three-Year Old Population Served	17.9%	Percentage of Three-Year Old Population Served	35.9%	Percentage of Three-Year Old Population Served	17.9%	Percentage of Three-Year Old Population Served	17.9%	Percentage of Three-Year Old Population Served	17.9%	Percentage of Three-Year Old Population Served	17.9%	Percentage of Three-Year Old Population Served	17.9%	
	Pupils Served			Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	
Pupils Served	5	7	9	8	8	17	17	33	33	17	17	17	17	12	12	4	4	
Personnel																		
Core Classroom Teachers	0.31	0.43	0.56	0.50	0.50	1.05	1.05	2.05	2.05	1.05	1.05	1.05	1.05	0.74	0.74	0.25	0.25	
Special Education Teachers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Substitutes	0.02	0.02	0.03	0.02	0.02	0.05	0.05	0.10	0.10	0.05	0.05	0.05	0.05	0.04	0.04	0.01	0.01	
General Education Aides	0.31	0.43	0.56	0.50	0.50	1.05	1.05	2.05	2.05	1.05	1.05	1.05	1.05	0.74	0.74	0.25	0.25	
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$302	\$423	\$544	\$483	\$483	\$1,027	\$1,027	\$1,994	\$1,994	\$1,027	\$1,027	\$1,027	\$1,027	\$725	\$725	\$242	\$242	

EXTENDED DAY		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		
Does educational program require an extended day component (Y=yes or N=no)?																
If yes, what proportion of the total K-5 population is to be served?		Percentage of Total Enrollment Served	0.0%	Percentage of Total Enrollment Served	15.4%	Percentage of Total Enrollment Served	46.0%	Percentage of Total Enrollment Served	15.4%							
	Pupils Served			Pupils Served	Pupils Served											
Pupils Served	0	0	0	0	86	86	257	257	86	86	86	86	64	64	18	18
Personnel																
Core Classroom Teachers	0.00	0.00	0.00	0.00	0.00	1.51	1.51	4.52	4.52	1.51	1.51	1.51	1.13	1.13	0.32	0.33
Special Education Teachers	0.00	0.00	0.00	0.00	0.00	0.06	0.06	0.18	0.18	0.06	0.06	0.06	0.05	0.05	0.01	0.01
Substitutes	0.00	0.00	0.00	0.00	0.00	0.08	0.08	0.24	0.24	0.08	0.08	0.08	0.06	0.06	0.02	0.02
General Education Aides	0.00	0.00	0.00	0.00	0.00	0.11	0.11	0.34	0.34	0.11	0.11	0.11	0.08	0.08	0.02	0.03
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.06	0.06	0.02	0.02	0.02	0.01	0.01	0.00	0.00
Non-Personnel Expenditures																
Instructional Supplies & Materials	\$0	\$0	\$0	\$0	\$0	\$6,116	\$6,116	\$18,276	\$18,276	\$6,116	\$6,116	\$6,116	\$4,551	\$4,551	\$1,280	\$1,351

EXTENDED YEAR		Require Extended Year Y		Require Extended Year Y		Require Extended Year Y		Require Extended Year Y		Require Extended Year Y		Require Extended Year Y		Require Extended Year Y		
Does educational program require an extended day component (Y=yes or N=no)?																
If yes, what proportion of the total K-5 population is to be served?		Percentage of Total Enrollment Served	8.6%	Percentage of Total Enrollment Served	24.1%	Percentage of Total Enrollment Served	53.9%	Percentage of Total Enrollment Served	24.1%							
	Pupils Served			Pupils Served	Pupils Served											
Pupils Served	26	35	49	48	48	134	134	301	301	134	134	134	100	100	29	29
Personnel																
Core Classroom Teachers	0.42	0.56	0.79	0.77	0.77	2.15	2.15	4.83	4.83	2.15	2.15	2.15	1.60	1.60	0.47	0.47
Special Education Teachers	0.11	0.15	0.21	0.21	0.21	0.59	0.59	1.32	1.32	0.59	0.59	0.59	0.44	0.44	0.13	0.13
Substitutes	0.03	0.04	0.05	0.05	0.05	0.14	0.14	0.31	0.31	0.14	0.14	0.14	0.10	0.10	0.03	0.03
General Education Aides	0.12	0.17	0.23	0.23	0.23	0.64	0.64	1.44	1.44	0.64	0.64	0.64	0.48	0.48	0.14	0.14
Special Education Aides	0.11	0.15	0.20	0.20	0.20	0.56	0.56	1.25	1.25	0.56	0.56	0.56	0.42	0.42	0.12	0.12
Non-Personnel Expenditures																
Instructional Supplies & Materials	\$679	\$915	\$1,280	\$1,254	\$1,254	\$3,501	\$3,501	\$7,865	\$7,865	\$3,501	\$3,501	\$3,501	\$2,613	\$2,613	\$758	\$758

MIDDLE SCHOOL			Poverty Change			Special Education Change	ELL Change	Small School	Very Small School		
			Base Models (No Free/Reduced Lunch or ELL)	Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII	
Alternative a - Total FTEs			Base Model - Small Schools	Base Model - Average School Size	Base Model - Large Schools	Low poverty, low ELL, average special education	Average poverty, low ELL, average special education	High poverty, low ELL, average special education	Average poverty, low ELL, high special education	Average poverty, high ELL, average special education	Average poverty, low ELL, average special education
ENROLLMENT			Students	Students	Students	Students	Students	Students	Students	Students	
Total Enrollment (6-8)	543	792	951	792	792	792	792	792	543	180	
District Enrollment	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225			
STUDENT DEMOGRAPHICS			Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
Eligible for Free and Reduced Price Lunch Program	0.0%	0.0%	0.0%	4.5%	34.2%	91.6%	34.2%	34.2%	34.2%	34.2%	
English Language Learners	0.0%	0.0%	0.0%	0.9%	0.9%	0.9%	0.9%	18.8%	0.9%	0.9%	
Special Education (Specific Learning Disability & Speech Language)	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	9.8%	6.7%	6.7%	6.7%	
Special Education (All other disabilities)	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	4.4%	3.1%	3.1%	3.1%	
Special Education Overall	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%	9.8%	

GRADES 6-8 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served		Pupils Served											
Pupils Served	543	792	951	792		792		792		792		792		543		180	
Personnel																	
Core Classroom Teachers	28.78	41.98	50.40	41.98	41.98	41.98	41.98	41.98	41.98	41.98	41.98	41.98	41.98	29.48	29.48	10.88	10.88
Special Education Teachers	0.65	2.46	4.09	6.81	6.81	6.73	6.73	6.65	6.65	8.71	8.71	6.73	6.73	3.69	3.69	0.70	0.70
Other Teachers	16.29	14.10	9.61	14.34	14.34	15.92	15.92	18.93	18.93	15.92	15.92	15.92	15.92	17.47	17.47	8.99	8.99
Substitutes	2.29	2.93	3.20	3.16	3.16	3.23	3.23	3.38	3.38	3.33	3.33	3.23	3.23	2.53	2.53	1.03	1.03
General Education Aides	5.43	7.92	9.51	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	6.37	6.37	2.90	2.90
Special Education Aides	1.52	3.88	5.90	5.46	5.46	4.36	4.36	2.14	2.14	5.15	5.15	4.36	4.36	1.97	1.97	0.07	0.07
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$40,475	\$137,040	\$224,360	\$143,297	\$143,297	\$184,576	\$184,576	\$264,370	\$264,370	\$184,576	\$184,576	\$184,576	\$184,576	\$73,080	\$73,080	\$0	\$0

GRADES 6-8 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served			Pupils Served
Pupils Served	543	792	951	792		792		792		792		792		543		180	
Personnel																	
Guidance Counselors	1.63	3.25	4.56	2.93	2.93	3.33	3.33	4.12	4.12	3.17	3.17	3.33	3.33	1.80	1.80	0.27	0.27
School Psychologists	0.71	1.03	1.24	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	0.71	0.71	0.23	0.23
Social Workers	1.25	1.03	0.57	0.95	0.95	1.11	1.11	1.43	1.43	1.03	1.03	1.11	1.11	1.38	1.38	0.72	0.72
Other Pupil Support	3.42	3.17	2.47	3.09	3.09	2.30	2.30	0.79	0.79	2.30	2.30	2.30	2.30	2.81	2.81	1.52	1.52
Special Education Other Pupil Support	1.14	2.06	2.76	1.19	1.19	0.79	0.79	0.00	0.00	0.40	0.40	0.79	0.79	0.20	0.20	0.00	0.00
Nurses	0.92	0.87	0.67	0.87	0.87	1.03	1.03	1.35	1.35	1.03	1.03	1.03	1.03	0.90	0.90	0.49	0.49
Librarians/Media Specialists	0.87	1.03	1.14	1.11	1.11	1.27	1.27	1.50	1.50	1.27	1.27	1.27	1.27	1.01	1.01	0.40	0.40
Principals	0.98	1.03	0.86	1.03	1.03	1.03	1.03	1.11	1.11	1.03	1.03	1.03	1.03	1.00	1.00	0.46	0.46
Assistant Principals	0.54	0.95	1.24	1.03	1.03	1.58	1.58	2.77	2.77	1.58	1.58	1.58	1.58	1.03	1.03	0.28	0.28
Other Prof. Staff	2.66	0.79	0.00	0.87	0.87	1.50	1.50	2.61	2.61	1.50	1.50	1.50	1.50	2.99	2.99	2.04	2.04
Clerical/Data Entry	3.53	3.48	2.85	3.64	3.64	4.99	4.99	7.52	7.52	4.99	4.99	4.99	4.99	4.49	4.49	2.08	2.08
Security	0.05	1.74	3.33	1.82	1.82	2.30	2.30	3.25	3.25	2.30	2.30	2.30	2.30	0.37	0.37	0.00	0.00
Non-Personnel Expenditures																	
Equipment & Technology	\$0	\$63,629	\$148,242	\$78,646	\$78,646	\$177,749	\$177,749	\$369,278	\$369,278	\$177,749	\$177,749	\$177,749	\$177,749	\$57,610	\$57,610	\$0	\$0
Student Activities	\$57,368	\$175,737	\$281,610	\$172,886	\$172,886	\$154,068	\$154,068	\$117,691	\$117,691	\$154,068	\$154,068	\$154,068	\$154,068	\$42,495	\$42,495	\$0	\$0
Professional Development	\$61,609	\$63,178	\$55,396	\$117,842	\$117,842	\$130,918	\$130,918	\$156,198	\$156,198	\$154,575	\$154,575	\$130,918	\$130,918	\$294,849	\$294,849	\$32,400	\$32,400
Assessment	\$19,412	\$28,314	\$33,998	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$20,239	\$20,239	\$8,944	\$8,944
Food	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

EXTENDED DAY																	
Does educational program require an extended day component (Y=yes or N=no)?	If yes, what proportion of the total grade 6-8 population is to be served?	Require Extended Day	Y	Require Extended Day	Y												
		Percentage of Total Enrollment Served	8.5%	Percentage of Total Enrollment Served	20.0%	Percentage of Total Enrollment Served	42.1%	Percentage of Total Enrollment Served	20.0%	Percentage of Total Enrollment Served	20.0%						
Pupils Served			Pupils Served	Pupils Served													
Pupils Served	37	54	65	68	68	158	158	334	334	158	158	158	158	109	109	36	36
Personnel																	
Core Classroom Teachers	0.48	0.70	0.84	0.88	0.88	2.04	2.04	4.32	4.32	2.04	2.04	2.04	2.04	1.41	1.41	0.47	0.47
Special Education Teachers	0.04	0.06	0.07	0.08	0.08	0.18	0.18	0.38	0.38	0.18	0.18	0.18	0.18	0.12	0.12	0.04	0.04
Substitutes	0.03	0.04	0.05	0.05	0.05	0.11	0.11	0.23	0.23	0.11	0.11	0.11	0.11	0.08	0.08	0.03	0.03
General Education Aides	0.07	0.10	0.12	0.13	0.13	0.30	0.30	0.64	0.64	0.30	0.30	0.30	0.30	0.21	0.21	0.07	0.07
Special Education Aides	0.02	0.04	0.04	0.04	0.04	0.10	0.10	0.22	0.22	0.10	0.10	0.10	0.10	0.07	0.07	0.02	0.02
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$2,210	\$3,225	\$3,882	\$4,061	\$4,061	\$9,435	\$9,435	\$19,946	\$19,946	\$9,435	\$9,435	\$9,435	\$9,435	\$6,509	\$6,509	\$2,150	\$2,150

Extended Year	Does educational program require an extended day component (Y=yes or N=no)?	If yes, what proportion of the total grade 6-8 population is to be served?	Require Extended Year															
Pupils Served			Pupils Served															
Pupils Served			16.8%	19.6%	25.2%	19.6%	19.6%	19.6%	19.6%	19.6%	19.6%	19.6%						
Pupils Served	89	129	155	190	133	190	155	190	199	190	155	190	155	89	107	30	35	
Personnel																		
Core Classroom Teachers	1.67	2.41	2.90	3.55	2.49	3.55	2.90	3.55	3.72	3.55	2.90	3.55	2.90	1.67	2.00	0.55	0.65	
Special Education Teachers	0.20	0.29	0.35	0.43	0.30	0.43	0.35	0.43	0.45	0.43	0.35	0.43	0.35	0.20	0.24	0.07	0.08	
Substitutes	0.09	0.14	0.16	0.20	0.14	0.20	0.16	0.20	0.21	0.20	0.16	0.20	0.16	0.09	0.11	0.03	0.04	
General Education Aides	0.14	0.20	0.24	0.29	0.20	0.29	0.24	0.29	0.31	0.29	0.24	0.29	0.24	0.14	0.16	0.05	0.05	
Special Education Aides	0.05	0.07	0.08	0.10	0.07	0.10	0.08	0.10	0.10	0.10	0.08	0.10	0.08	0.05	0.05	0.02	0.02	
Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$2,352	\$3,409	\$4,096	\$5,021	\$3,515	\$5,021	\$4,096	\$5,021	\$5,259	\$5,021	\$4,096	\$5,021	\$4,096	\$2,352	\$2,828	\$780	\$925	

HIGH SCHOOL				Poverty Change			Special Education Change		ELL Change		Small School		Very Small School	
Alternative a - Total FTEs	Base Models (No Free/Reduced Lunch or ELL)			Model I	Model II	Model III	Model IV		Model V		Model VI		Model VII	
	Base Model - Small Schools	Base Model - Average School Size	Base Model - Large Schools	Low poverty, low ELL, average special education	Average poverty, low ELL, average special education	High poverty, low ELL, average special education	Average poverty, low ELL, high special education		Average poverty, high ELL, average special education		Average poverty, low ELL, average special education		Average poverty, low ELL, average special education	
ENROLLMENT	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students
Total Enrollment (9-12)	576	943	1,184	943	943	943	943	943	943	943	576	576	180	180
District Enrollment	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225				
STUDENT DEMOGRAPHICS	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Eligible for Free and Reduced Price Lunch Program	0.0%	0.0%	0.0%	4.5%	34.2%	91.6%	34.2%	34.2%	34.2%	34.2%	34.2%	34.2%	34.2%	34.2%
English Language Learners	0.0%	0.0%	0.0%	0.9%	0.9%	0.9%	0.9%	0.9%	18.8%	0.9%	0.9%	0.9%	0.9%	0.9%
Special Education (Specific Learning Disability & Speech Language)	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	9.8%	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%
Special Education (All other disabilities)	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	4.4%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
Special Education Overall	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%

GRADES 9-12 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served			Pupils Served										
Pupils Served	576	943	1184	943			943			943			943			576	
Personnel																	
Core Classroom Teachers	27.30	37.63	41.44	38.85	38.85	46.49	46.49	61.39	61.39	46.49	46.49	46.49	32.85	32.85	11.69	11.69	
Special Education Teachers	0.35	0.00	0.00	7.07	7.07	7.07	7.07	7.07	7.07	10.28	10.28	7.07	4.77	4.77	1.56	1.56	
Other Teachers	12.96	21.22	26.64	21.22	21.22	21.22	21.22	21.22	21.22	21.22	21.22	21.22	24.72	13.63	13.63	4.26	4.26
Substitutes	2.03	2.94	3.40	3.36	3.36	3.74	3.74	4.48	4.48	3.90	3.90	3.74	2.56	2.56	0.88	0.88	0.88
General Education Aides	3.74	6.13	7.70	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	3.33	3.33	0.90	0.90	0.90
Special Education Aides	2.71	5.28	7.22	6.70	6.70	5.47	5.47	3.21	3.21	6.22	6.22	5.47	5.47	2.81	2.81	0.73	0.73
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$47,912	\$178,227	\$306,052	\$186,752	\$186,752	\$243,049	\$243,049	\$351,852	\$351,852	\$243,049	\$243,049	\$243,049	\$243,049	\$87,495	\$87,495	\$6,792	\$6,792

GRADES 9-12 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served													
Pupils Served	576	943	1184		943		943		943		943		943		576		180
Personnel																	
Guidance Counselors	3.51	5.47	6.63	3.96	3.96	4.43	4.43	5.28	5.28	3.68	3.68	4.43	4.43	2.84	2.84	0.96	0.96
School Psychologists	0.58	0.94	1.18	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.64	0.64	0.27	0.27
Social Workers	0.81	1.32	1.66	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	0.95	0.95	0.30	0.30
Other Pupil Support	2.65	5.38	7.58	5.09	5.09	3.02	3.02	0.00	0.00	3.02	3.02	3.02	3.02	1.25	1.25	0.18	0.18
Special Education Other Pupil Support	0.86	1.89	2.72	1.04	1.04	0.66	0.66	0.00	0.00	0.28	0.28	0.66	0.66	0.02	0.02	0.00	0.00
Nurses	0.81	0.85	0.71	0.94	0.94	1.13	1.13	1.60	1.60	1.13	1.13	1.13	1.13	1.10	1.10	0.41	0.41
Librarians/Media Specialists	0.81	1.04	0.95	1.04	1.04	1.23	1.23	1.70	1.70	1.23	1.23	1.23	1.23	0.95	0.95	0.37	0.37
Principals	0.98	1.04	0.83	1.04	1.04	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	0.83	0.83	0.40	0.40
Assistant Principals	0.86	2.17	3.32	2.17	2.17	2.36	2.36	2.64	2.64	2.36	2.36	2.36	2.36	0.97	0.97	0.16	0.16
Other Prof. Staff	2.42	1.32	0.00	1.41	1.41	2.07	2.07	3.39	3.39	2.07	2.07	2.07	2.07	3.02	3.02	1.44	1.44
Clerical/Data Entry	4.61	6.88	7.93	6.88	6.88	7.45	7.45	8.39	8.39	7.45	7.45	7.45	7.45	5.01	5.01	1.71	1.71
Security	0.00	2.36	5.09	2.45	2.45	2.55	2.55	2.83	2.83	2.55	2.55	2.55	2.55	0.00	0.00	0.00	0.00
					14.53												
Non-Personnel Expenditures																	
Equipment & Technology	\$0	\$88,199	\$206,963	\$108,322	\$108,322	\$241,144	\$241,144	\$497,847	\$497,847	\$241,144	\$241,144	\$241,144	\$241,144	\$75,991	\$75,991	\$0	\$0
Student Activities	\$220,856	\$361,574	\$453,981	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$217,648	\$217,648	\$66,568	\$66,568
Professional Development	\$85,110	\$113,773	\$121,774	\$150,220	\$150,220	\$164,808	\$164,808	\$192,985	\$192,985	\$180,179	\$180,179	\$164,808	\$164,808	\$331,776	\$331,776	\$32,400	\$32,400
Assessment	\$7,240	\$8,949	\$8,833	\$11,109	\$11,109	\$25,404	\$25,404	\$53,015	\$53,015	\$25,404	\$25,404	\$25,404	\$25,404	\$17,294	\$17,294	\$6,003	\$6,003
Food	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

EXTENDED DAY																	
Does educational program require an extended day component (Y=yes or N=no)?				Require Extended Day	Y	Require Extended Day	Y	Require Extended Day	Y	Require Extended Day	Y	Require Extended Day	Y	Require Extended Day	Y	Require Extended Day	Y
If yes, what proportion of the total grade 9-12 population is to be served?				Percentage of Total Enrollment Served	22.3%	Percentage of Total Enrollment Served	28.1%	Percentage of Total Enrollment Served	39.1%	Percentage of Total Enrollment Served	28.1%	Percentage of Total Enrollment Served	28.1%	Percentage of Total Enrollment Served	28.1%	Percentage of Total Enrollment Served	28.1%
	Pupils Served			Pupils Served	Pupils Served	Pupils Served											
Pupils Served	124	202	254	211	211	265	265	369	369	265	265	265	265	162	162	51	51
Personnel																	
Core Classroom Teachers	2.57	4.18	5.26	4.37	4.37	5.49	5.49	7.64	7.64	5.49	5.49	5.49	5.49	3.35	3.35	1.06	1.06
Special Education Teachers	0.02	0.03	0.04	0.03	0.03	0.04	0.04	0.06	0.06	0.04	0.04	0.04	0.04	0.03	0.03	0.01	0.01
Substitutes	0.13	0.21	0.27	0.22	0.22	0.28	0.28	0.39	0.39	0.28	0.28	0.28	0.28	0.17	0.17	0.05	0.05
General Education Aides	0.17	0.28	0.35	0.29	0.29	0.37	0.37	0.51	0.51	0.37	0.37	0.37	0.37	0.22	0.22	0.07	0.07
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$7,085	\$11,541	\$14,512	\$12,055	\$12,055	\$15,141	\$15,141	\$21,083	\$21,083	\$15,141	\$15,141	\$15,141	\$15,141	\$9,256	\$9,256	\$2,914	\$2,914

EXTENDED YEAR																	
Does educational program require an extended day component (Y=yes or N=no)?				Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y
If yes, what proportion of the total grade 9-12 population is to be served?				Percentage of Total Enrollment Served	9.6%	Percentage of Total Enrollment Served	14.4%	Percentage of Total Enrollment Served	23.7%	Percentage of Total Enrollment Served	14.4%	Percentage of Total Enrollment Served	14.4%	Percentage of Total Enrollment Served	14.4%	Percentage of Total Enrollment Served	14.4%
	Pupils Served			Pupils Served	Pupils Served	Pupils Served											
Pupils Served	93	153	192	91	91	136	136	224	224	136	136	136	136	83	83	26	26
Personnel																	
Core Classroom Teachers	2.08	3.43	4.30	2.04	2.04	3.05	3.05	5.02	5.02	3.05	3.05	3.05	3.05	1.86	1.86	0.58	0.58
Special Education Teachers	0.29	0.48	0.60	0.28	0.28	0.42	0.42	0.70	0.70	0.42	0.42	0.42	0.42	0.26	0.26	0.08	0.08
Substitutes	0.12	0.20	0.24	0.12	0.12	0.17	0.17	0.29	0.29	0.17	0.17	0.17	0.17	0.11	0.11	0.03	0.03
General Education Aides	0.21	0.35	0.44	0.21	0.21	0.31	0.31	0.52	0.52	0.31	0.31	0.31	0.31	0.19	0.19	0.06	0.06
Special Education Aides	0.28	0.45	0.57	0.27	0.27	0.40	0.40	0.66	0.66	0.40	0.40	0.40	0.40	0.25	0.25	0.08	0.08
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$2,458	\$4,044	\$5,074	\$2,405	\$2,405	\$3,594	\$3,594	\$5,920	\$5,920	\$3,594	\$3,594	\$3,594	\$3,594	\$2,194	\$2,194	\$687	\$687

SUMMARY PJP SPECIFICATIONS FOR DISTRICT-LEVEL SPECIAL EDUCATION RESOURCES – STAGE 1

DISTRICT LEVEL EXPENDITURES FOR SPECIAL EDUCATION

Alternative a - Total FTEs

ENROLLMENT	Students	
	4,225	
	Reference	Input
INDEX OF TOTAL EXPENDITURE PER PUPIL (100 = Reference Column in Blue)	100.0	100.0

Pupils Served	
K-12 SPECIAL EDUCATION RESOURCES	4,225

Personnel	1.13	1.13
Special Class Teacher	1.13	1.13
Resource Specialist	0.00	0.00
Instructional Paraprofessionals	0.75	0.75
Adaptive PE	0.00	0.00
Physical Therapist	1.10	1.10
Occupational Therapist	1.10	1.10
Related Services Aides (e.g., PT aide, OT aide)	2.00	2.00
Speech Pathologist	1.50	1.50
Audiologist	0.20	0.20
Psychologist/Diagnostician	0.35	0.35
Guidance Counselor	0.00	0.00
School Social Worker	0.88	0.88
School Nurse	0.00	0.00
Personal Health Aides	1.00	1.00
Vision Screen Tech	0.00	0.00
Orientation & Mobility	0.20	0.20
Interpreter	1.75	1.75
Home/Hospital Instruction	1.00	1.00
Community-Based Services/Vocational Ed Specialist	0.00	0.00
Extended Time (e.g., after-school)	0.00	0.00
Summer School	0.90	0.90

TOTAL EXPENDITURE	\$772,862	\$772,862
TOTAL EXPENDITURE PER PUPIL	\$183	\$183
INDEX OF TOTAL EXPENDITURE PER PUPIL (100 = Reference Column in Blue)	100.0	100.0

PRESCHOOL SPECIAL EDUCATION RESOURCES		
Personnel		
Special Education Teachers	4.19	4.19
Special Education Paraprofessionals	3.19	3.19
Special Education Social Workers	0.00	0.00
Special Education Other Pupil Support	3.00	3.00

Non-Personnel Expenditures (Assuming Special Education Incidence Rate of 15.5%)		
Instructional Supplies & Materials	\$125,391	\$125,391
Equipment & Technology	\$107,080	\$107,080
Student Activities	\$24,759	\$24,759
Professional Development	\$166,337	\$166,337
Assessment	\$22,187	\$22,187

TOTAL EXPENDITURE	\$1,883,945,506	\$1,883,945,506
TOTAL EXPENDITURE PER PUPIL	\$445,904	\$445,904
INDEX OF TOTAL EXPENDITURE PER PUPIL (100 = Reference Column in Blue)	100.0	100.0

SUMMARY PJP SPECIFICATIONS – STAGE 2

(Note: changes from Stage 1 appear in pink highlighted cells)

ELEMENTARY SCHOOL				Poverty Change			Special Education Change	ELL Change	Small School	Very Small School		
Alternative a - Total FTEs		Base Models (No Free/Reduced Lunch or ELL)		Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII		
				Base Model - Small Schools	Base Model - Average School Size	Base Model - Large Schools	Low poverty, low ELL, average special education	Average poverty, low ELL, average special education	High poverty, low ELL, average special education	Average poverty, high ELL, high special education	Average poverty, high ELL, average special education	Average poverty, low ELL, average special education
ENROLLMENT	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	
Total Enrollment (K-5)	414	558	774	558	558	558	558	558	414	120		
District Enrollment	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225				
STUDENT DEMOGRAPHICS	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
Eligible for Free and Reduced Price Lunch Program	0.0%	0.0%	0.0%	4.5%	34.2%	91.6%	34.2%	34.2%	34.2%	34.2%	34.2%	
English Language Learners	0.0%	0.0%	0.0%	0.9%	0.9%	0.9%	0.9%	18.8%	0.9%	0.9%	0.9%	
Special Education (Specific Learning Disability & Speech Language)	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	9.8%	6.7%	6.7%	6.7%	6.7%	
Special Education (All other disabilities)	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	4.4%	3.1%	3.1%	3.1%	3.1%	
Special Education Overall	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%	9.8%	9.8%	

KINDERGARTEN PROGRAM INCLUDING SPECIAL EDUCATION			Pupils Served (1/6 th of Total Enrollment)			Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served	
Pupils Served			69	93	129	93	93	93	93	93	93	93	93	69	20		
Personnel																	
Core Classroom Teachers	4.09	5.51	7.65	5.51	5.51	5.51	5.51	5.51	5.51	5.51	5.51	5.51	4.09	4.09	1.19	1.19	
Special Education Teachers	0.46	0.69	1.11	0.70	0.70	0.75	0.75	0.86	0.86	0.75	0.75	0.75	0.51	0.51	0.12	0.12	
Substitutes	0.23	0.31	0.44	0.31	0.31	0.31	0.31	0.32	0.32	0.31	0.31	0.31	0.23	0.23	0.01	0.01	
General Education Aides	1.07	0.96	0.32	1.09	1.09	1.93	1.93	3.58	3.58	1.93	1.93	1.93	1.79	1.79	0.73	0.73	
Special Education Aides	0.20	0.27	0.37	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.20	0.20	0.06	0.06	
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$7,434	\$10,685	\$16,202	\$10,843	\$10,843	\$11,884	\$11,884	\$13,899	\$13,899	\$11,884	\$11,884	\$11,884	\$8,325	\$8,325	\$2,121	\$2,121	

GRADES 1-5 PROGRAM INCLUDING SPECIAL EDUCATION		Pupils Served (5/6 th of Total Enrollment)			Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served			
Pupils Served		345	465	645	465		465		465		465		465		465		345		100	
Personnel																				
Core Classroom Teachers		20.04	27.39	38.83	27.71	27.71	29.57	29.57	33.29	33.29	29.57	29.57	29.57	29.57	21.62	21.62	6.10	6.10		
Special Education Teachers		0.93	0.33	0.00	4.00	4.00	4.60	4.60	5.81	5.81	6.23	6.23	4.60	4.60	4.07	4.07	1.60	1.60		
Other Teachers		9.87	5.67	0.00	6.18	6.18	9.63	9.63	16.32	16.32	9.63	9.63	9.63	9.63	12.82	12.82	7.07	7.07		
Substitutes		1.54	1.67	1.94	1.89	1.89	2.19	2.19	2.77	2.77	2.27	2.27	2.19	2.19	1.93	1.93	0.74	0.74		
General Education Aides		6.93	2.09	0.00	2.60	2.60	5.86	5.86	12.14	12.14	5.86	5.86	5.86	5.86	9.69	9.69	5.99	5.99		
Special Education Aides		0.00	0.00	0.00	2.28	2.28	3.44	3.44	5.63	5.63	5.25	5.25	3.44	3.44	3.45	3.45	1.49	1.49		
Non-Personnel Expenditures																				
Instructional Supplies & Materials		\$31,964	\$53,810	\$96,956	\$57,121	\$57,121	\$78,985	\$78,985	\$121,249	\$121,249	\$78,985	\$78,985	\$78,985	\$78,985	\$78,985	\$78,985	\$50,643	\$50,643	\$9,970	\$9,970

GRADES K-5 PROGRAM INCLUDING SPECIAL EDUCATION		Pupils Served (Total Enrollment)			Pupils Served		Pupils Served		Pupils Served											
Pupils Served		414	558	774	558		558		558		558		558		558		414		120	
Personnel																				
Guidance Counselors		0.70	0.95	1.32	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.70	0.70	0.20	0.20		
School Psychologists		0.75	0.45	0.00	0.45	0.45	0.84	0.84	1.62	1.62	0.78	0.78	0.84	0.84	1.14	1.14	0.58	0.58		
Social Workers		0.95	0.61	0.00	0.39	0.39	1.00	1.00	2.23	2.23	0.84	0.84	1.00	1.00	1.19	1.19	0.66	0.66		
Other Pupil Support		1.66	1.40	0.15	1.40	1.40	1.28	1.28	1.06	1.06	1.28	1.28	1.28	1.28	1.61	1.61	0.82	0.82		
Special Education Other Pupil Support		0.87	1.90	4.02	1.56	1.56	1.12	1.12	0.22	0.22	1.00	1.00	1.12	1.12	0.34	0.34	0.00	0.00		
Nurses		0.91	0.95	0.77	0.95	0.95	1.06	1.06	1.23	1.23	1.06	1.06	1.06	1.06	1.06	1.06	0.41	0.41		
Librarians/Media Specialists		0.95	1.00	0.77	1.00	1.00	1.12	1.12	1.23	1.23	1.12	1.12	1.12	1.12	0.95	0.95	0.42	0.42		
Principals		0.95	1.06	1.01	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	0.95	0.95	0.38	0.38		
Assistant Principals		0.25	0.61	1.32	0.61	0.61	0.78	0.78	1.12	1.12	0.78	0.78	0.78	0.78	0.43	0.43	0.02	0.02		
Other Prof. Staff		0.75	0.61	0.08	0.73	0.73	1.23	1.23	2.23	2.23	1.23	1.23	1.23	1.23	1.12	1.12	0.50	0.50		
Clerical/Data Entry		1.78	2.68	4.41	2.79	2.79	3.46	3.46	4.74	4.74	3.46	3.46	3.46	3.46	2.34	2.34	0.54	0.54		
Security		0.00	0.00	0.62	0.11	0.11	0.73	0.73	1.90	1.90	0.73	0.73	0.73	0.73	0.26	0.26	0.00	0.00		
Non-Personnel Expenditures																				
Equipment & Technology		\$1,147	\$15,194	\$49,466	\$23,933	\$23,933	\$81,619	\$81,619	\$193,107	\$193,107	\$81,619	\$81,619	\$81,619	\$81,619	\$50,425	\$50,425	\$8,625	\$8,625		
Student Activities		\$17,562	\$23,670	\$32,833	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$17,562	\$17,562	\$5,090	\$5,090		
Professional Development		\$75,824	\$102,198	\$141,758	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$75,824	\$75,824	\$21,978	\$21,978		
Assessment		\$13,302	\$17,929	\$24,869	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$13,302	\$13,302	\$3,856	\$3,856		
Food		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

PRESCHOOL PROGRAM INCLUDING SPECIAL EDUCATION																	
Does educational program require a preschool component (Type Y for yes or N for no)?				Require Preschool	Y	Require Preschool	Y	Require Preschool	Y	Require Preschool	Y	Require Preschool	Y	Require Preschool	Y	Require Preschool	Y
Which reference numbers would you like to see, those corresponding to universal coverage or only those that are targeted the free/reduced lunch eligible population (A=all, F=free/reduced lunch)?	Base Model Reference Numbers	F	Model I Reference Numbers	F	Model II Reference Numbers	F	Model III Reference Numbers	F	Model IV Reference Numbers	F	Model V Reference Numbers	F	Model VI Reference Numbers	F	Model VII Reference Numbers	F	
If yes, will preschool be full or half-day program (type F for full or H for half)?			Full or Half-Day	F													
If yes, what percentage of the four-year old population is to be served?			Percentage of Four-Year Old Population Served	10.0%	Percentage of Four-Year Old Population Served	40.0%	Percentage of Four-Year Old Population Served	91.6%	Percentage of Four-Year Old Population Served	40.0%	Percentage of Four-Year Old Population Served	40.0%	Percentage of Four-Year Old Population Served	40.0%	Percentage of Four-Year Old Population Served	40.0%	
	Pupils Served			Pupils Served	Pupils Served	Pupils Served											
Pupils Served	17	23	32	9	9	37	37	85	85	37	37	37	37	28	28	8	8
Personnel																	
Core Classroom Teachers	1.31	1.77	2.46	0.69	0.69	2.84	2.84	6.54	6.54	2.84	2.84	2.84	2.84	2.15	2.15	0.62	0.62
Special Education Teachers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substitutes	0.07	0.09	0.12	0.03	0.03	0.14	0.14	0.33	0.33	0.14	0.14	0.14	0.14	0.11	0.11	0.03	0.03
General Education Aides	1.29	1.74	2.42	0.68	0.68	2.80	2.80	6.43	6.43	2.80	2.80	2.80	2.80	2.12	2.12	0.61	0.61
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$1,344	\$1,818	\$2,530	\$711	\$711	\$2,925	\$2,925	\$6,719	\$6,719	\$2,925	\$2,925	\$2,925	\$2,925	\$2,213	\$2,213	\$632	\$632

EARLY CHILDHOOD DEVELOPMENT (ECD)																	
Does educational program require an early childhood component (Y=yes or N=no)?				Require Early Childhood Development	Y	Require Early Childhood Development	Y	Require Early Childhood Development	Y	Require Early Childhood Development	Y	Require Early Childhood Development	Y	Require Early Childhood Development	Y	Require Early Childhood Development	Y
Which reference numbers would you like to see, those corresponding to universal coverage or only those that are targeted the free/reduced lunch eligible population (A=all, F=free/reduced lunch)?	Base Model Reference Numbers	F	Model I Reference Numbers	F	Model II Reference Numbers	F	Model III Reference Numbers	F	Model IV Reference Numbers	F	Model V Reference Numbers	F	Model VI Reference Numbers	F	Model VII Reference Numbers	F	
If yes, will preschool be full or half-day program (type F for full or H for half)?			Full or Half-Day	H													
If yes, what percentage of the three-year old population is to be served?			Percentage of Three-Year Old Population Served	10.0%	Percentage of Three-Year Old Population Served	40.0%	Percentage of Three-Year Old Population Served	91.6%	Percentage of Three-Year Old Population Served	40.0%	Percentage of Three-Year Old Population Served	40.0%	Percentage of Three-Year Old Population Served	40.0%	Percentage of Three-Year Old Population Served	40.0%	
	Pupils Served			Pupils Served	Pupils Served	Pupils Served											
Pupils Served	5	7	9	9	5	37	19	85	43	37	19	37	19	28	14	8	4
Personnel																	
Core Classroom Teachers	0.31	0.43	0.56	0.56	0.31	2.29	1.18	5.27	2.66	2.29	1.18	2.29	1.18	1.74	0.87	0.50	0.25
Special Education Teachers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substitutes	0.02	0.02	0.03	0.03	0.02	0.11	0.06	0.26	0.13	0.11	0.06	0.11	0.06	0.09	0.04	0.02	0.01
General Education Aides	0.31	0.43	0.56	0.56	0.31	2.29	1.18	5.27	2.66	2.29	1.18	2.29	1.18	1.74	0.87	0.50	0.25
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$302	\$423	\$544	\$544	\$302	\$2,235	\$1,148	\$5,135	\$2,598	\$2,235	\$1,148	\$2,235	\$1,148	\$1,692	\$846	\$483	\$242

EXTENDED DAY																				
Does educational program require an extended day component (Y=yes or N=no)?					Require Extended Day	Y														
If yes, what proportion of the total K-5 population is to be served?					Percentage of Total Enrollment Served	10.0%	Percentage of Total Enrollment Served	20.0%	Percentage of Total Enrollment Served	50.0%	Percentage of Total Enrollment Served	20.0%	Percentage of Total Enrollment Served	20.0%						
				Pupils Served	Pupils Served	Pupils Served														
Pupils Served	0	0	0	56	56	112	112	279	279	112	112	112	112	83	83	24	24			
Personnel																				
Core Classroom Teachers	0.00	0.00	0.00	0.99	0.99	1.97	1.97	4.91	4.91	1.97	1.97	1.97	1.97	1.46	1.46	0.42	0.42			
Special Education Teachers	0.00	0.00	0.00	0.04	0.04	0.08	0.08	0.20	0.20	0.08	0.08	0.08	0.08	0.06	0.06	0.02	0.02			
Substitutes	0.00	0.00	0.00	0.05	0.05	0.10	0.10	0.26	0.26	0.10	0.10	0.10	0.10	0.08	0.08	0.02	0.02			
General Education Aides	0.00	0.00	0.00	0.07	0.07	0.15	0.15	0.37	0.37	0.15	0.15	0.15	0.15	0.11	0.11	0.03	0.03			
Special Education Aides	0.00	0.00	0.00	0.01	0.01	0.03	0.03	0.06	0.06	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01			
Non-Personnel Expenditures																				
Instructional Supplies & Materials	\$0	\$0	\$0	\$3,982	\$3,982	\$7,965	\$7,965	\$19,841	\$19,841	\$7,965	\$7,965	\$7,965	\$7,965	\$5,902	\$5,902	\$1,707	\$1,707			

EXTENDED YEAR																				
Does educational program require an extended day component (Y=yes or N=no)?					Require Extended Year	Y														
If yes, what proportion of the total K-5 population is to be served?					Percentage of Total Enrollment Served	10.0%	Percentage of Total Enrollment Served	20.0%	Percentage of Total Enrollment Served	50.0%	Percentage of Total Enrollment Served	20.0%	Percentage of Total Enrollment Served	20.0%						
				Pupils Served	Pupils Served	Pupils Served														
Pupils Served	26	35	49	56	56	112	112	279	279	112	112	112	112	83	83	24	24			
Personnel																				
Core Classroom Teachers	0.42	0.56	0.79	0.90	0.90	1.80	1.80	4.48	4.48	1.80	1.80	1.80	1.80	1.33	1.33	0.38	0.38			
Special Education Teachers	0.11	0.15	0.21	0.25	0.25	0.49	0.49	1.22	1.22	0.49	0.49	0.49	0.49	0.36	0.36	0.11	0.11			
Substitutes	0.03	0.04	0.05	0.06	0.06	0.11	0.11	0.28	0.28	0.11	0.11	0.11	0.11	0.08	0.08	0.02	0.02			
General Education Aides	0.12	0.17	0.23	0.27	0.27	0.54	0.54	1.34	1.34	0.54	0.54	0.54	0.54	0.40	0.40	0.12	0.12			
Special Education Aides	0.11	0.15	0.20	0.23	0.23	0.47	0.47	1.16	1.16	0.47	0.47	0.47	0.47	0.35	0.35	0.10	0.10			
Non-Personnel Expenditures																				
Instructional Supplies & Materials	\$679	\$915	\$1,280	\$1,463	\$1,463	\$2,926	\$2,926	\$7,290	\$7,290	\$2,926	\$2,926	\$2,926	\$2,926	\$2,169	\$2,169	\$627	\$627			

MIDDLE SCHOOL				Poverty Change				Special Education Change	ELL Change	Small School	Very Small School
Alternative a - Total FTEs	Base Models (No Free/Reduced Lunch or ELL)			Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII	
	Base Model - Small Schools	Base Model - Average School Size	Base Model - Large Schools	Low poverty, low ELL, average special education	Average poverty, low ELL, average special education	High poverty, low ELL, average special education	Average poverty, low ELL, high special education	Average poverty, high ELL, average special education	Average poverty, low ELL, average special education	Average poverty, low ELL, average special education	
ENROLLMENT	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	
Total Enrollment (6-8)	543	792	951	792	792	792	792	792	543	180	
District Enrollment	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	
STUDENT DEMOGRAPHICS	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
Eligible for Free and Reduced Price Lunch Program	0.0%	0.0%	0.0%	4.5%	34.2%	91.6%	34.2%	34.2%	34.2%	34.2%	
English Language Learners	0.0%	0.0%	0.0%	0.9%	0.9%	0.9%	0.9%	18.8%	0.9%	0.9%	
Special Education (Specific Learning Disability & Speech Language)	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	9.8%	6.7%	6.7%	6.7%	
Special Education (All other disabilities)	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	4.4%	3.1%	3.1%	3.1%	
Special Education Overall	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%	9.8%	

GRADES 6-8 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served			Pupils Served			Pupils Served			Pupils Served			Pupils Served		
Pupils Served	543	792	951	792			792			792			792			543		
Personnel																		
Core Classroom Teachers	28.78	41.98	50.40	41.98	41.98	41.98	41.98	41.98	41.98	41.98	41.98	41.98	41.98	41.98	29.48	29.48	10.88	10.88
Special Education Teachers	0.65	2.46	4.09	6.81	6.81	6.73	6.73	6.65	6.65	8.71	8.71	6.73	6.73	3.69	3.69	0.70	0.70	
Other Teachers	16.29	14.10	9.61	14.34	14.34	15.92	15.92	18.93	18.93	15.92	15.92	15.92	15.92	15.92	17.47	17.47	8.99	8.99
Substitutes	2.29	2.93	3.20	3.16	3.16	3.23	3.23	3.38	3.38	3.33	3.33	3.23	3.23	2.53	2.53	1.03	1.03	
General Education Aides	5.43	7.92	9.51	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	6.37	6.37	2.90	2.90	
Special Education Aides	1.52	3.88	5.90	5.46	5.46	4.36	4.36	2.14	2.14	5.15	5.15	4.36	4.36	1.97	1.97	0.07	0.07	
Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$40,475	\$137,040	\$224,360	\$143,297	\$143,297	\$184,576	\$184,576	\$264,370	\$264,370	\$184,576	\$184,576	\$184,576	\$184,576	\$73,080	\$73,080	\$0	\$0	

GRADES 6-8 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served		Pupils Served			Pupils Served			Pupils Served			Pupils Served			Pupils Served	
Pupils Served	543	792	951	792		792			792			792			792			543	
Personnel																			
Guidance Counselors	1.63	3.25	4.56	2.93	2.93	3.33	3.33	4.12	4.12	3.17	3.17	3.33	3.33	1.80	1.80	0.27	0.27		
School Psychologists	0.71	1.03	1.24	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	0.71	0.71	0.23	0.23		
Social Workers	1.25	1.03	0.57	0.95	0.95	1.11	1.11	1.43	1.43	1.03	1.03	1.11	1.11	1.38	1.38	0.72	0.72		
Other Pupil Support	3.42	3.17	2.47	3.09	3.09	2.30	2.30	0.79	0.79	2.30	2.30	2.30	2.30	2.81	2.81	1.52	1.52		
Special Education Other Pupil Support	1.14	2.06	2.76	1.19	1.19	0.79	0.79	0.00	0.00	0.40	0.40	0.79	0.79	0.20	0.20	0.00	0.00		
Nurses	0.92	0.87	0.67	0.87	0.87	1.03	1.03	1.35	1.35	1.03	1.03	1.03	1.03	0.90	0.90	0.49	0.49		
Librarians/Media Specialists	0.87	1.03	1.14	1.11	1.11	1.27	1.27	1.50	1.50	1.27	1.27	1.27	1.27	1.01	1.01	0.40	0.40		
Principals	0.98	1.03	0.86	1.03	1.03	1.03	1.03	1.11	1.11	1.03	1.03	1.03	1.03	1.00	1.00	0.46	0.46		
Assistant Principals	0.54	0.95	1.24	1.03	1.03	1.58	1.58	2.77	2.77	1.58	1.58	1.58	1.58	1.03	1.03	0.28	0.28		
Other Prof. Staff	2.66	0.79	0.00	0.87	0.87	1.50	1.50	2.61	2.61	1.50	1.50	1.50	1.50	2.99	2.99	2.04	2.04		
Clerical/Data Entry	3.53	3.48	2.85	3.64	3.64	4.99	4.99	7.52	7.52	4.99	4.99	4.99	4.99	4.49	4.49	2.08	2.08		
Security	0.05	1.74	3.33	1.82	1.82	2.30	2.30	3.25	3.25	2.30	2.30	2.30	2.30	0.37	0.37	0.00	0.00		
Non-Personnel Expenditures																			
Equipment & Technology	\$0	\$63,629	\$148,242	\$78,646	\$78,646	\$177,749	\$177,749	\$369,278	\$369,278	\$177,749	\$177,749	\$177,749	\$177,749	\$57,610	\$57,610	\$0	\$0		
Student Activities	\$57,368	\$175,737	\$281,610	\$172,886	\$154,068	\$154,068	\$154,068	\$117,691	\$154,068	\$154,068	\$154,068	\$154,068	\$154,068	\$42,495	\$42,495	\$0	\$0		
Professional Development	\$61,609	\$63,178	\$55,396	\$117,842	\$117,842	\$130,918	\$130,918	\$156,198	\$156,198	\$154,575	\$154,575	\$130,918	\$154,575	\$294,849	\$294,849	\$32,400	\$32,400		
Assessment	\$19,412	\$28,314	\$33,998	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$20,239	\$20,239	\$8,944	\$8,944		
Food	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

EXTENDED DAY																			
Does educational program require an extended day component (Y=yes or N=no)?				Require Extended Day	Y	Require Extended Day													
If yes, what proportion of the total grade 6-8 population is to be served?				Percentage of Total Enrollment Served	10.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	60.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	30.0%						
	Pupils Served			Pupils Served	Pupils Served	Pupils Served													
Pupils Served	37	54	65	79	79	238	238	475	475	238	238	238	238	163	163	54	54		
Personnel																			
Core Classroom Teachers	0.48	0.70	0.84	1.02	1.02	3.08	3.08	6.14	6.14	3.08	3.08	3.08	3.08	2.11	2.11	0.70	0.70		
Special Education Teachers	0.04	0.06	0.07	0.09	0.09	0.27	0.27	0.54	0.54	0.27	0.27	0.27	0.27	0.18	0.18	0.06	0.06		
Substitutes	0.03	0.04	0.05	0.06	0.06	0.17	0.17	0.33	0.33	0.17	0.17	0.17	0.17	0.11	0.11	0.04	0.04		
General Education Aides	0.07	0.10	0.12	0.15	0.15	0.46	0.46	0.91	0.91	0.46	0.46	0.46	0.46	0.31	0.31	0.10	0.10		
Special Education Aides	0.02	0.04	0.04	0.05	0.05	0.16	0.16	0.31	0.31	0.16	0.16	0.16	0.16	0.11	0.11	0.04	0.04		

Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$2,210	\$3,225	\$3,882	\$4,718	\$4,718	\$14,213	\$14,213	\$28,366	\$28,366	\$14,213	\$14,213	\$14,213	\$14,213	\$9,734	\$9,734	\$3,225	\$3,225	

EXTENDED YEAR																	
Does educational program require an extended day component (Y=yes or N=no)?				Require Extended Year	Y												
If yes, what proportion of the total grade 6-8 population is to be served?				Percentage of Total Enrollment Served	10.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	60.0%	Percentage of Total Enrollment Served	30.0%						
	Pupils Served			Pupils Served	Pupils Served												
Pupils Served	89	129	155	190	79	190	238	190	475	190	238	190	238	89	163	30	54
Personnel																	
Core Classroom Teachers	1.67	2.41	2.90	3.55	1.48	3.55	4.45	3.55	8.89	3.55	4.45	3.55	4.45	1.67	3.05	0.55	1.01
Special Education Teachers	0.20	0.29	0.35	0.43	0.18	0.43	0.54	0.43	1.07	0.43	0.54	0.43	0.54	0.20	0.37	0.07	0.12
Substitutes	0.09	0.14	0.16	0.20	0.08	0.20	0.25	0.20	0.50	0.20	0.25	0.20	0.25	0.09	0.17	0.03	0.06
General Education Aides	0.14	0.20	0.24	0.29	0.12	0.29	0.37	0.29	0.73	0.29	0.37	0.29	0.37	0.14	0.25	0.05	0.08
Special Education Aides	0.05	0.07	0.08	0.10	0.04	0.10	0.12	0.10	0.24	0.10	0.12	0.10	0.12	0.05	0.08	0.02	0.03
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$2,352	\$3,409	\$4,096	\$5,021	\$2,088	\$5,021	\$6,290	\$5,021	\$12,554	\$5,021	\$6,290	\$5,021	\$6,290	\$2,352	\$4,308	\$780	\$1,427

HIGH SCHOOL				Poverty Change				Special Education Change	ELL Change	Small School	Very Small School
Alternative a - Total FTEs	Base Models (No Free/Reduced Lunch or ELL)			Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII	
	Base Model - Small Schools	Base Model - Average School Size	Base Model - Large Schools	Low poverty, low ELL, average special education	Average poverty, low ELL, average special education	High poverty, low ELL, average special education	Average poverty, low ELL, high special education	Average poverty, high ELL, average special education	Average poverty, low ELL, average special education	Average poverty, low ELL, average special education	
ENROLLMENT	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students
Total Enrollment (9-12)	576	943	1,184	943	943	943	943	943	576	180	
District Enrollment	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	
STUDENT DEMOGRAPHICS	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Eligible for Free and Reduced Price Lunch Program	0.0%	0.0%	0.0%	4.5%	34.2%	91.6%	34.2%	34.2%	34.2%	34.2%	34.2%
English Language Learners	0.0%	0.0%	0.0%	0.9%	0.9%	0.9%	0.9%	18.8%	0.9%	0.9%	0.9%
Special Education (Specific Learning Disability & Speech Language)	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	9.8%	6.7%	6.7%	6.7%	6.7%
Special Education (All other disabilities)	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	4.4%	3.1%	3.1%	3.1%	3.1%
Special Education Overall	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%	9.8%	9.8%

GRADES 9-12 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served		Pupils Served											
Pupils Served	576	943	1184	943		943		943		943		943		576		180	
Personnel																	
Core Classroom Teachers	27.30	37.63	41.44	38.85	38.85	46.49	46.49	61.39	61.39	46.49	46.49	46.49	46.49	32.85	32.85	11.69	11.69
Special Education Teachers	0.35	0.00	0.00	7.07	7.07	7.07	7.07	7.07	7.07	10.28	10.28	7.07	7.07	4.77	4.77	1.56	1.56
Other Teachers	12.96	21.22	26.64	21.22	21.22	21.22	21.22	21.22	21.22	21.22	21.22	21.22	24.72	13.63	13.63	4.26	4.26
Substitutes	2.03	2.94	3.40	3.36	3.36	3.74	3.74	4.48	4.48	3.90	3.90	3.74	3.74	2.56	2.56	0.88	0.88
General Education Aides	3.74	6.13	7.70	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	3.33	3.33	0.90	0.90
Special Education Aides	2.71	5.28	7.22	6.70	6.70	5.47	5.47	3.21	3.21	6.22	6.22	5.47	5.47	2.81	2.81	0.73	0.73
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$47,912	\$178,227	\$306,052	\$186,752	\$186,752	\$243,049	\$243,049	\$351,852	\$351,852	\$243,049	\$243,049	\$243,049	\$243,049	\$87,495	\$87,495	\$6,792	\$6,792

GRADES 9-12 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served															
Pupils Served	576	943	1184	943		943		943		943		943		943		576		180	
Personnel																			
Guidance Counselors	3.51	5.47	6.63	3.96	3.96	4.43	4.43	5.28	5.28	3.68	4.43	4.43	4.43	4.43	2.84	0.96	0.96		
School Psychologists	0.58	0.94	1.18	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.64	0.27	0.27		
Social Workers	0.81	1.32	1.66	1.32	1.32	2.00	1.32	3.00	1.32	2.00	1.32	2.00	1.32	2.00	0.95	0.30	0.30		
Other Pupil Support	2.65	5.38	7.58	5.09	5.09	3.02	3.02	0.00	0.00	3.02	3.02	3.02	3.02	3.02	1.25	0.18	0.18		
Special Education Other Pupil Support	0.86	1.89	2.72	1.04	1.04	0.66	0.66	0.00	0.00	0.28	0.28	0.66	0.66	0.02	0.02	0.00	0.00		
Nurses	0.81	0.85	0.71	0.94	0.94	1.13	1.13	1.60	1.60	1.13	1.13	1.13	1.13	1.13	1.10	0.41	0.41		
Librarians/Media Specialists	0.81	1.04	0.95	1.04	1.04	1.23	1.23	1.70	1.70	1.23	1.23	1.23	1.23	1.23	0.95	0.37	0.37		
Principals	0.98	1.04	0.83	1.04	1.04	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	0.83	0.40	0.40		
Assistant Principals	0.86	2.17	3.32	2.17	2.17	2.36	2.36	2.64	3.00	2.36	2.36	2.36	2.36	2.36	0.97	0.16	0.16		
Other Prof. Staff	2.42	1.32	0.00	1.41	1.41	2.07	2.07	3.39	3.39	2.07	2.07	2.07	2.07	2.07	3.02	1.44	1.44		
Clerical/Data Entry	4.61	6.88	7.93	6.88	6.88	7.45	7.45	8.39	8.39	7.45	7.45	7.45	7.45	7.45	5.01	1.71	1.71		
Security	0.00	2.36	5.09	2.45	2.45	2.55	3.50	2.83	6.00	2.55	3.50	2.55	3.50	0.00	0.00	0.00	0.00		
Non-Personnel Expenditures																			
Equipment & Technology	\$0	\$88,199	\$206,963	\$108,322	\$108,322	\$241,144	\$241,144	\$497,847	\$497,847	\$241,144	\$241,144	\$241,144	\$241,144	\$75,991	\$75,991	\$0	\$0		
Student Activities	\$220,856	\$361,574	\$453,981	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$217,648	\$217,648	\$66,568	\$66,568		
Professional Development	\$85,110	\$113,773	\$121,774	\$150,220	\$150,220	\$164,808	\$164,808	\$192,985	\$192,985	\$180,179	\$180,179	\$164,808	\$180,179	\$331,776	\$331,776	\$32,400	\$32,400		
Assessment	\$7,240	\$8,949	\$8,833	\$11,109	\$11,109	\$25,404	\$25,404	\$53,015	\$53,015	\$25,404	\$25,404	\$25,404	\$25,404	\$17,294	\$17,294	\$6,003	\$6,003		
Food	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		

EXTENDED DAY																		
Does educational program require an extended day component (Y=yes or N=no)?																		
If yes, what proportion of the total grade 9-12 population is to be served?																		
	Pupils Served			Pupils Served														
Pupils Served	124	202	254	94	94	283	283	377	377	283	283	283	283	173	173	54	54	
Personnel																		
Core Classroom Teachers	2.57	4.18	5.26	1.95	1.95	5.86	5.86	7.81	7.81	5.86	5.86	5.86	5.86	3.58	3.58	1.12	1.12	
Special Education Teachers	0.02	0.03	0.04	0.02	0.02	0.05	0.05	0.06	0.06	0.05	0.05	0.05	0.05	0.03	0.03	0.01	0.01	
Substitutes	0.13	0.21	0.27	0.10	0.10	0.30	0.30	0.39	0.39	0.30	0.30	0.30	0.30	0.18	0.18	0.06	0.06	
General Education Aides	0.17	0.28	0.35	0.13	0.13	0.39	0.39	0.52	0.52	0.39	0.39	0.39	0.39	0.24	0.24	0.07	0.07	
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$7,085	\$11,541	\$14,512	\$5,371	\$5,371	\$16,169	\$16,169	\$16,169	\$21,540	\$21,540	\$16,169	\$16,169	\$16,169	\$9,884	\$9,884	\$3,085	\$3,085	

EXTENDED YEAR																	
Does educational program require an extended day component (Y=yes or N=no)?				Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y
If yes, what proportion of the total grade 9-12 population is to be served?				Percentage of Total Enrollment Served	15.0%	Percentage of Total Enrollment Served	35.0%	Percentage of Total Enrollment Served	50.0%	Percentage of Total Enrollment Served	35.0%	Percentage of Total Enrollment Served	35.0%	Percentage of Total Enrollment Served	35.0%	Percentage of Total Enrollment Served	35.0%
	Pupils Served			Pupils Served	Pupils Served	Pupils Served											
Pupils Served	93	153	192	141	141	330	330	472	472	330	330	330	330	202	202	63	63
Personnel																	
Core Classroom Teachers	2.08	3.43	4.30	3.16	3.16	7.39	7.39	10.57	10.57	7.39	7.39	7.39	7.39	4.52	4.52	1.41	1.41
Special Education Teachers	0.29	0.48	0.60	0.44	0.44	1.03	1.03	1.47	1.47	1.03	1.03	1.03	1.03	0.63	0.63	0.20	0.20
Substitutes	0.12	0.20	0.24	0.18	0.18	0.42	0.42	0.60	0.60	0.42	0.42	0.42	0.42	0.26	0.26	0.08	0.08
General Education Aides	0.21	0.35	0.44	0.33	0.33	0.76	0.76	1.09	1.09	0.76	0.76	0.76	0.76	0.47	0.47	0.15	0.15
Special Education Aides	0.28	0.45	0.57	0.42	0.42	0.98	0.98	1.40	1.40	0.98	0.98	0.98	0.98	0.60	0.60	0.19	0.19
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$2,458	\$4,044	\$5,074	\$3,726	\$3,726	\$8,721	\$8,721	\$12,474	\$12,474	\$8,721	\$8,721	\$8,721	\$8,721	\$5,339	\$5,339	\$1,665	\$1,665

SUMMARY PJP SPECIFICATIONS – STAGE 3

(Note: changes from Stage 2 appear in orange highlighted cells)

ELEMENTARY SCHOOL				Poverty Change			Special Education Change	ELL Change	Small School	Very Small School
	Base Models (No Free/Reduced Lunch or ELL)				Model I	Model II				
<i>Alternative a - Total FTEs</i>										
	Base Model - Small Schools	Base Model - Average School Size	Base Model - Large Schools	Low poverty, low ELL, average special education	Average poverty, low ELL, average special education	High poverty, low ELL, average special education	Average poverty, low ELL, high special education	Average poverty, high ELL, average special education	Average poverty, low ELL, average special education	Average poverty, low ELL, average special education
ENROLLMENT	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students
Total Enrollment (K-5)	414	558	774	558	558	558	558	558	414	120
District Enrollment	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225
STUDENT DEMOGRAPHICS	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Eligible for Free and Reduced Price Lunch Program	0.0%	0.0%	0.0%	4.5%	34.2%	91.6%	34.2%	34.2%	34.2%	34.2%
English Language Learners	0.0%	0.0%	0.0%	0.9%	0.9%	0.9%	0.9%	18.8%	0.9%	0.9%
Special Education (Specific Learning Disability & Speech Language)	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	9.8%	6.7%	6.7%	6.7%
Special Education (All other disabilities)	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	4.4%	3.1%	3.1%	3.1%
Special Education Overall	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%	9.8%

KINDERGARTEN PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served (1/6th of Total Enrollment)			Pupils Served		Pupils Served									
	Pupils Served	69	93	129	93	93	93	93	93	93	69	20	1.19	1.19	
Personnel															
Core Classroom Teachers	4.09	5.51	7.65	5.51	5.51	5.51	5.51	5.51	5.51	5.51	4.09	4.09	1.19	1.19	
Special Education Teachers	0.46	0.69	1.11	0.70	0.70	0.75	0.75	0.86	0.86	0.75	0.51	0.51	0.12	0.12	
Substitutes	0.23	0.31	0.44	0.31	0.31	0.31	0.31	0.32	0.32	0.31	0.23	0.23	0.01	0.01	
General Education Aides	1.07	0.96	0.32	1.09	1.09	1.93	1.93	3.58	3.58	1.93	1.79	1.79	0.73	0.73	
Special Education Aides	0.20	0.27	0.37	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.20	0.20	0.06	0.06	
Non-Personnel Expenditures															
Instructional Supplies & Materials	\$7,434	\$10,685	\$16,202	\$10,843	\$10,843	\$11,884	\$11,884	\$13,899	\$13,899	\$11,884	\$11,884	\$11,884	\$8,325	\$8,325	

GRADES 1-5 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served (5/6 th of Total Enrollment)			Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served		Pupils Served		
Pupils Served	345	465	645	465		465		465		465		465		465		345		
Personnel																		
Core Classroom Teachers	20.04	27.39	38.83	27.71	27.71	29.57	29.57	33.29	33.29	29.57	29.57	29.57	29.57	21.62	21.62	6.10	6.10	
Special Education Teachers	0.93	0.33	0.00	4.00	4.00	4.60	4.60	5.81	5.81	6.23	6.23	4.60	4.60	4.07	4.07	1.60	1.60	
Other Teachers	9.87	5.67	0.00	6.18	6.18	9.63	9.63	16.32	16.32	9.63	9.63	9.63	11.63	12.82	8.82	7.07	4.07	
Substitutes	1.54	1.67	1.94	1.89	1.89	2.19	2.19	2.77	2.77	2.27	2.27	2.19	2.19	1.93	1.93	0.74	0.74	
General Education Aides	6.93	2.09	0.00	2.60	2.60	5.86	5.86	12.14	12.14	5.86	5.86	5.86	5.86	9.69	4.69	5.99	2.99	
Special Education Aides	0.00	0.00	0.00	2.28	2.28	3.44	3.44	5.63	5.63	5.25	5.25	3.44	3.44	3.45	3.45	1.49	1.49	
Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$31,964	\$53,810	\$96,956	\$57,121	\$57,121	\$78,985	\$78,985	\$121,249	\$121,249	\$78,985	\$78,985	\$78,985	\$94,782	\$50,643	\$50,643	\$9,970	\$9,970	

GRADES K-5 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served (Total Enrollment)			Pupils Served		Pupils Served												
Pupils Served	414	558	774	558		558		558		558		558		414		120		
Personnel																		
Guidance Counselors	0.70	0.95	1.32	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.70	0.70	0.20	0.20	
School Psychologists	0.75	0.45	0.00	0.45	0.45	0.84	0.84	1.62	1.62	0.78	0.78	0.84	0.84	1.14	1.14	0.58	0.58	
Social Workers	0.95	0.61	0.00	0.39	0.39	1.00	1.00	2.23	2.23	0.84	0.84	1.00	1.00	1.19	1.19	0.66	0.66	
Other Pupil Support	1.66	1.40	0.15	1.40	1.40	1.28	1.28	1.06	1.06	1.28	1.28	1.28	1.28	1.61	1.61	0.82	0.82	
Special Education Other Pupil Support	0.87	1.90	4.02	1.56	1.56	1.12	1.12	0.22	0.22	1.00	1.00	1.12	1.12	0.34	0.34	0.00	0.00	
Nurses	0.91	0.95	0.77	0.95	0.95	1.06	1.06	1.23	1.23	1.06	1.06	1.06	1.06	1.06	1.06	0.41	0.41	
Librarians/Media Specialists	0.95	1.00	0.77	1.00	1.00	1.12	1.12	1.23	1.23	1.12	1.12	1.12	1.12	0.95	0.95	0.42	0.42	
Principals	0.95	1.06	1.01	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	0.95	0.95	0.38	0.38	
Assistant Principals	0.25	0.61	1.32	0.61	0.61	0.78	0.78	1.12	1.12	0.78	0.78	0.78	0.78	0.43	0.43	0.02	0.02	
Other Prof. Staff	0.75	0.61	0.08	0.73	0.73	1.23	1.23	2.23	2.23	1.23	1.23	1.23	1.23	1.12	1.12	0.50	0.50	
Clerical/Data Entry	1.78	2.68	4.41	2.79	2.79	3.46	3.46	4.74	4.74	3.46	3.46	3.46	3.46	2.34	2.34	0.54	0.54	
Security	0.00	0.00	0.62	0.11	0.11	0.73	0.73	1.90	1.90	0.73	0.73	0.73	0.73	0.26	0.26	0.00	0.00	
Non-Personnel Expenditures																		
Equipment & Technology	\$1,147	\$15,194	\$49,466	\$23,933	\$23,933	\$81,619	\$81,619	\$193,107	\$193,107	\$81,619	\$81,619	\$81,619	\$81,619	\$50,425	\$50,425	\$8,625	\$8,625	
Student Activities	\$17,562	\$23,670	\$32,833	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$23,670	\$17,562	\$17,562	\$5,090	\$5,090	
Professional Development	\$75,824	\$102,198	\$141,758	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$102,198	\$75,824	\$75,824	\$21,978	\$21,978	
Assessment	\$13,302	\$17,929	\$24,869	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$17,929	\$13,302	\$13,302	\$3,856	\$3,856	
Food	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
INDEX OF TOTAL EXPENDITURE PER PUPIL (100 = Base Model-Average School Size)	114.4	100.0	85.1	98.6	98.6	120.0	120.0	160.8	160.8	117.5	117.5	120.0	121.9	133.5	133.5	170.5	170.5	

PRESCHOOL PROGRAM INCLUDING SPECIAL EDUCATION																		
Does educational program require a preschool component (Type Y for yes or N for no)?				Require Preschool	Y													
Which reference numbers would you like to see, those corresponding to universal coverage or only those that are targeted the free/reduced lunch eligible population (A=all, F=free/reduced lunch)?	Base Model Reference Numbers	F	Model I Reference Numbers	F	Model II Reference Numbers	F	Model III Reference Numbers	F	Model IV Reference Numbers	F	Model V Reference Numbers	F	Model VI Reference Numbers	F	Model VII Reference Numbers	F		
If yes, will preschool be full or half-day program (type F for full or H for half)?			Full or Half-Day	F														
If yes, what percentage of the four-year old population is to be served?			Percentage of Four-Year Old Population Served	10.0%	Percentage of Four-Year Old Population Served	40.0%	Percentage of Four-Year Old Population Served	91.6%	Percentage of Four-Year Old Population Served	40.0%	Percentage of Four-Year Old Population Served	40.0%	Percentage of Four-Year Old Population Served	40.0%	Percentage of Four-Year Old Population Served	40.0%	Percentage of Four-Year Old Population Served	40.0%
	Pupils Served			Pupils Served	Pupils Served													
Pupils Served	17	23	32	9	9	37	37	85	85	37	37	37	37	28	28	8	8	
Personnel																		
Core Classroom Teachers	1.31	1.77	2.46	0.69	0.69	2.84	2.84	6.54	6.54	2.84	2.84	2.84	2.84	2.15	2.15	0.62	0.62	
Special Education Teachers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Substitutes	0.07	0.09	0.12	0.03	0.03	0.14	0.14	0.33	0.33	0.14	0.14	0.14	0.14	0.11	0.11	0.03	0.03	
General Education Aides	1.29	1.74	2.42	0.68	0.68	2.80	2.80	6.43	6.43	2.80	2.80	2.80	2.80	2.12	2.12	0.61	0.61	
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$1,344	\$1,818	\$2,530	\$711	\$711	\$2,925	\$2,925	\$6,719	\$6,719	\$2,925	\$2,925	\$2,925	\$2,925	\$2,213	\$2,213	\$632	\$632	
INDEX OF TOTAL EXPENDITURE PER PUPIL (100 = Base Model-Average School Size)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
TOTAL EXPENDITURE	#####	\$178,267	\$248,023	\$69,757	\$69,757	\$286,777	\$286,777	\$658,812	\$658,812	\$286,777	\$286,777	\$286,777	\$286,777	\$217,020	\$217,020	\$62,006	\$62,006	
TOTAL EXPENDITURE PER PUPIL	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	\$7,751	

EARLY CHILDHOOD DEVELOPMENT (ECD)																			
Does educational program require an early childhood component (Y=yes or N=no)?				Require Early Childhood Development	Y	Require Early Childhood Development													
Which reference numbers would you like to see, those corresponding to universal coverage or only those that are targeted the free/reduced lunch eligible population (A=all, F=free/reduced lunch)?	Base Model Reference Numbers		F	Model I Reference Numbers	F	Model II Reference Numbers	F	Model III Reference Numbers	F	Model IV Reference Numbers	F	Model V Reference Numbers	F	Model VI Reference Numbers	F	Model VII Reference Numbers	F		
If yes, will preschool be full or half-day program (type F for full or H for half)?				Full or Half-Day	H														
If yes, what percentage of the three-year old population is to be served?				Percentage of Three-Year Old Population Served	10.0%	Percentage of Three-Year Old Population Served	40.0%	Percentage of Three-Year Old Population Served	91.6%	Percentage of Three-Year Old Population Served	40.0%	Percentage of Three-Year Old Population Served	40.0%	Percentage of Three-Year Old Population Served	40.0%	Percentage of Three-Year Old Population Served	40.0%	Percentage of Three-Year Old Population Served	40.0%
	Pupils Served			Pupils Served	Pupils Served	Pupils Served													
Pupils Served	5	7	9	9	5	37	19	85	43	37	19	37	19	28	14	8	4		
Personnel																			
Core Classroom Teachers	0.31	0.43	0.56	0.56	0.31	2.29	1.18	5.27	2.66	2.29	1.18	2.29	1.18	1.74	0.87	0.50	0.25		
Special Education Teachers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Substitutes	0.02	0.02	0.03	0.03	0.02	0.11	0.06	0.26	0.13	0.11	0.06	0.11	0.06	0.09	0.04	0.02	0.01		
General Education Aides	0.31	0.43	0.56	0.56	0.31	2.29	1.18	5.27	2.66	2.29	1.18	2.29	1.18	1.74	0.87	0.50	0.25		
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Non-Personnel Expenditures																			
Instructional Supplies & Materials	\$302	\$423	\$544	\$544	\$302	\$2,235	\$1,148	\$5,135	\$2,598	\$2,235	\$1,148	\$2,235	\$1,148	\$1,692	\$846	\$483	\$242		
INDEX OF TOTAL EXPENDITURE PER PUPIL (100 = Base Model-Average School Size)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

EXTENDED DAY																	
Does educational program require an extended day component (Y=yes or N=no)?				Require Extended Day	Y												
If yes, what proportion of the total K-5 population is to be served?				Percentage of Total Enrollment Served	10.0%	Percentage of Total Enrollment Served	20.0%	Percentage of Total Enrollment Served	50.0%	Percentage of Total Enrollment Served	20.0%						
	Pupils Served			Pupils Served	Pupils Served												
Pupils Served	0	0	0	56	56	112	112	279	279	112	112	112	112	83	83	24	24
Personnel																	
Core Classroom Teachers	0.00	0.00	0.00	0.99	0.99	1.97	1.97	4.91	4.91	1.97	1.97	1.97	1.97	1.46	1.46	0.42	0.42
Special Education Teachers	0.00	0.00	0.00	0.04	0.04	0.08	0.08	0.20	0.20	0.08	0.08	0.08	0.08	0.06	0.06	0.02	0.02
Substitutes	0.00	0.00	0.00	0.05	0.05	0.10	0.10	0.26	0.26	0.10	0.10	0.10	0.10	0.08	0.08	0.02	0.02
General Education Aides	0.00	0.00	0.00	0.07	0.07	0.15	0.15	0.37	0.37	0.15	0.15	0.15	0.15	0.11	0.11	0.03	0.03
Special Education Aides	0.00	0.00	0.00	0.01	0.01	0.03	0.03	0.06	0.06	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$0	\$0	\$0	\$3,982	\$3,982	\$7,965	\$7,965	\$19,841	\$19,841	\$7,965	\$7,965	\$7,965	\$7,965	\$5,902	\$5,902	\$1,707	\$1,707

EXTENDED YEAR																	
Does educational program require an extended day component (Y=yes or N=no)?				Require Extended Year	Y												
If yes, what proportion of the total K-5 population is to be served?				Percentage of Total Enrollment Served	10.0%	Percentage of Total Enrollment Served	20.0%	Percentage of Total Enrollment Served	50.0%	Percentage of Total Enrollment Served	20.0%						
	Pupils Served			Pupils Served	Pupils Served												
Pupils Served	26	35	49	56	56	112	112	279	279	112	112	112	112	83	83	24	24
Personnel																	
Core Classroom Teachers	0.42	0.56	0.79	0.90	0.90	1.80	1.80	4.48	4.48	1.80	1.80	1.80	1.80	1.33	1.33	0.38	0.38
Special Education Teachers	0.11	0.15	0.21	0.25	0.25	0.49	0.49	1.22	1.22	0.49	0.49	0.49	0.49	0.36	0.36	0.11	0.11
Substitutes	0.03	0.04	0.05	0.06	0.06	0.11	0.11	0.28	0.28	0.11	0.11	0.11	0.11	0.08	0.08	0.02	0.02
General Education Aides	0.12	0.17	0.23	0.27	0.27	0.54	0.54	1.34	1.34	0.54	0.54	0.54	0.54	0.40	0.40	0.12	0.12
Special Education Aides	0.11	0.15	0.20	0.23	0.23	0.47	0.47	1.16	1.16	0.47	0.47	0.47	0.47	0.35	0.35	0.10	0.10
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$679	\$915	\$1,280	\$1,463	\$1,463	\$2,926	\$2,926	\$7,290	\$7,290	\$2,926	\$2,926	\$2,926	\$2,926	\$2,169	\$2,169	\$627	\$627

MIDDLE SCHOOL				Poverty Change				Special Education Change	ELL Change	Small School	Very Small School
Alternative a - Total FTEs	Base Models (No Free/Reduced Lunch or ELL)			Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII	
	Base Model - Small Schools	Base Model - Average School Size	Base Model - Large Schools	Low poverty, low ELL, average special education	Average poverty, low ELL, average special education	High poverty, low ELL, average special education	Average poverty, low ELL, high special education	Average poverty, high ELL, average special education	Average poverty, low ELL, average special education	Average poverty, low ELL, average special education	
ENROLLMENT	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students
Total Enrollment (6-8)	543	792	951	792	792	792	792	792	792	543	180
District Enrollment	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225		
STUDENT DEMOGRAPHICS	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Eligible for Free and Reduced Price Lunch Program	0.0%	0.0%	0.0%	4.5%	34.2%	91.6%	34.2%	34.2%	34.2%	34.2%	34.2%
English Language Learners	0.0%	0.0%	0.0%	0.9%	0.9%	0.9%	0.9%	18.8%	0.9%	0.9%	0.9%
Special Education (Specific Learning Disability & Speech Language)	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	9.8%	6.7%	6.7%	6.7%	6.7%
Special Education (All other disabilities)	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	4.4%	3.1%	3.1%	3.1%	3.1%
Special Education Overall	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%	9.8%	9.8%

GRADES 6-8 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served			Pupils Served											
Pupils Served	543	792	951	792	792	792	792	792	792	792	792	792	792	543	180			
Personnel																		
Core Classroom Teachers	28.78	41.98	50.40	41.98	41.98	41.98	41.98	41.98	41.98	41.98	41.98	41.98	29.48	29.48	10.88	10.88		
Special Education Teachers	0.65	2.46	4.09	6.81	6.81	6.73	6.73	6.65	6.65	8.71	8.71	6.73	6.73	3.69	3.69	0.70	0.70	
Other Teachers	16.29	14.10	9.61	14.34	14.34	15.92	15.92	18.93	18.93	15.92	15.92	15.92	18.92	17.47	17.47	8.99	8.99	
Substitutes	2.29	2.93	3.20	3.16	3.16	3.23	3.23	3.38	3.38	3.33	3.33	3.23	3.23	2.53	2.53	1.03	1.03	
General Education Aides	5.43	7.92	9.51	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	6.37	6.37	2.90	2.90	
Special Education Aides	1.52	3.88	5.90	5.46	5.46	4.36	4.36	2.14	2.14	5.15	5.15	4.36	4.36	1.97	1.97	0.07	0.07	
Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$40,475	\$137,040	\$224,360	\$143,297	\$143,297	\$184,576	\$184,576	\$264,370	\$264,370	\$184,576	\$184,576	\$184,576	\$221,491	\$73,080	\$73,080	\$0	\$50,760	

GRADES 6-8 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served													
Pupils Served	543	792	951	792		792		792		792		792		543		180	
Personnel																	
Guidance Counselors	1.63	3.25	4.56	2.93	2.93	3.33	3.33	4.12	4.12	3.17	3.17	3.33	3.33	1.80	1.80	0.27	0.27
School Psychologists	0.71	1.03	1.24	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	0.71	0.71	0.23	0.23
Social Workers	1.25	1.03	0.57	0.95	0.95	1.11	1.11	1.43	1.43	1.03	1.03	1.11	1.11	1.38	1.00	0.72	0.50
Other Pupil Support	3.42	3.17	2.47	3.09	3.09	2.30	2.30	0.79	0.79	2.30	2.30	2.30	2.30	2.81	1.81	1.52	1.52
Special Education Other Pupil Support	1.14	2.06	2.76	1.19	1.19	0.79	0.79	0.00	0.00	0.40	0.40	0.79	0.79	0.20	0.20	0.00	0.00
Nurses	0.92	0.87	0.67	0.87	0.87	1.03	1.03	1.35	1.35	1.03	1.03	1.03	1.03	0.90	0.90	0.49	0.49
Librarians/Media Specialists	0.87	1.03	1.14	1.11	1.11	1.27	1.27	1.50	1.50	1.27	1.27	1.27	1.27	1.01	1.01	0.40	0.40
Principals	0.98	1.03	0.86	1.03	1.03	1.03	1.03	1.11	1.11	1.03	1.03	1.03	1.03	1.00	1.00	0.46	0.46
Assistant Principals	0.54	0.95	1.24	1.03	1.03	1.58	1.58	2.77	2.77	1.58	1.58	1.58	1.58	1.03	1.03	0.28	0.28
Other Prof. Staff	2.66	0.79	0.00	0.87	0.87	1.50	1.50	2.61	2.61	1.50	1.50	1.50	1.50	2.99	1.00	2.04	1.00
Clerical/Data Entry	3.53	3.48	2.85	3.64	3.64	4.99	4.99	7.52	7.52	4.99	4.99	4.99	4.99	4.49	4.49	2.08	2.08
Security	0.05	1.74	3.33	1.82	1.82	2.30	2.30	3.25	3.25	2.30	2.30	2.30	2.30	0.37	0.37	0.00	0.00
Non-Personnel Expenditures																	
Equipment & Technology	\$0	\$63,629	\$148,242	\$78,646	\$78,646	\$177,749	\$177,749	\$369,278	\$369,278	\$177,749	\$177,749	\$177,749	\$177,749	\$57,610	\$121,865	\$0	\$40,397
Student Activities	\$57,368	\$175,737	\$281,610	\$172,886	\$154,068	\$154,068	\$154,068	\$117,691	\$154,068	\$154,068	\$154,068	\$154,068	\$154,068	\$42,495	\$105,630	\$0	\$35,015
Professional Development	\$61,609	\$63,178	\$55,396	\$117,842	\$117,842	\$130,918	\$130,918	\$156,198	\$156,198	\$154,575	\$154,575	\$154,575	\$154,575	\$294,849	\$89,758	\$32,400	\$29,754
Assessment	\$19,412	\$28,314	\$33,998	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$28,314	\$20,239	\$19,412	\$8,944	\$6,435
Food	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

EXTENDED DAY																		
Does educational program require an extended day component (Y=yes or N=no)?					Require Extended Day	Y	Require Extended Day											
If yes, what proportion of the total grade 6-8 population is to be served?					Percentage of Total Enrollment Served	10.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	60.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	
	Pupils Served			Pupils Served	Pupils Served													
Pupils Served	37	54	65	79	79	238	238	475	475	238	238	238	238	163	163	54	54	
Personnel																		
Core Classroom Teachers	0.48	0.70	0.84	1.02	1.02	3.08	3.08	6.14	6.14	3.08	3.08	3.08	3.08	2.11	2.11	0.70	0.70	
Special Education Teachers	0.04	0.06	0.07	0.09	0.09	0.27	0.27	0.54	0.54	0.27	0.27	0.27	0.27	0.18	0.18	0.06	0.06	
Substitutes	0.03	0.04	0.05	0.06	0.06	0.17	0.17	0.33	0.33	0.17	0.17	0.17	0.17	0.11	0.11	0.04	0.04	
General Education Aides	0.07	0.10	0.12	0.15	0.15	0.46	0.46	0.91	0.91	0.46	0.46	0.46	0.46	0.31	0.31	0.10	0.10	
Special Education Aides	0.02	0.04	0.04	0.05	0.05	0.16	0.16	0.31	0.31	0.16	0.16	0.16	0.16	0.11	0.11	0.04	0.04	
Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$2,210	\$3,225	\$3,882	\$4,718	\$4,718	\$14,213	\$14,213	\$28,366	\$28,366	\$14,213	\$14,213	\$14,213	\$14,213	\$9,734	\$9,734	\$3,225	\$3,225	

EXTENDED YEAR																	
Does educational program require an extended day component (Y=yes or N=no)?				Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y	Require Extended Year	Y
If yes, what proportion of the total grade 6-8 population is to be served?				Percentage of Total Enrollment Served	10.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	60.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	30.0%
	Pupils Served			Pupils Served	Pupils Served	Pupils Served											
Pupils Served	89	129	155	190	79	190	238	190	475	190	238	190	238	89	163	30	54
Personnel																	
Core Classroom Teachers	1.67	2.41	2.90	3.55	1.48	3.55	4.45	3.55	8.89	3.55	4.45	3.55	4.45	1.67	3.05	0.55	1.01
Special Education Teachers	0.20	0.29	0.35	0.43	0.18	0.43	0.54	0.43	1.07	0.43	0.54	0.43	0.54	0.20	0.37	0.07	0.12
Substitutes	0.09	0.14	0.16	0.20	0.08	0.20	0.25	0.20	0.50	0.20	0.25	0.20	0.25	0.09	0.17	0.03	0.06
General Education Aides	0.14	0.20	0.24	0.29	0.12	0.29	0.37	0.29	0.73	0.29	0.37	0.29	0.37	0.14	0.25	0.05	0.08
Special Education Aides	0.05	0.07	0.08	0.10	0.04	0.10	0.12	0.10	0.24	0.10	0.12	0.10	0.12	0.05	0.08	0.02	0.03
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$2,352	\$3,409	\$4,096	\$5,021	\$2,088	\$5,021	\$6,290	\$5,021	\$12,554	\$5,021	\$6,290	\$5,021	\$6,290	\$2,352	\$4,308	\$780	\$1,427

HIGH SCHOOL				Poverty Change			Special Education Change		ELL Change		Small School		Very Small School		
Alternative a - Total FTEs	Base Models (No Free/Reduced Lunch or ELL)			Model I	Model II	Model III	Model IV		Model V		Model VI		Model VII		
	Base Model - Small Schools	Base Model - Average School Size	Base Model - Large Schools	Low poverty, low ELL, average special education	Average poverty, low ELL, average special education	High poverty, low ELL, average special education	Average poverty, low ELL, high special education		Average poverty, high ELL, average special education		Average poverty, low ELL, average special education		Average poverty, low ELL, average special education		
ENROLLMENT	Students	Students	Students	Students		Students		Students		Students		Students		Students	
Total Enrollment (9-12)	576	943	1,184	943		943		943		943		576		180	
District Enrollment	4,225	4,225	4,225	4,225		4,225		4,225		4,225					
STUDENT DEMOGRAPHICS	Percent	Percent	Percent	Percent		Percent		Percent		Percent		Percent		Percent	
Eligible for Free and Reduced Price Lunch Program	0.0%	0.0%	0.0%	4.5%		34.2%		91.6%		34.2%		34.2%		34.2%	
English Language Learners	0.0%	0.0%	0.0%	0.9%		0.9%		0.9%		0.9%		18.8%		0.9%	
Special Education (Specific Learning Disability & Speech Language)	6.7%	6.7%	6.7%	6.7%		6.7%		6.7%		9.8%		6.7%		6.7%	
Special Education (All other disabilities)	3.1%	3.1%	3.1%	3.1%		3.1%		3.1%		4.4%		3.1%		3.1%	
Special Education Overall	9.8%	9.8%	9.8%	9.8%		9.8%		9.8%		14.2%		9.8%		9.8%	

GRADES 9-12 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served		Pupils Served									
Pupils Served	576	943	1184	943		943		943		943		943		576	
Personnel															
Core Classroom Teachers	27.30	37.63	41.44	38.85	38.85	46.49	46.49	61.39	61.39	46.49	46.49	46.49	46.49	32.85	32.85
Special Education Teachers	0.35	0.00	0.00	7.07	7.07	7.07	7.07	7.07	7.07	10.28	10.28	7.07	7.07	4.77	4.77
Other Teachers	12.96	21.22	26.64	21.22	21.22	21.22	21.22	21.22	21.22	21.22	21.22	24.72	13.63	13.63	4.26
Substitutes	2.03	2.94	3.40	3.36	3.36	3.74	3.74	4.48	4.48	3.90	3.90	3.74	3.74	2.56	2.56
General Education Aides	3.74	6.13	7.70	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	3.33	0.90
Special Education Aides	2.71	5.28	7.22	6.70	6.70	5.47	5.47	3.21	3.21	6.22	6.22	5.47	5.47	2.81	0.73
Non-Personnel Expenditures															
Instructional Supplies & Materials	\$47,912	\$178,227	\$306,052	\$186,752	\$186,752	\$243,049	\$243,049	\$351,852	\$351,852	\$243,049	\$243,049	\$291,659	\$87,495	\$148,458	\$6,792

GRADES 9-12 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served													
Pupils Served	576	943	1184	943		943		943		943		943		576		180	
Personnel																	
Guidance Counselors	3.51	5.47	6.63	3.96	3.96	4.43	4.43	5.28	5.28	3.68	4.43	4.43	4.43	2.84	2.84	0.96	0.96
School Psychologists	0.58	0.94	1.18	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.64	0.64	0.27	0.27
Social Workers	0.81	1.32	1.66	1.32	1.32	1.32	2.00	1.32	3.00	1.32	2.00	1.32	2.00	0.95	0.95	0.30	0.30
Other Pupil Support	2.65	5.38	7.58	5.09	5.09	3.02	3.02	0.00	0.00	3.02	3.02	3.02	3.02	1.25	1.25	0.18	0.18
Special Education Other Pupil Support	0.86	1.89	2.72	1.04	1.04	0.66	0.66	0.00	0.00	0.28	0.28	0.66	0.66	0.02	0.02	0.00	0.00
Nurses	0.81	0.85	0.71	0.94	0.94	1.13	1.13	1.60	1.60	1.13	1.13	1.13	1.13	1.10	1.10	0.41	0.41
Librarians/Media Specialists	0.81	1.04	0.95	1.04	1.04	1.23	1.23	1.70	1.70	1.23	1.23	1.23	1.23	0.95	0.95	0.37	0.37
Principals	0.98	1.04	0.83	1.04	1.04	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	0.83	0.83	0.40	0.40
Assistant Principals	0.86	2.17	3.32	2.17	2.17	2.36	2.36	2.64	3.00	2.36	2.36	2.36	2.36	0.97	0.97	0.16	0.16
Other Prof. Staff	2.42	1.32	0.00	1.41	1.41	2.07	2.07	3.39	3.39	2.07	2.07	2.07	2.07	3.02	1.22	1.44	1.00
Clerical/Data Entry	4.61	6.88	7.93	6.88	6.88	7.45	7.45	8.39	8.39	7.45	7.45	7.45	7.45	5.01	5.01	1.71	1.71
Security	0.00	2.36	5.09	2.45	2.45	2.55	3.50	2.83	6.00	2.55	3.50	2.55	3.50	0.00	0.00	0.00	0.00
Non-Personnel Expenditures																	
Equipment & Technology	\$0	\$88,199	\$206,963	\$108,322	\$108,322	\$241,144	\$241,144	\$497,847	\$497,847	\$241,144	\$241,144	\$241,144	\$241,144	\$75,991	\$147,295	\$0	\$50,633
Student Activities	\$220,856	\$361,574	\$453,981	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$361,574	\$217,648	\$220,856	\$66,568	\$75,919
Professional Development	\$85,110	\$113,773	\$121,774	\$150,220	\$150,220	\$164,808	\$164,808	\$192,985	\$192,985	\$180,179	\$180,179	\$164,808	\$197,770	\$331,776	\$100,668	\$32,400	\$34,604
Assessment	\$7,240	\$8,949	\$8,833	\$11,109	\$11,109	\$25,404	\$25,404	\$53,015	\$53,015	\$25,404	\$25,404	\$25,404	\$25,404	\$17,294	\$15,517	\$6,003	\$5,334
Food	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

EXTENDED DAY																	
Does educational program require an extended day component (Y=yes or N=no)?				Require Extended Day	Y	Require Extended Day	Y	Require Extended Day	Y	Require Extended Day	Y	Require Extended Day	Y	Require Extended Day	Y	Require Extended Day	Y
If yes, what proportion of the total grade 9-12 population is to be served?				Percentage of Total Enrollment Served	10.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	40.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	30.0%	Percentage of Total Enrollment Served	30.0%
	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	
Pupils Served	124	202	254	94	94	283	283	377	377	283	283	283	283	173	173	54	54
Personnel																	
Core Classroom Teachers	2.57	4.18	5.26	1.95	1.95	5.86	5.86	7.81	7.81	5.86	5.86	5.86	5.86	3.58	3.58	1.12	1.12
Special Education Teachers	0.02	0.03	0.04	0.02	0.02	0.05	0.05	0.06	0.06	0.05	0.05	0.05	0.05	0.03	0.03	0.01	0.01
Substitutes	0.13	0.21	0.27	0.10	0.10	0.30	0.30	0.39	0.39	0.30	0.30	0.30	0.30	0.18	0.18	0.06	0.06
General Education Aides	0.17	0.28	0.35	0.13	0.13	0.39	0.39	0.52	0.52	0.39	0.39	0.39	0.39	0.24	0.24	0.07	0.07
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$7,085	\$11,541	\$14,512	\$5,371	\$5,371	\$16,169	\$16,169	\$21,540	\$21,540	\$16,169	\$16,169	\$16,169	\$16,169	\$9,884	\$9,876	\$3,085	\$3,085

EXTENDED YEAR																	
Does educational program require an extended day component (Y=yes or N=no)?			Require Extended Year	Y													
If yes, what proportion of the total grade 9-12 population is to be served?			Percentage of Total Enrollment Served	15.0%	Percentage of Total Enrollment Served	35.0%	Percentage of Total Enrollment Served	50.0%	Percentage of Total Enrollment Served	35.0%							
	Pupils Served			Pupils Served	Pupils Served	Pupils Served											
Pupils Served	93	153	192	141	141	330	330	472	472	330	330	330	330	202	202	63	63
Personnel																	
Core Classroom Teachers	2.08	3.43	4.30	3.16	3.16	7.39	7.39	10.57	10.57	7.39	7.39	7.39	7.39	4.52	4.52	1.41	1.41
Special Education Teachers	0.29	0.48	0.60	0.44	0.44	1.03	1.03	1.47	1.47	1.03	1.03	1.03	1.03	0.63	0.63	0.20	0.20
Substitutes	0.12	0.20	0.24	0.18	0.18	0.42	0.42	0.60	0.60	0.42	0.42	0.42	0.42	0.26	0.26	0.08	0.08
General Education Aides	0.21	0.35	0.44	0.33	0.33	0.76	0.76	1.09	1.09	0.76	0.76	0.76	0.76	0.47	0.47	0.15	0.15
Special Education Aides	0.28	0.45	0.57	0.42	0.42	0.98	0.98	1.40	1.40	0.98	0.98	0.98	0.98	0.60	0.60	0.19	0.19
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$2,458	\$4,044	\$5,074	\$3,726	\$3,726	\$8,721	\$8,721	\$12,474	\$12,474	\$8,721	\$8,721	\$8,721	\$8,721	\$5,339	\$5,339	\$1,665	\$1,665

SUMMARY PJP SPECIFICATIONS FOR ALTERNATIVE B CALCULATION WORKSHEET (FTES PER 100 PUPILS)

specifications are only for Stage 1

ELEMENTARY SCHOOL			Poverty Change				Special Education Change	ELL Change	Small School	Very Small School	
			Base Models (No Free/Reduced Lunch or ELL)		Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII
			Base Model - Small Schools	Base Model - Average School Size	Base Model - Large Schools	Low poverty, low ELL, average special education	Average poverty, low ELL, average special education	High poverty, low ELL, average special education	Average poverty, high ELL, high special education	Average poverty, low ELL, average special education	Average poverty, low ELL, average special education
Alternative b - FTEs per 100 pupils											
ENROLLMENT	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students
Total Enrollment (K-5)	414	558	774	558	558	558	558	558	414	120	
District Enrollment	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225			
STUDENT DEMOGRAPHICS	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Eligible for Free and Reduced Price Lunch Program	0.0%	0.0%	0.0%	4.5%	34.2%	91.6%	34.2%	34.2%	34.2%	34.2%	34.2%
English Language Learners	0.0%	0.0%	0.0%	0.9%	0.9%	0.9%	0.9%	18.8%	0.9%	0.9%	0.9%
Special Education (Specific Learning Disability & Speech Language)	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	9.8%	6.7%	6.7%	6.7%	6.7%
Special Education (All other disabilities)	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	4.4%	3.1%	3.1%	3.1%	3.1%
Special Education Overall	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%	9.8%	9.8%

KINDERGARTEN PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served (1/6 th of Total Enrollment)			Pupils Served													
Pupils Served	69	93	129	93		93		93		93		93		69		20	
Personnel																	
Core Classroom Teachers	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93
Special Education Teachers	0.67	0.74	0.86	0.75	0.75	0.81	0.81	0.93	0.93	0.81	0.81	0.81	0.81	0.73	0.73	0.58	0.58
Substitutes	0.33	0.33	0.34	0.33	0.33	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.33	0.33	0.03	0.03
General Education Aides	1.55	1.03	0.25	1.17	1.17	2.08	2.08	3.85	3.85	2.08	2.08	2.08	2.08	2.60	2.60	3.66	3.66
Special Education Aides	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$108	\$115	\$126	\$117	\$117	\$128	\$128	\$149	\$149	\$128	\$128	\$128	\$128	\$121	\$121	\$106	\$106

GRADES 1-5 INSTRUCTIONAL PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served (5/6 th of Total Enrollment)			Pupils Served													
Pupils Served	345	465	645	465		465		465		465		465		345		100	
Personnel																	
Core Classroom Teachers	5.81	5.89	6.02	5.96	5.96	6.36	6.36	7.16	7.16	6.36	6.36	6.36	6.36	6.27	6.27	6.10	6.10
Special Education Teachers	0.27	0.07	0.00	0.86	0.86	0.99	0.99	1.25	1.25	1.34	1.34	0.99	0.99	1.18	1.18	1.60	1.60
Other Teachers	2.86	1.22	0.00	1.33	1.33	2.07	2.07	3.51	3.51	2.07	2.07	2.07	2.07	3.72	3.72	7.07	7.07
Substitutes	0.45	0.36	0.30	0.41	0.41	0.47	0.47	0.60	0.60	0.49	0.49	0.47	0.47	0.56	0.56	0.74	0.74
General Education Aides	2.01	0.45	0.00	0.56	0.56	1.26	1.26	2.61	2.61	1.26	1.26	1.26	1.26	2.81	2.81	5.99	5.99
Special Education Aides	0.00	0.00	0.00	0.49	0.49	0.74	0.74	1.21	1.21	1.13	1.13	0.74	0.74	1.00	1.00	1.49	1.49
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$93	\$116	\$150	\$123	\$123	\$170	\$170	\$261	\$261	\$170	\$170	\$170	\$170	\$147	\$147	\$100	\$100

GRADES K-5 ADMIN. & SUPPORT SERVICES INCLUDING SPECIAL EDUCATION	Pupils Served (Total Enrollment)			Pupils Served													
Pupils Served	414	558	774	558		558		558		558		558		414		120	
Personnel																	
Guidance Counselors	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
School Psychologists	0.18	0.08	0.00	0.08	0.08	0.15	0.15	0.29	0.29	0.14	0.14	0.15	0.15	0.27	0.27	0.48	0.48
Social Workers	0.23	0.11	0.00	0.07	0.07	0.18	0.18	0.40	0.40	0.15	0.15	0.18	0.18	0.29	0.29	0.55	0.55
Other Pupil Support	0.40	0.25	0.02	0.25	0.25	0.23	0.23	0.19	0.19	0.23	0.23	0.23	0.23	0.39	0.39	0.68	0.68
Special Education Other Pupil Support	0.21	0.34	0.52	0.28	0.28	0.20	0.20	0.04	0.04	0.18	0.18	0.20	0.20	0.08	0.08	0.00	0.00
Nurses	0.22	0.17	0.10	0.17	0.17	0.19	0.19	0.22	0.22	0.19	0.19	0.19	0.19	0.26	0.26	0.34	0.34
Librarians/Media Specialists	0.23	0.18	0.10	0.18	0.18	0.20	0.20	0.22	0.22	0.20	0.20	0.20	0.20	0.23	0.23	0.35	0.35
Principals	0.23	0.19	0.13	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.23	0.23	0.32	0.32
Assistant Principals	0.06	0.11	0.17	0.11	0.11	0.14	0.14	0.20	0.20	0.14	0.14	0.14	0.14	0.10	0.10	0.01	0.01
Other Prof. Staff	0.18	0.11	0.01	0.13	0.13	0.22	0.22	0.40	0.40	0.22	0.22	0.22	0.22	0.27	0.27	0.42	0.42
Clerical/Data Entry	0.43	0.48	0.57	0.50	0.50	0.62	0.62	0.85	0.85	0.62	0.62	0.62	0.62	0.56	0.56	0.45	0.45
Security	0.00	0.00	0.08	0.02	0.02	0.13	0.13	0.34	0.34	0.13	0.13	0.13	0.13	0.06	0.06	0.00	0.00
Non-Personnel Expenditures																	
Equipment & Technology	\$3	\$27	\$64	\$43	\$43	\$146	\$146	\$346	\$346	\$146	\$146	\$146	\$146	\$122	\$122	\$72	\$72
Student Activities	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42
Professional Development	\$183	\$183	\$183	\$183	\$183	\$183	\$183	\$183	\$183	\$183	\$183	\$183	\$183	\$183	\$183	\$183	\$183
Assessment	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32
Food	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PRESCHOOL PROGRAM INCLUDING SPECIAL EDUCATION																	
Does educational program require a preschool component (Type Y for yes or N for no)?		Require Preschool	Y	Require Preschool	Y	Require Preschool	Y	Require Preschool	Y	Require Preschool	Y	Require Preschool	Y	Require Preschool	Y	Require Preschool	Y
Which reference numbers would you like to see, those corresponding to universal coverage or only those that are targeted the free/reduced lunch eligible population (A=all, F=free/reduced lunch)?	Base Model Reference Numbers		F	Require Preschool	F	Require Preschool	F	Require Preschool	F	Require Preschool	F	Require Preschool	F	Require Preschool	F	Require Preschool	F
If yes, will preschool be full or half-day program (type F for full or H for half)?				Full or Half-Day	F	Full or Half-Day	F	Full or Half-Day	F	Full or Half-Day	F	Full or Half-Day	F	Full or Half-Day	F	Full or Half-Day	F
If yes, what percentage of the four-year old population is to be served?				Percentage of Four-Year Old Population Served	28.0%	Percentage of Four-Year Old Population Served	46.8%	Percentage of Four-Year Old Population Served	83.2%	Percentage of Four-Year Old Population Served	46.8%	Percentage of Four-Year Old Population Served	46.8%	Percentage of Four-Year Old Population Served	46.8%	Percentage of Four-Year Old Population Served	46.8%
	Pupils Served			Pupils Served	Pupils Served												
Pupils Served	17	23	32	26	26	44	44	77	77	44	44	44	44	32	32	9	9
Personnel																	
Core Classroom Teachers	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69
Special Education Teachers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substitutes	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
General Education Aides	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79

EARLY CHILDHOOD DEVELOPMENT (ECD)																		
Does educational program require an early childhood component (Y=yes or N=no)?			Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	Require Early Childhood Development Y	
Which reference numbers would you like to see, those corresponding to universal coverage or only those that are targeted the free/reduced lunch eligible population (A=all, F=free/reduced lunch)?	Base Model Reference Numbers		F	Model I Reference Numbers	F	Model II Reference Numbers	F	Model III Reference Numbers	F	Model IV Reference Numbers	F	Model V Reference Numbers	F	Model VI Reference Numbers	F	Model VII Reference Numbers	F	
If yes, will preschool be full or half-day program (type F for full or H for half)?			F	Full or Half-Day	F													
If yes, what percentage of the three-year old population is to be served?			8.6%	Percentage of Three-Year Old Population Served	17.9%	Percentage of Three-Year Old Population Served	35.9%	Percentage of Three-Year Old Population Served	17.9%	Percentage of Three-Year Old Population Served	17.9%	Percentage of Three-Year Old Population Served	17.9%	Percentage of Three-Year Old Population Served	17.9%	Percentage of Three-Year Old Population Served	17.9%	
	Pupils Served			Pupils Served	Pupils Served													
Pupils Served	5	7	9	8	8	17	17	33	33	17	17	17	17	12	12	4	4	
Personnel																		
Core Classroom Teachers	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	
Special Education Teachers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Substitutes	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	
General Education Aides	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	

EXTENDED DAY																		
Does educational program require an extended day component (Y=yes or N=no)?	Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y	
	Percentage of Total Enrollment Served	0.0%	Percentage of Total Enrollment Served	15.4%	Percentage of Total Enrollment Served	46.0%	Percentage of Total Enrollment Served	15.4%										
	Pupils Served			Pupils Served	Pupils Served	Pupils Served												
Pupils Served	0	0	0	0	0	86	86	257	257	86	86	86	86	86	64	64	18	18
Personnel																		
Core Classroom Teachers	1.76	1.76	1.76	1.76	0.00	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.86
Special Education Teachers	0.07	0.07	0.07	0.07	0.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Substitutes	0.09	0.09	0.09	0.09	0.00	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
General Education Aides	0.13	0.13	0.13	0.13	0.00	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.14
Special Education Aides	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$71	\$71	\$71	\$71	\$0	\$71	\$71	\$71	\$71	\$71	\$71	\$71	\$71	\$71	\$71	\$71	\$71	\$75

EXTENDED YEAR																		
Does educational program require an extended day component (Y=yes or N=no)?	Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year	
	Percentage of Total Enrollment Served	8.6%	Percentage of Total Enrollment Served	24.1%	Percentage of Total Enrollment Served	53.9%	Percentage of Total Enrollment Served	24.1%										
Pupils Served			Pupils Served	Pupils Served														
Pupils Served	26	35	49	48	48	134	134	301	301	134	134	134	134	100	100	29	29	29
Personnel																		
Core Classroom Teachers	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
Special Education Teachers	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Substitutes	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
General Education Aides	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
Special Education Aides	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Non-Personnel Expenditures																		
Instructional Supplies & Materials	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26

MIDDLE SCHOOL			Poverty Change						Special Education Change		ELL Change		Small School		Very Small School		
Alternative b - FTEs per 100 pupils			Base Models (No Free/Reduced Lunch or ELL)			Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII					
	Base Model - Small Schools	Base Model - Average School Size	Base Model - Large Schools	Low poverty, low ELL, average special education	Average poverty, low ELL, average special education	High poverty, low ELL, average special education	Average poverty, low ELL, high special education	Average poverty, high ELL, average special education	Average poverty, low ELL, average special education								
ENROLLMENT	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	
Total Enrollment (6-8)	543	792	951	792	792	792	792	792	792	792	792	543				180	
District Enrollment	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225						
STUDENT DEMOGRAPHICS	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
Eligible for Free and Reduced Price Lunch Program	0.0%	0.0%	0.0%	4.5%	34.2%	91.6%	34.2%	34.2%	34.2%	34.2%	34.2%					34.2%	
English Language Learners	0.0%	0.0%	0.0%	0.9%	0.9%	0.9%	0.9%	0.9%	18.8%	18.8%	18.8%					0.9%	
Special Education (Specific Learning Disability & Speech Language)	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	9.8%	9.8%	6.7%	6.7%	6.7%					6.7%	
Special Education (All other disabilities)	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	4.4%	4.4%	3.1%	3.1%	3.1%					3.1%	
Special Education Overall	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	14.2%	14.2%	9.8%	9.8%	9.8%					9.8%	
TOTAL EXPENDITURE INDEX FOR 6-8 PROGRAM WITH EXTENDED TIME ADD-ONS																	
INDEX OF TOTAL EXPENDITURE PER PUPIL (100 = Base Model-Average School Size)	111.5	100.0	94.4	107.8	106.4	114.8	114.0	128.5	128.8	117.1	116.3	114.8	114.0	126.0	124.3	152.2	149.8
GRAND TOTAL EXPENDITURE	\$5,109,506	\$6,684,938	\$7,579,751	\$7,203,996	\$7,114,432	\$7,674,063	\$7,619,067	\$8,593,212	\$8,607,353	\$7,828,363	\$7,773,367	\$7,674,063	\$7,619,067	\$5,775,555	\$5,695,781	\$2,312,160	\$2,276,137
GRAND TOTAL EXPENDITURE PER PUPIL	\$9,410	\$8,441	\$7,970	\$9,096	\$8,983	\$9,689	\$9,620	\$10,850	\$10,868	\$9,884	\$9,815	\$9,689	\$9,620	\$10,636	\$10,489	\$12,845	\$12,645
PCT PERSONNEL EXPENDITURES FOR GCEI	95.6%	92.0%	89.1%	91.5%	91.4%	90.3%	90.2%	88.3%	88.3%	90.2%	90.1%	90.3%	90.2%	94.0%	95.8%	97.0%	98.9%

GRADES 6-8 INSTRUCTIONAL PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served													
Pupils Served	543	792	951	792		792		792		792		792		543		180	
Personnel																	
Core Classroom Teachers	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.43	5.43	6.05	6.05
Special Education Teachers	0.12	0.31	0.43	0.86	0.86	0.85	0.85	0.84	0.84	1.10	1.10	0.85	0.85	0.68	0.68	0.39	0.39
Other Teachers	3.00	1.78	1.01	1.81	1.81	2.01	2.01	2.39	2.39	2.01	2.01	2.01	2.01	3.22	3.22	5.00	5.00
Substitutes	0.42	0.37	0.34	0.40	0.40	0.41	0.41	0.43	0.43	0.42	0.42	0.41	0.41	0.47	0.47	0.57	0.57
General Education Aides	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.17	1.17	1.61	1.61
Special Education Aides	0.28	0.49	0.62	0.69	0.69	0.55	0.55	0.27	0.27	0.65	0.65	0.55	0.55	0.36	0.36	0.04	0.04
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$75	\$173	\$236	\$181	\$181	\$233	\$233	\$334	\$334	\$233	\$233	\$233	\$233	\$135	\$135	\$0	\$0

GRADES 6-8 ADMIN. & SUPPORT SERVICES (INCL. SPECIAL EDUCATION)	Pupils Served			Pupils Served														
Pupils Served	543	792	951	792		792		792		792		792		792		543		
Personnel																		
Guidance Counselors	0.30	0.41	0.48	0.37	0.37	0.42	0.42	0.52	0.52	0.40	0.40	0.42	0.42	0.33	0.33	0.15	0.15	
School Psychologists	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	
Social Workers	0.23	0.13	0.06	0.12	0.12	0.14	0.14	0.18	0.18	0.13	0.13	0.14	0.14	0.25	0.25	0.40	0.40	
Other Pupil Support	0.63	0.40	0.26	0.39	0.39	0.29	0.29	0.10	0.10	0.29	0.29	0.29	0.29	0.52	0.52	0.84	0.84	
Special Education Other Pupil Support	0.21	0.26	0.29	0.15	0.15	0.10	0.10	0.00	0.00	0.05	0.05	0.10	0.10	0.04	0.04	0.00	0.00	
Nurses	0.17	0.11	0.07	0.11	0.11	0.13	0.13	0.17	0.17	0.13	0.13	0.13	0.13	0.17	0.17	0.27	0.27	
Librarians/Media Specialists	0.16	0.13	0.12	0.14	0.14	0.16	0.16	0.19	0.19	0.16	0.16	0.16	0.16	0.19	0.19	0.22	0.22	
Principals	0.18	0.13	0.09	0.13	0.13	0.13	0.13	0.14	0.14	0.13	0.13	0.13	0.13	0.19	0.19	0.26	0.26	
Assistant Principals	0.10	0.12	0.13	0.13	0.13	0.20	0.20	0.35	0.35	0.20	0.20	0.20	0.20	0.19	0.19	0.15	0.15	
Other Prof. Staff	0.49	0.10	0.00	0.11	0.11	0.19	0.19	0.33	0.33	0.19	0.19	0.19	0.19	0.55	0.55	1.13	1.13	
Clerical/Data Entry	0.65	0.44	0.30	0.46	0.46	0.63	0.63	0.95	0.95	0.63	0.63	0.63	0.63	0.83	0.83	1.15	1.15	
Security	0.01	0.22	0.35	0.23	0.23	0.29	0.29	0.41	0.41	0.29	0.29	0.29	0.29	0.07	0.07	0.00	0.00	
Non-Personnel Expenditures																		
Equipment & Technology	\$0	\$80	\$156	\$99	\$99	\$224	\$224	\$466	\$466	\$224	\$224	\$224	\$224	\$106	\$106	\$0	\$0	
Student Activities	\$106	\$222	\$296	\$218	\$218	\$195	\$195	\$149	\$149	\$195	\$195	\$195	\$195	\$78	\$78	\$0	\$0	
Professional Development	\$113	\$80	\$58	\$149	\$149	\$165	\$165	\$197	\$197	\$195	\$195	\$165	\$165	\$199	\$0	\$248	\$0	
Assessment	\$36	\$36	\$36	\$36	\$36	\$36	\$36	\$36	\$36	\$36	\$36	\$36	\$36	\$37	\$37	\$50	\$50	
Food	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

EXTENDED DAY																	
Does educational program require an extended day component (Y=yes or N=no)?		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y		Require Extended Day Y			
If yes, what proportion of the total grade 6-8 population is to be served?		Percentage of Total Enrollment Served		8.5%		Percentage of Total Enrollment Served		20.0%		Percentage of Total Enrollment Served		42.1%		Percentage of Total Enrollment Served		20.0%	
Pupils Served		Pupils Served		Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	
Pupils Served		37	54	65	68	68	158	158	334	334	158	158	158	158	109	109	
Personnel																	
Core Classroom Teachers	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	
	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	
	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	
	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	
	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	
Non-Personnel Expenditures																	
Instructional Supplies & Materials		\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	

EXTENDED YEAR																	
Does educational program require an extended day component (Y=yes or N=no)?				Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year	
If yes, what proportion of the total grade 6-8 population is to be served?		Percentage of Total Enrollment Served		16.8%		Percentage of Total Enrollment Served		19.6%		Percentage of Total Enrollment Served		25.2%		Percentage of Total Enrollment Served		19.6%	
Pupils Served			Pupils Served			Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served
Pupils Served	89	129	155	190	133	190	155	190	199	190	155	190	155	89	107	30	35
Personnel																	
Core Classroom Teachers	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87
Special Education Teachers	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Substitutes	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
General Education Aides	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Special Education Aides	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26

HIGH SCHOOL			Poverty Change					Special Education Change		ELL Change		Small School		Very Small School	
			Base Models (No Free/Reduced Lunch or ELL)		Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII	Model VI	Model VII	Model VI	Model VII
ENROLLMENT			Base Model - Small Schools	Base Model - Average School Size	Base Model - Large Schools	Low poverty, low ELL, average special education	Average poverty, low ELL, average special education	High poverty, low ELL, average special education	Average poverty, low ELL, high special education	Average poverty, high ELL, average special education	Average poverty, high ELL, high special education	Average poverty, low ELL, average special education	Average poverty, low ELL, high special education	Average poverty, low ELL, average special education	Average poverty, low ELL, high special education
Total Enrollment (9-12)			Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students	Students
District Enrollment			576	943	1,184	943	943	943	943	943	576	180			
			4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225					
STUDENT DEMOGRAPHICS			Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Eligible for Free and Reduced Price Lunch Program			0.0%	0.0%	0.0%	4.5%	34.2%	91.6%	34.2%	34.2%	34.2%	34.2%	34.2%	34.2%	34.2%
English Language Learners			0.0%	0.0%	0.0%	0.9%	0.9%	0.9%	0.9%	18.8%	0.9%	0.9%	0.9%	0.9%	0.9%
Special Education (Specific Learning Disability & Speech Language)			6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	9.8%	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%
Special Education (All other disabilities)			3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	4.4%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
Special Education Overall			9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	14.2%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%
TOTAL EXPENDITURE INDEX FOR 9 - 12 PROGRAM WITH EXTENDED TIME ADD-ONS															
INDEX OF TOTAL EXPENDITURE PER PUPIL (100 = Base Model-Average School Size)			105.6	100.0	97.2	105.7	105.7	116.6	116.6	138.7	138.7	119.2	119.2	116.6	119.8
GRAND TOTAL EXPENDITURE	\$5,164,213	\$8,005,852	\$9,772,550	\$8,461,182	\$8,461,182	\$9,337,692	\$9,337,692	\$11,108,111	\$11,108,111	\$9,540,237	\$9,540,237	\$9,337,692	\$9,588,226	\$6,010,360	\$5,894,090
GRAND TOTAL EXPENDITURE PER PUPIL	\$8,966	\$8,490	\$8,254	\$8,973	\$8,973	\$9,902	\$9,902	\$11,780	\$11,780	\$10,117	\$10,117	\$9,902	\$10,168	\$10,435	\$10,233
PCT PERSONNEL EXPENDITURES FOR GCEI	92.1%	89.6%	87.8%	89.4%	89.4%	88.1%	88.1%	86.2%	86.2%	88.2%	88.2%	88.1%	88.4%	90.6%	92.4%

GRADES 9-12 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served													
Pupils Served	576	943	1184	943		943		943		943		943		576		180	
Personnel																	
Core Classroom Teachers	4.74	3.99	3.50	4.12	4.12	4.93	4.93	6.51	6.51	4.93	4.93	4.93	4.93	5.70	5.70	6.49	6.49
Special Education Teachers	0.06	0.00	0.00	0.75	0.75	0.75	0.75	0.75	0.75	1.09	1.09	0.75	0.75	0.83	0.83	0.87	0.87
Other Teachers	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.37	2.37	2.37	2.37
Substitutes	0.35	0.31	0.29	0.36	0.36	0.40	0.40	0.48	0.48	0.41	0.41	0.40	0.40	0.44	0.44	0.49	0.49
General Education Aides	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.58	0.58	0.50	0.50
Special Education Aides	0.47	0.56	0.61	0.71	0.71	0.58	0.58	0.34	0.34	0.66	0.66	0.58	0.58	0.49	0.49	0.41	0.41
Non-Personnel Expenditures																	
Instructional Supplies & Materials	\$83	\$189	\$258	\$198	\$198	\$258	\$258	\$373	\$373	\$258	\$258	\$258	\$258	\$152	\$152	\$38	\$38

GRADES 9-12 PROGRAM INCLUDING SPECIAL EDUCATION	Pupils Served			Pupils Served													
Pupils Served	576	943	1184	943		943		943		943		943		576		180	
Personnel																	
Guidance Counselors	0.61	0.58	0.56	0.42	0.42	0.47	0.47	0.56	0.56	0.39	0.39	0.47	0.47	0.49	0.49	0.53	0.53
School Psychologists	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.15	0.15
Social Workers	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.17	0.17	0.17	0.17
Other Pupil Support	0.46	0.57	0.64	0.54	0.54	0.32	0.32	0.00	0.00	0.32	0.32	0.32	0.32	0.22	0.22	0.10	0.10
Special Education Other Pupil Support	0.15	0.20	0.23	0.11	0.11	0.07	0.07	0.00	0.00	0.03	0.03	0.07	0.07	0.00	0.00	0.00	0.00
Nurses	0.14	0.09	0.06	0.10	0.10	0.12	0.12	0.17	0.17	0.12	0.12	0.12	0.12	0.19	0.19	0.23	0.23
Librarians/Media Specialists	0.14	0.11	0.08	0.11	0.11	0.13	0.13	0.18	0.18	0.13	0.13	0.13	0.13	0.17	0.17	0.20	0.20
Principals	0.17	0.11	0.07	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.14	0.14	0.22	0.22
Assistant Principals	0.15	0.23	0.28	0.23	0.23	0.25	0.25	0.28	0.28	0.25	0.25	0.25	0.25	0.17	0.17	0.09	0.09
Other Prof. Staff	0.42	0.14	0.00	0.15	0.15	0.22	0.22	0.36	0.36	0.22	0.22	0.22	0.22	0.52	0.52	0.80	0.80
Clerical/Data Entry	0.80	0.73	0.67	0.73	0.73	0.79	0.79	0.89	0.89	0.79	0.79	0.79	0.79	0.87	0.87	0.95	0.95
Security	0.00	0.25	0.43	0.26	0.26	0.27	0.27	0.30	0.30	0.27	0.27	0.27	0.27	0.00	0.00	0.00	0.00
Non-Personnel Expenditures																	
Equipment & Technology	\$0	\$94	\$175	\$115	\$115	\$256	\$256	\$528	\$528	\$256	\$256	\$256	\$256	\$132	\$132	\$0	\$0
Student Activities	\$383	\$383	\$383	\$383	\$383	\$383	\$383	\$383	\$383	\$383	\$383	\$383	\$383	\$378	\$378	\$370	\$370
Professional Development	\$148	\$121	\$103	\$159	\$159	\$175	\$175	\$205	\$205	\$191	\$191	\$175	\$175	\$202	\$0	\$231	\$0
Assessment	\$13	\$9	\$7	\$12	\$12	\$27	\$27	\$56	\$56	\$27	\$27	\$27	\$27	\$30	\$30	\$33	\$33
Food	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

EXTENDED DAY		Require Extended Day		Require Extended Day		Require Extended Day		Require Extended Day		Require Extended Day		Require Extended Day		Require Extended Day		
Does educational program require an extended day component (Y=yes or N=no)?		Percentage of Total Enrollment Served	22.3%	Percentage of Total Enrollment Served	28.1%	Percentage of Total Enrollment Served	39.1%	Percentage of Total Enrollment Served	28.1%							
If yes, what proportion of the total grade 9-12 population is to be served?		Pupils Served	Pupils Served													
Pupils Served	124	202	254	211	211	265	265	369	369	265	265	265	162	162	51	51
Personnel																
Core Classroom Teachers	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07
Special Education Teachers	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Substitutes	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
General Education Aides	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Special Education Aides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-Personnel Expenditures																
Instructional Supplies & Materials	\$57	\$57	\$57	\$57	\$57	\$57	\$57	\$57	\$57	\$57	\$57	\$57	\$57	\$57	\$57	\$57

EXTENDED YEAR		Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year		Require Extended Year	
Does educational program require an extended day component (Y=yes or N=no)?															
If yes, what proportion of the total grade 9-12 population is to be served?		Percentage of Total Enrollment Served	9.6%	Percentage of Total Enrollment Served	14.4%	Percentage of Total Enrollment Served	23.7%	Percentage of Total Enrollment Served	14.4%	Percentage of Total Enrollment Served	14.4%	Percentage of Total Enrollment Served	14.4%	Percentage of Total Enrollment Served	14.4%
	Pupils Served			Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served	Pupils Served			Pupils Served	Pupils Served
Pupils Served	93	153	192	91	91	136	136	224	224	136	136	136	136	83	83
Personnel															
Core Classroom Teachers	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24
Special Education Teachers	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Substitutes	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
General Education Aides	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Special Education Aides	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Non-Personnel Expenditures															
Instructional Supplies & Materials	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$26

SYNTHESIS OF ELEMENTARY SCHOOL RESOURCES

Regression of Elementary School Resources Per 100 Pupils on Poverty, Enrollment and Special Education																							
	Grades 1-5						Grades K-5																
	Core Classroom Teachers	Special Education Teachers	Other Teachers	General Education Aides	Special Education Aides	Instructional Supplies & Materials	Guidance Counselors	School Psychologists	Social Workers	Other Pupil Support	Special Education Other Pupil Support	Nurses	Librarians/ Media Specialists	Principals	Assistant Principals	Other Prof. Staff	Clerical/Data Entry	Security	Equipment & Technology	Student Activities	Professional Development	Assessment	Food
Percent Free Lunch	0.0138 (2.72)***	0.0045 (3.26)***	0.0251 (4.25)***	0.0235 (4.18)***	0.0082 (2.18)**	1.5833 (2.85)***	0.0015 (1.39)	0.0024 (1.84)*	0.0038 (3.17)***	-0.0007 (0.35)	-0.0027 (2.34)**	0.0005 (1.10)	0.0005 (1.90)*	0 (0.06)	0.001 (1.97)*	0.0031 (2.66)**	0.004 (3.76)***	0.0036 (2.46)**	3.4809 (4.16)***	0.1595 (0.55)	0.3848 (0.94)	0.2364 (1.24)	-0.1769 (1.38)
Enrollment	0.0007 (0.44)	-0.0017 (4.26)***	-0.0137 (8.19)***	-0.013 (9.71)***	-0.002 (2.11)**	0.1922 (1.45)	-0.0001 (0.33)	-0.0007 (3.26)***	-0.0009 (4.17)***	-0.001 (1.98)*	0.0009 (2.83)***	-0.0003 (5.43)***	-0.0004 (9.16)***	-0.0003 (33.80)***	0.0003 (3.09)***	-0.0005 (2.07)**	0.0004 (1.61)	0.0004 (1.37)	0.0003 (0.94)	0.1698 (1.72)*	0.1395 (1.40)	-0.1056 (1.00)	0.0531 (0.52)
Percent Special Education	0 (.)	0.0788 (6.42)***	0 (.)	0 (.)	0.0899 (3.14)***	0 (.)	0.0002 (0.06)	-0.0011 (0.27)	-0.0059 (1.07)	0 (.)	-0.0044 (0.66)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	13.5001 (2.19)**	0 (.)	0 (.)
Constant	5.5533 (8.15)***	0.8413 (4.21)***	7.5836 (11.84)***	6.4894 (14.42)***	0.5272 (0.92)	26.3327 (0.62)	0.1236 (1.37)	0.493 (4.72)***	0.5874 (6.14)***	0.8279 (2.68)**	-0.1541 (1.18)	0.3624 (19.96)***	0.379 (25.95)***	0.3532 (76.61)***	-0.0555 (1.02)	0.3715 (3.50)***	0.2621 (2.45)**	-0.1837 (2.07)**	-67.5452 (0.98)	-41.4832 (1.16)	77.1473 (1.14)	-8.3808 (0.36)	24.4583 (1.83)*
Observations	40	48	40	40	48	40	48	48	40	48	40	40	40	40	40	40	40	40	40	40	48	40	40
R-squared	0.2008	0.4904	0.7062	0.7246	0.1617	0.5313	0.0854	0.2722	0.4311	0.1270	0.2198	0.6588	0.6850	0.9718	0.2979	0.1562	0.4917	0.4993	0.5619	0.2339	0.2321	0.1760	0.0848
F-test of joint significance (p-value)	0.01	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.11	0.11	0.12	0.05	
Small School	5.81	0.27	2.86	2.01	-0.18	92.65	0.17	0.18	0.23	0.4	0.21	0.22	0.23	0.23	0.06	0.18	0.43	-0.04	2.77	42.42	183.15	32.13	18.88
Average School	5.89	0.07	1.22	0.45	-0.42	115.72	0.17	0.08	0.11	0.25	0.34	0.17	0.18	0.19	0.11	0.11	0.48	0	27.23	42.42	183.15	32.13	16.94
Large School	6.02	-0.23	-1.25	-1.88	-0.79	150.32	0.17	-0.09	-0.08	0.02	0.52	0.1	0.1	0.13	0.17	0.01	0.57	0.08	63.91	42.42	183.15	32.13	14.03
Poverty 1	5.96	0.86	1.33	0.56	0.49	122.84	0.17	0.08	0.07	0.25	0.28	0.17	0.18	0.19	0.11	0.13	0.5	0.02	42.89	42.42	183.15	32.13	16.14
Poverty 2	6.36	0.99	2.07	1.26	0.74	169.86	0.17	0.15	0.18	0.23	0.2	0.19	0.2	0.19	0.14	0.22	0.62	0.13	146.27	42.42	183.15	32.13	10.89
Poverty 3	7.16	1.25	3.51	2.61	1.21	260.75	0.17	0.29	0.4	0.19	0.04	0.22	0.22	0.19	0.2	0.4	0.85	0.34	346.07	42.42	183.15	32.13	0.73
SE 1	6.36	1.34	2.07	1.26	1.13	169.86	0.17	0.14	0.15	0.23	0.18	0.19	0.2	0.19	0.14	0.22	0.62	0.13	146.27	42.42	183.15	32.13	10.89
LEP 1	6.36	0.99	2.07	1.26	0.74	169.86	0.17	0.15	0.18	0.23	0.2	0.19	0.2	0.19	0.14	0.22	0.62	0.13	146.27	42.42	183.15	32.13	10.89
Small school	6.27	1.18	3.72	2.81	1.00	146.79	0.17	0.27	0.29	0.39	0.08	0.26	0.23	0.23	0.10	0.27	0.56	0.06	121.80	42.42	183.15	32.13	12.82
Smallest school	6.10	1.60	7.07	5.99	1.49	99.70	0.17	0.48	0.55	0.68	0.00	0.34	0.35	0.32	0.01	0.42	0.45	0.00	71.88	42.42	183.15	32.13	16.79

Robust absolute t statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Regression of Elementary School Resources Per 100 Pupils on Poverty, Enrollment and Special Education (continued)																				
	Extra Day					Extra Year					ECD					Kindergarten				
	Core Classroom Teachers	Special Education Teachers	General Education Aides	Special Education Aides	Instructional Supplies & Materials	Core Classroom Teachers	Special Education Teachers	General Education Aides	Instructional Supplies & Materials	Core Classroom Teachers	Special Education Teachers	General Education Aides	Special Education Aides	Instructional Supplies & Materials	Core Classroom Teachers	Special Education Teachers	General Education Aides	Special Education Aides	Instructional Supplies & Materials	
Percent Free Lunch	-0.0047 (0.81)	-0.0022 (2.20)**	-0.0017 (1.97)*	0 (.)	0.0302 (0.06)	-0.0487 (1.44)	-0.0304 (1.73)*	-0.0075 (0.79)	-0.0292 (1.63)	0.3647 (1.06)	0.0382 (3.63)***	0.0062 (1.07)	0.0756 (5.42)***	0.0062 (1.07)	-1.8676 (8.21)***	-0.0028 (0.61)	0.002 (0.92)	0.0308 (2.26)**	0.0004 (0.12)	0.3773 (1.53)
Enrollment	0.007 (7.52)***	-0.0005 (2.30)**	0.0002 (1.12)	0 (.)	0.2036 (1.59)	0.0045 (0.79)	0.0032 (1.18)	0.0001 (0.08)	0.003 (1.11)	-0.0136 (0.18)	-0.0503 (4.14)***	0.0007 (0.24)	-0.0645 (4.09)***	0.0007 (0.24)	1.9149 (6.70)***	-0.0031 (0.45)	0.0032 (1.27)	-0.0217 (1.06)	0.0039 (1.08)	0.2977 (1.27)
Percent Special Education	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	
Constant	0.9492 (3.53)***	0.2993 (3.32)***	0.1151 (2.41)**	0 (.)	32.8048 (0.99)	2.9082 (3.05)***	1.1887 (2.46)**	0.7695 (3.13)***	1.1445 (2.32)**	13.1512 (2.26)**	6.041 (14.62)***	-0.2869 (1.09)	3.7735 (5.24)***	-0.2869 (1.09)	104.5432 (6.50)***	6.3422 (11.71)***	0.4443 (1.86)*	3.0447 (2.10)**	-0.0843 (0.33)	87.2033 (5.66)***
Observations	30	30	30	30	30	31	31	31	31	18	18	18	18	18	40	40	40	40	40	
R-squared	0.5095	0.3486	0.1149		0.0673	0.1085	0.1834	0.0831	0.1702	0.1627	0.6167	0.1913	0.5977	0.1913	0.6946	0.0339	0.0912	0.1262	0.0515	0.2161
F-test of joint significance (p-value)	0.00	0.01	0.14	1.00	0.27	0.13	0.09	0.17	0.11	0.03	0.00	0.56	0.00	0.56	0.00	0.56	0.07	0.09	0.28	0.00
Small School	1.94	0.09	0.05	0	71.11	1.6	0.44	0.48	0.42	26.13	6.09	0.09	5.3	0.09	80	5.93	0.67	1.55	0.29	107.74
Average School	1.94	0.09	0.05	0	71.11	1.6	0.44	0.48	0.42	26.13	6.09	0.09	5.3	0.09	80	5.93	0.74	1.03	0.29	114.89
Large School	1.94	0.09	0.05	0	71.11	1.6	0.44	0.48	0.42	26.13	6.09	0.09	5.3	0.09	80	5.93	0.86	0.25	0.29	125.6
Poverty 1	1.94	0.09	0.05	0	71.11	1.6	0.44	0.48	0.42	26.13	6.09	0.09	5.3	0.09	80	5.93	0.75	1.17	0.29	116.59
Poverty 2	1.94	0.09	0.05	0	71.11	1.6	0.44	0.48	0.42	26.13	6.09	0.09	5.3	0.09	80	5.93	0.81	2.08	0.29	127.79
Poverty 3	1.94	0.09	0.05	0	71.11	1.6	0.44	0.48	0.42	26.13	6.09	0.09	5.3	0.09	80	5.93	0.93	3.85	0.29	149.45
SE 1	1.94	0.09	0.05	0	71.11	1.6	0.44	0.48	0.42	26.13	6.09	0.09	5.3	0.09	80	5.93	0.81	2.08	0.29	127.79
LEP 1	1.94	0.09	0.05	0	71.11	1.6	0.44	0.48	0.42	26.13	6.09	0.09	5.3	0.09	80	5.93	0.81	2.08	0.29	127.79
Small school	1.94	0.09	0.05	0.00	71.11	1.60	0.44	0.48	0.42	26.13	6.09	0.09	5.30	0.09	80.00	5.93	0.73	2.60	0.29	120.65
Smallest school	1.94	0.09	0.05	0.00	71.11	1.60	0.44	0.48	0.42	26.13	6.09	0.09	5.30	0.09	80.00	5.93	0.58	3.66	0.29	106.06
Robust absolute t statistics in parentheses																				
* significant at 10%; ** significant at 5%; *** significant at 1%																				

Regression of Elementary School Resources Per 100 Pupils on Poverty, Enrollment and Special Education (continued)					
	PreK				
	Core Classroom Teachers	Special Education Teachers	General Education Aides	Special Education Aides	Instructional Supplies & Materials
Percent Free Lunch	0.037 (2.15)**	-0.0171 (2.80)***	-0.0044 (0.21)	-0.0015 (1.37)	-1.1133 (3.22)***
Enrollment	-0.0347 (1.85)*	0.0095 (3.09)***	-0.0437 (1.96)*	0.0069 (6.22)***	2.7375 (8.64)***
Percent Special Education	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)
Constant	7.656 (5.61)***	0.8124 (2.16)**	9.6684 (6.40)***	-0.2242 (3.33)***	20.1306 -0.83
Observations	35	35	35	35	35
R-squared	0.1434	0.2088	0.2128	0.6690	0.6847
F-test of joint significance (p-value)	0.07	0.01	0.08	0.00	0.00
Small School	6.23	1.2	7.87	0.06	132.37
Average School	5.4	1.43	6.83	0.23	198.07
Large School	4.57	1.66	5.78	0.39	263.77
Poverty 1	5.57	1.35	6.81	0.22	193.06
Poverty 2	6.67	0.84	6.67	0.17	159.99
Poverty 3	8.79	-0.14	6.42	0.09	96.09
SE 1	6.67	0.84	6.67	0.17	159.99
LEP 1	6.67	0.84	6.67	0.17	159.99
Small school	6.53	0.88	6.50	0.20	170.94
Smallest school	8.23	0.42	8.64	0.00	36.81

Robust absolute t statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

SYNTHESIS OF MIDDLE SCHOOL RESOURCES

Regressions of Middle School Resources Per 100 Pupils on Poverty, Enrollment and Special Education																								
	Grades 6-8																							
	Core Classroom Teachers	Special Education Teachers	Other Teachers	General Education Aides	Special Education Aides	Instructional Supplies & Materials	Guidance Counselors	School Psychologists	Social Workers	Other Pupil Support	Special Education Other Pupil Support	Nurses	Librarians/Media Specialists	Principals	Assistant Principals	Other Prof. Staff	Clerical/Data Entry	Security	Equipment & Technology	Student Activities	Professional Development	Assessment	Food	
Percent Free Lunch	0.0156 (2.09)**	-0.0002 (0.17)	0.0066 (0.89)	0.0064 (1.07)	-0.0049 (2.39)**	1.7551 (3.26)***	0.0016 (1.49)	0.0002 (0.63)	0.0007 (1.27)	-0.0033 (1.84)*	-0.0017 (2.84)***	0.0007 (2.53)**	0.0006 (2.04)**	0.0001 (3.30)***	0.0025 (5.59)***	0.0026 (1.89)*	0.0056 (3.37)***	0.0021 (1.42)	4.2131 (3.95)***	-0.8001 (0.75)	0.556 (1.56)	0.4225 (2.18)**	-0.2135 (1.43)	
Enrollment	-0.0017 (1.25)	0.0008 (3.31)***	-0.0049 (4.58)***	-0.0012 (1.03)	0.0009 (2.31)**	0.3956 (5.11)***	0.0005 (2.59)**	-0.0001 (1.06)	-0.0004 (4.47)***	-0.0009 (2.27)**	0.0002 (2.38)***	-0.0003 (9.68)***	-0.0001 (2.60)**	-0.0002 (39.17)***	0.0001 (1.23)	-0.0016 (4.06)***	-0.0009 (1.94)*	0.0008 (5.01)***	0.4751 (2.43)**	0.4668 (2.96)***	-0.1353 (2.52)**	-0.0342 (0.90)	-0.0008 (0.02)	
Percent Special Education	0 (.)	0.0558 (6.06)***	0 (.)	0 (.)	0.0232 (1.67)	0 (.)	-0.0043 (0.99)	-0.0003 (0.16)	-0.0015 (0.56)	0 (.)	-0.0104 (3.03)***	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	6.7876 (2.14)**	0 (.)	0 (.)		
Constant	5.8186 (6.77)***	-0.2954 (1.5)	5.652 (7.84)***	1.6059 (1.91)*	-0.1854 (0.73)	-140.249 (3.20)***	0.0474 (0.42)	0.1916 (3.66)***	0.4618 (7.22)***	1.1197 (4.00)***	0.0891 (1.77)*	0.3045 (21.99)***	0.22 (9.36)***	0.2902 (97.54)***	0.0493 (1.33)	1.3298 (4.71)***	1.1241 (3.56)***	-0.4381 (4.42)***	-295.9712 (2.63)**	-147.8485 (1.63)	186.9357 (4.55)***	41.3936 (1.71)*	19.4517 (0.83)	
Observations	40	48	40	40	48	40	48	48	48	40	48	40	40	40	40	40	40	40	40	48	40	40		
R-squared	0.1222	0.5032	0.2796	0.0395	0.2011	0.6758	0.2739	0.0341	0.2763	0.3069	0.2238	0.5591	0.1192	0.9790	0.5753	0.4321	0.2082	0.4571	0.5598	0.1621	0.1615	0.1220	0.0798	
F-test of joint significance (p-value)	0.13	0.00	0.00	0.49	0.00	0.00	0.00	0.55	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.04	0.11	0.05
Small School	5.30	0.12	3.00	1.00	0.28	74.54	0.30	0.13	0.23	0.63	0.21	0.17	0.16	0.18	0.10	0.49	0.65	0.01	-37.97	105.65	113.46	35.75	19.04	
Average School	5.30	0.31	1.78	1.00	0.49	173.03	0.41	0.13	0.13	0.40	0.26	0.11	0.13	0.13	0.12	0.10	0.44	0.22	80.34	221.89	79.77	35.75	18.86	
Large School	5.30	0.43	1.01	1.00	0.62	235.92	0.48	0.13	0.06	0.26	0.29	0.07	0.12	0.09	0.13	-0.15	0.30	0.35	155.88	296.12	58.25	35.75	18.74	
Poverty 1	5.30	0.86	1.81	1.00	0.69	180.93	0.37	0.13	0.12	0.39	0.15	0.11	0.14	0.13	0.13	0.11	0.46	0.23	99.30	218.29	148.79	35.75	17.90	
Poverty 2	5.30	0.85	2.01	1.00	0.55	233.05	0.42	0.13	0.14	0.29	0.10	0.13	0.16	0.13	0.20	0.19	0.63	0.29	224.43	194.53	165.30	35.75	11.56	
Poverty 3	5.30	0.84	2.39	1.00	0.27	333.80	0.52	0.13	0.18	0.10	0.00	0.17	0.19	0.14	0.35	0.33	0.95	0.41	466.26	148.60	197.22	35.75	-0.70	
SE 1	5.30	1.10	2.01	1.00	0.65	233.05	0.40	0.13	0.13	0.29	0.05	0.13	0.16	0.13	0.20	0.19	0.63	0.29	224.43	194.53	195.17	35.75	11.56	
LEP 1	5.30	0.85	2.01	1.00	0.55	233.05	0.42	0.13	0.14	0.29	0.10	0.13	0.16	0.13	0.20	0.19	0.63	0.29	224.43	194.53	165.30	35.75	11.56	
Small school	5.43	0.68	3.22	1.17	0.36	134.59	0.33	0.13	0.25	0.52	0.04	0.17	0.19	0.19	0.55	0.83	0.07	106.10	78.26	199.00	37.27	11.72		
Smallest school	6.05	0.39	5.00	1.61	0.04	0.00	0.15	0.13	0.40	0.84	0.00	0.27	0.22	0.26	0.15	1.13	1.15	0.00	0.00	248.12	49.69	12.01		

Robust absolute t statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Regressions of Middle School Resources Per 100 Pupils on Poverty, Enrollment and Special Education (continued)										
	Extra Day					Extra Year				
	Core Classroom Teachers	Special Education Teachers	General Education Aides	Special Education Aides	Instructional Supplies & Materials	Core Classroom Teachers	Special Education Teachers	General Education Aides	Special Education Aides	Instructional Supplies & Materials
Percent Free Lunch	-0.0057 (1.09)	-0.0015 (2.08)**	-0.0017 (0.94)	-0.0006 (0.78)	-0.2077 (0.58)	-0.0357 (2.21)**	-0.0118 (2.25)**	-0.0006 (0.36)	-0.0098 (1.89)*	0.0872 (0.51)
Enrollment	0.005 (3.88)***	-0.0006 (4.15)***	-0.0002 (0.64)	-0.0003 (1.97)*	-0.0366 (0.52)	-0.0003 (0.06)	0.0011 (0.86)	0.0002 (0.39)	-0.0009 (0.68)	0.0589 (1.34)
Percent Special Education	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)
Constant	0.4503 (2.53)**	0.3328 (5.57)***	0.3358 (2.33)**	0.1648 (2.29)**	79.0075 (2.37)**	3.5233 (2.89)***	0.8415 (2.28)**	0.1307 (2.00)*	0.9519 (2.49)**	12.2393 (2.19)**
Observations	35	35	35	35	35	35	35	35	35	35
R-squared	0.5499	0.4336	0.0515	0.1183	0.0189	0.1223	0.1053	0.0031	0.1757	0.1775
F-test of joint significance (p-value)	0.00	0.00	0.37	0.09	0.69	0.05	0.09	0.93	0.08	0.01
Small School	1.29	0.11	0.19	0.07	59.72	1.87	0.50	0.13	0.35	26.43
Average School	1.29	0.11	0.19	0.07	59.72	1.87	0.50	0.13	0.35	26.43
Large School	1.29	0.11	0.19	0.07	59.72	1.87	0.50	0.13	0.35	26.43
Poverty 1	1.29	0.11	0.19	0.07	59.72	1.87	0.50	0.13	0.35	26.43
Poverty 2	1.29	0.11	0.19	0.07	59.72	1.87	0.50	0.13	0.35	26.43
Poverty 3	1.29	0.11	0.19	0.07	59.72	1.87	0.50	0.13	0.35	26.43
SE 1	1.29	0.11	0.19	0.07	59.72	1.87	0.50	0.13	0.35	26.43
LEP 1	1.29	0.11	0.19	0.07	59.72	1.87	0.50	0.13	0.35	26.43
Small school	2.97	0.11	0.19	0.07	59.72	1.87	0.50	0.13	0.35	26.43
Smallest school	1.16	0.11	0.19	0.07	59.72	1.87	0.50	0.13	0.35	26.43

Robust absolute t statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

SYNTHESIS OF HIGH SCHOOL RESOURCES

Regression of High School Resources Per 100 Pupils on Poverty, Enrollment and Special Education																							
	Grades 9-12																						
	Core Classroom Teachers	Special Education Teachers	Other Teachers	General Education Aides	Special Education Aides	Instructional Supplies & Materials	Guidance Counselors	School Psychologists	Social Workers	Other Pupil Support	Special Education Other Pupil Support	Nurses	Librarians/Media Specialists	Principals	Assistant Principals	Other Prof Staff	Clerical/Data Entry	Security	Equipment & Technology	Student Activities	Professional Development	Assessment	Food
Percent Free Lunch	0.0275 (3.62)***	0 (0.01)	-0.0069 (0.76)	-0.0008 (0.29)	-0.0043 (2.81)***	2.0101 (3.32)***	0.0016 (2.52)**	0 (0.05)	-0.0001 (0.24)	-0.0072 (5.37)***	-0.0015 (2.43)**	0.0009 (4.71)***	0.0008 (4.60)***	0.0001 (5.20)***	0.0006 (1.40)	0.0024 (3.27)***	0.0018 (1.48)	0.0005 (0.39)	4.7425 (3.63)***	-0.1755 (0.10)	0.5207 (1.65)	0.5102 (2.59)**	-0.2061 (1.40)
Enrollment	-0.002 (2.83)***	-0.0001 (1.64)	0 (0.03)	0.0002 (0.89)	0.0002 (1.50)	0.2883 (6.76)***	-0.0001 (1.62)	-0.0001 (1.82)*	0 (0.49)	0.0003 (2.03)**	0.0001 (2.82)***	-0.0001 (8.67)***	-0.0001 (5.35)***	-0.0002 (53.06)***	0.0002 (5.68)***	-0.0007 (5.99)***	-0.0002 (2.54)**	0.0007 (12.44)***	0.3372 (3.10)***	0.0203 (0.20)	-0.0739 (3.04)***	-0.0084 (0.56)	-0.0022 (0.10)
Percent Special Education	0 (.)	0.0763 (5.35)***	0 (.)	0 (.)	0.0176 (1.72)*	0 (.)	-0.017 (3.38)***	-0.0006 (0.44)	0.0024 (0.88)	0 (.)	-0.0085 (3.08)***	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	3.7055 (1.64)	0 (.)	0 (.)	
Constant	5.9143 (12.66)***	0.1379 (0.87)	2.6022 (5.93)***	0.4908 (2.64)**	0.3467 (2.61)**	-82.9057 (2.53)**	0.6624 (12.71)***	0.1744 (5.01)***	0.1454 (2.75)***	0.2897 (3.11)***	0.0797 (2.15)**	0.2173 (19.64)***	0.1953 (17.66)***	0.2561 (142.36)***	0.0332 (1.62)	0.8448 (7.26)***	0.9238 (18.05)***	-0.4262 (14.69)***	-224.4925 (3.16)***	372.1711 (5.21)***	190.3022 (6.49)***	17.4147 (1.60)	20.6227 (1.12)
Observations	40	48	40	40	48	40	48	48	40	48	40	40	40	40	40	40	40	40	40	48	40	40	
R-squared	0.2553	0.6075	0.0228	0.0128	0.1975	0.6451	0.2732	0.0695	0.0144	0.3601	0.2005	0.5421	0.3953	0.9850	0.4988	0.6049	0.0974	0.6396	0.5017	0.0004	0.1378	0.1979	0.0802
F-test of joint significance (p-value)	0.00	0.00	0.73	0.67	0.00	0.00	0.00	0.26	0.80	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.98	0.02	0.04	0.05	
Small School	4.74	0.06	2.25	0.65	0.47	83.18	0.61	0.10	0.14	0.46	0.15	0.14	0.14	0.17	0.15	0.42	0.80	-0.01	-30.24	383.43	147.76	12.57	19.38
Average School	3.99	0.00	2.25	0.65	0.56	189.00	0.58	0.10	0.14	0.57	0.20	0.09	0.11	0.11	0.23	0.14	0.73	0.25	93.53	383.43	120.65	9.49	18.59
Large School	3.50	-0.03	2.25	0.65	0.61	258.49	0.56	0.10	0.14	0.64	0.23	0.06	0.08	0.07	0.28	-0.04	0.67	0.43	174.80	383.43	102.85	7.46	18.07
Poverty 1	4.12	0.75	2.25	0.65	0.71	198.04	0.42	0.10	0.14	0.54	0.11	0.10	0.11	0.11	0.23	0.15	0.73	0.26	114.87	383.43	159.30	11.78	17.67
Poverty 2	4.93	0.75	2.25	0.65	0.58	257.74	0.47	0.10	0.14	0.32	0.07	0.12	0.13	0.12	0.25	0.22	0.79	0.27	255.72	383.43	174.77	26.94	11.54
Poverty 3	6.51	0.75	2.25	0.65	0.34	373.12	0.56	0.10	0.14	-0.09	-0.02	0.17	0.18	0.12	0.28	0.36	0.89	0.30	527.94	383.43	204.65	56.22	-0.29
SE 1	4.93	1.09	2.25	0.65	0.66	257.74	0.39	0.10	0.14	0.32	0.03	0.12	0.13	0.12	0.25	0.22	0.79	0.27	255.72	383.43	191.07	26.94	11.54
LEP 1	4.93	0.75	2.25	0.65	0.58	257.74	0.47	0.10	0.14	0.32	0.07	0.12	0.13	0.12	0.25	0.22	0.79	0.27	255.72	383.43	174.77	26.94	11.54
Small school	5.70	0.83	2.37	0.58	0.49	151.90	0.49	0.11	0.17	0.22	0.00	0.19	0.17	0.14	0.17	0.52	0.87	0.00	131.93	377.86	201.86	30.03	12.31
Smallest school	6.49	0.87	2.37	0.50	0.41	37.73	0.53	0.15	0.17	0.10	0.00	0.23	0.20	0.22	0.09	0.80	0.95	0.00	0.00	369.82	231.12	33.35	13.18

Robust absolute t statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Regression of High School Resources Per 100 Pupils on Poverty, Enrollment and Special Education (continued)										
	Extra Day					Extra Year				
	Core Classroom Teachers	Special Education Teachers	General Education Aides	Special Education Aides	Instructional Supplies & Materials	Core Classroom Teachers	Special Education Teachers	General Education Aides	Special Education Aides	Instructional Supplies & Materials
Percent Free Lunch	0.0093 (1.27)	0.0001 (0.53)	0.0014 (1.00)	0 (.)	-0.4505 (1.08)	-0.039 (2.68)**	-0.0083 (2.33)**	0.0018 (1.03)	-0.0082 (2.30)**	0.5089 (7.30)***
Enrollment	-0.0013 (2.13)**	0 (1.05)	0.0002 (1.86)*	0 (.)	-0.106 (2.69)**	-0.0096 (3.68)***	-0.0012 (1.78)*	-0.0019 (4.08)***	-0.0012 (1.70)	-0.1073 (4.56)***
Percent Special Education	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)
Constant	2.1653 (4.98)***	0.0165 (1.12)	-0.0466 (0.54)	0 (.)	128.39 (2.77)***	6.3734 (4.92)***	0.9841 (2.80)***	0.6059 (3.85)***	0.9617 (2.68)**	32.2708 (4.64)***
Observations	35	35	35	35	35	30	30	30	30	30
R-squared	0.1910	0.0235	0.1239	0.0000	0.2003	0.3562	0.2014	0.3497	0.1941	0.5431
F-test of joint significance (p-value)	0.09	0.47	0.17	1.00	0.02	0.00	0.04	0.00	0.05	0.00
Small School	2.07	0.02	0.14	0.00	57.14	2.24	0.31	0.23	0.30	30.00
Average School	2.07	0.02	0.14	0.00	57.14	2.24	0.31	0.23	0.30	30.00
Large School	2.07	0.02	0.14	0.00	57.14	2.24	0.31	0.23	0.30	30.00
Poverty 1	2.07	0.02	0.14	0.00	57.14	2.24	0.31	0.23	0.30	30.00
Poverty 2	2.07	0.02	0.14	0.00	57.14	2.24	0.31	0.23	0.30	30.00
Poverty 3	2.07	0.02	0.14	0.00	57.14	2.24	0.31	0.23	0.30	30.00
SE 1	2.07	0.02	0.14	0.00	57.14	2.24	0.31	0.23	0.30	30.00
LEP 1	2.07	0.02	0.14	0.00	57.14	2.24	0.31	0.23	0.30	30.00
Small school	2.07	0.02	0.14	0.00	57.14	2.24	0.31	0.23	0.30	30.00
Smallest school	2.07	0.02	0.14	0.00	57.14	2.24	0.31	0.23	0.30	30.00
Robust absolute t statistics in parentheses										
* significant at 10%; ** significant at 5%; *** significant at 1%										

APPENDIX H

DETERMINING “ADEQUATE” RESOURCES FOR NEW YORK’S PUBLIC SCHOOLS

Expert Consultant Reviews of Professional Judgment Panel Outcomes

The AIR/MAP research team commissioned three independent expert reviews of Professional Judgment Panel processes and outcomes. These expert reviews were undertaken by Professors Kenji Hakuta of Stanford University, Henry M. Levin of Teachers College, Columbia University and Margaret McLaughlin of the University of Maryland (more detailed biographies of each expert are provided on the sheet preceding their own reports). Questions specific to individual areas of academic specialization were posed of each expert. Their complete responses to these questions follow this introductory section. Immediately below is a preview of each report.

Overall Professional Judgment Panel Processes and Outcomes. (Levin)

Professor Levin’s report concludes that logistical arrangements for, directions to, and operation of Professional Judgment Panels were undertaken to a high standard. He offers numerous insightful remarks regarding interpretation of Professional Judgment Panel results. His insights concentrate on two areas. First, he contends that Professional Judgment Panel instructional program designs need to be judged against baseline data regarding where student performance is now and where it is intended to be after panels’ designs for instructional “treatments” have occurred.

Professor Levin does not conclude that Professional Judgment Panel –suggested resource levels and configurations panels are necessarily either insufficient or inappropriate. Rather, he laments the absence in panel reports of an explicit underlying theory of action linking presumed student deficiencies and intended instructional outcomes.

Finally, Professor Levin extends a caveat that even sufficient resource levels cannot guarantee student success. There are large elements of will involved, both on the part of teachers and administrators and on the part of students, their families, and their communities.

English Language Learners. (Hakuta)

Professor Hakuta reviewed Professional Judgment Panel program designs from the perspective of an English Language Learning expert. He makes no assertions regarding the adequacy or inadequacy of resource recommendations. He does question implied pedagogical strategies underlying most panels’ instructional designs. He is unsure that panel participants sufficiently suffused English Language Learning into the entire curriculum. This strategy calls for fewer language-teaching specialists in a school but more staff development for each content area teacher.

Special Education. (McLaughlin)

Professor McLaughlin was asked questions pertaining to the validity of the Professional Judgment Panel processes and outcomes for Special Education or disabled students. (Because of the significance of this subgroup of students, the large dollar amounts involved in supporting their public schooling, and the special protections accorded this student category by federal statutes, the AIR/MAP research team undertook a separate set of Professional Judgment Panel exercises specifically concentrating on disabled students.)

Professor McLaughlin's report concludes that exercises posed of the Professional Judgment Panel assembled for Special Education were indeed appropriate and that the outcomes of the panels accurately portray, perhaps even overestimate, costs involved in providing specialized education services to this population.

Professor McLaughlin's report contends that panels may have overestimated costs because of the highly legalistic environment surrounding special education in New York State generally and New York City specifically, a lack of full research understanding on the part of panel participants regarding advantages of early intervention, and a possible underestimation of the potential effectiveness of classroom teachers in handling disabilities, when particularly prepared to do so.

DR. HENRY M. LEVIN EXPERT PANELIST REPORT

Dr. Henry M. Levin served on the external panel of experts, providing expertise in the cost effectiveness of education and programs for at-risk youth. Dr. Levin is currently a William Heard Kilpatrick Professor of Economics and Education at Teachers College, Columbia University, and director of the National Center for the Study of Privatization in Education. He specializes in the economics of education, urban economics, public finance, and education policy. Among his many honors and professional activities, Dr. Levin has served as an elected member of the National Collegiate Athletic Association Research Committee from 1993-1999 and was named in 1991 as one of nine national leaders in educational innovation by the *New York Times*. In the New York area, he sits on the Governing Board of the Institute on Education and Government at Teachers College, Columbia University, and the Board of Directors of the Salvatori Project in New York City.

Introduction

I have read the report carefully and have concluded that the professional judgment panels were well-organized, their instructions were clear, and they labored conscientiously to produce the resource patterns that were associated with their particular groups of schools. I have been impressed with how far this technique has come in the last few years. Nevertheless, I have a number of concerns. The most important of these is the issue of interpretation. This can be alleviated somewhat with baseline information, so let me get to that.

Baseline

In order to evaluate the probability that these formulations provide resource adequacy, we need to have some understanding of the present situation. To be more specific, we know the following:

- 1- You set two standards for educational adequacy. The first is explicit in that the students meet the Regents Exam requirements. The second is implied in that all students graduate. You are not explicit about the latter in the text, but you set out that equal numbers of students will enter and graduate from high school.
Obviously, that means a 100 percent graduation rate. Although Jim Smith has indicated that this is just a convenience to assist the panels in calculating needed resources, it is surely more than that. First, not all of the Regents Exams can be taken or completed if students drop out. So, even if this exercise were just limited to proficiency on the Regents Examinations, it would require a very high level of high school completion. Second, it seems absurd to base resource adequacy estimates on 100 percent graduation if those resources are not needed because students have dropped out. We cannot justify spending for students who are not present. I believe that in NYC and the other six largest urban districts, the 5 year graduation rate is on the order of about 50 percent. Michael Rebell can give you the figures. In some of the rural districts it is likely to be even less.
- 2- Presumably, resources are inadequate—at least for the urban schools—to meet these standards. That is why the Court has ruled in favor of CFE and you need to ascertain what level of resources would be adequate. But, to do this you need to have a strong theory and evidence of why many students do not meet Regents proficiency standards and/or do not graduate. From these you can deduce strategies to amend the situation and resource requirements. This also requires the establishment of existing baselines and additional resources as appropriate interventions.

From my way of thinking, this means that you need to specify baseline situations for both existing educational performance and for resources. I need to know what are the performance gaps that need to be closed to reach this 100 percent criterion on both dimensions. Probably it is best to do this not only on average for each of the school categories (PJP's), but also some distributional information. These performance gaps should be at the center of the exercise.

Second, a similar display should be made of existing or baseline school resources. What is the present level of resources that accounts (at least in part) for the gaps? Presumably, all or some of the gaps are due to inadequate resources at present. We need to know the present resources. Further, are there some resources (e.g. at the district level) that are not included in the estimates of overall per-pupil costs. It is easy to leave out resources that are not obvious, but that are included in baseline use by schools. By leaving them out inadvertently from the adequacy measures, there will be an understatement of total resource costs in the final estimates. By checking at baseline what is used, it is possible to make sure that they are included, even if not identified by the teams.

Third, this leads to a theory of action in which the gaps will be closed by changes in school resources as well as other types of changes. The exercise presumes that all of the gaps can be closed by adding more and more effective school resources. That also should be discussed specifically. What are the present causes of the gaps in performance, and how will more resources and strategies address them so that they are likely to disappear? It is only then that we can understand the new resource specifications and how they respond to a shortage of resources at baseline and explain the gap. All of this needs to be laid out.

Specifically, I am calling for a performance table for each PJP which shows existing performance gaps, not only on average, but at specific cut points in the present distribution of districts. Obviously, this would not be possible for NYC, although a distribution of schools would be informative. Such a table should also include data on racial and poverty compositions.

Moreover, in addition to Table 1, I would like to see Tables comparing each of the proposed levels for each resource with the existing levels. This table only includes the resources identified by the panels. But, there are probably resources required of the schools that were not identified by the panels, but that were overlooked because they are not prominent in the instructional process or some other aspect of school operations—but still needed. Further, there are resources that districts require for transportation, accountability to state and federal agencies, administrative support and so on. The overall cost must ultimately include district costs and those not identified by the panels, but that are still necessary.

Further, we need to trace the “adequacy” response to specific strategies that respond to the performance gaps. I cannot tell how much of the specifications for adequacy are redistributions, and how much are additions. I realize that there are some short descriptive statements about the use of resources, but these are brief and limited in terms of understanding how they fit into an overall strategy. That is, they appear to make sense in a piecemeal way, but do not embrace an overall strategy that tells how they will provide the “value-added” that will close the gap.

In summary, I am suggesting that for each group we get: a) baseline information on the present performance regarding Regents Exams and Graduation Rates and use this to calculate the gaps in performance that would have to be addressed by more and better resources; b) baseline information on existing resources that these schools use; c) comparison of baseline information with recommendations for adequacy; and d) clearer picture of why these resources are likely to be part of a successful strategy to close the gaps. Of course, this raises the more serious question of whether the adequacy performance goals are serious ones or can be resolved through schools alone.

Beyond the Resource Specifications

Beyond this it is important to emphasize that at best the resource adequacy satisfies one of the necessary conditions for success, and not the sufficient conditions. The analogy is specifying a computer system that will be “adequate” to handle a certain workload. We can certainly specify the CPU, peripherals, operator qualifications, maintenance requirements, and software. But, these in themselves will not make for an efficient system, even if they provide the capacity. Clearly, the ability to reach certain performance levels will depend upon the qualifications of the operator, the flow of the work, the incentives to perform, and so on.

The parallel situation for schools is getting all of these resources in place. But, there is so much else that will determine performance. To begin with, we can specify personnel, but the quality, motivation, cooperative behavior, and other features of personnel will determine their effectiveness. The resource patterns say nothing about qualifications in these respects. Yet, they are central. Unfortunately, there aren’t enough good teachers to go around (on a general equilibrium basis for a large state), and the schools rarely get it right in terms of choosing the best from the available pool. I realize that this goes beyond the scope of “adequacy” in this type of resource specification, but it must be recognized when such high performance standards are set in terms of student results.

In some sense we need to know what portion of the gaps in performance (Regents exams and graduation rates) can be closed by the intelligent use of additional resources and what portion cannot be closed in this way. As I will note below, even a lack of resources in families that leads to school failure can be compensated—in part—by school interventions. Most obviously a strong and universal preschool program can compensate for family inability or unwillingness to provide important educational experiences for their offspring. Longer school days and longer school years with engaging programs that provide enrichment can develop student interest and skills as well as provide assistance on homework. Tutoring can compensate for inadequate skill development in families. School programs that involve families more fully can assist families to provide greater support for their children to help them succeed.

But, it is not just gaps due to family behavior that must be addressed. Can resources also be used to address weaknesses in school leadership and organization. To some degree the answer must be yes. Higher salaries and benefits can attract more talented teachers and school leaders. Better mentoring and staff development can improve teacher and school performance. Will these be reflected in your “costs of adequacy”? That is, will you use standard prices for costing out or consider the cost-quality relation in personnel, mentoring, training, and so on? I realize that these are difficult issues to address. They are further complicated by the possibility that as Ballou and Podgursky argue, even if you get a superior pool of personnel applying for positions in response to higher salaries, schools may not choose any better nor use higher standards to evaluate for tenure. These are the larger issues that are on my mind as I review the concept of adequacy and its fleshing out by the panels.

Specific Comments on the Work of the Panels

In many cases the panels made similar assumptions and specified relatively similar patterns of resource use for adequacy. Accordingly, my comments will be drawn from particular panel reports, but they may not be unique to a single panel. However, in

most cases I will not repeat them after calling attention to them for a specific panel. I will begin by responding to the questions in the instructions:

- 1- The first question on whether the instructional programs specified by the panels seem reasonable to provide New York State youngsters with an adequate education is answerable only by the word “perhaps”. But, read my larger concerns above to see why I answer it that way.
- 2- There is too little detail about these linkages to answer this question. Theories and evidence on why students in particular settings are not learning and what will be done for them are the intermediaries that connect resources to learning outcomes. These intermediary linkages are not spelled out.
- 3- Virtually all “successful” programs and reforms (e.g. Star class size reduction, whole school reform, educational voucher experiments, computer-assisted instruction) with the exception of tutoring show effect sizes on the order of .2 (standard deviations). This is a very small amount, about one-fifth of the black-white achievement gap. And this is the result of successful reforms. Assuming that the additional resources are as effective as these, my guess is that they would have a positive effect, but would not come close to creating 100 percent Regents proficiency or 100 percent graduate rates. One dimension that is missing resources and traction is finding ways of improving home support (not just parental participation in back-to-school or teacher-parent conferences) or compensating for what homes of many at-risk students can’t provide through: (1) longer school days used productively and engagingly; (2) enrichment summer sessions; (3) homework assistance; and (4) extensive tutoring.
- 4- I think that the way of integrating these services is to provide a more extensive description of how schools would be organized to deliver services to different groups of youngsters. We have very little information on this dimension. Later, the resource requirements and costs could be broken out.
- 5- See the answer to question 3.
- 6- This question is partially answered in the general comments made in the introduction and above. It is virtually impossible to fully answer since we do not have a case (even a single school) presented where the proficiency goals were met for every student or almost every student.
- 7- This question is unanswerable. I am sure that even with these resources the goal of 100 percent proficiency will not be met. Where they could be cut back without doing harm to this goal is not clear without understanding the larger questions of how they will be organized and used.
- 8- See my introduction above and some of the comments that I will make on individual panel results.
- 9- I see all of this as an attempt to create improvement over time so that those students with the best chances of success are those who have experienced the additional resources the longest.
- 10- There is too little detail for me to answer.

Comments on Specific Panels:

PJP 1

- The terminology of “A Full Day Enriched Program” is ambiguous. Is this an extended day? Does enrichment mean only the dimensions mentioned or enrichment in the sense of gifted and talented instruction as mentioned later when Renzulli is mentioned. Later we are told that there will be an extended day, but it is unclear how it will be used to benefit students.
- Most of the description is formulaic (as with other panels), but we do not get a picture of the richness of the program.
- To the degree that summer school is available at each level, it is not clear what summer school will attempt to accomplish and how it is connected with specific student needs. It seems gratuitous.
- Child Study Teams at all levels seem to be formulaic rather than programmatic. It is not clear what they will do that addresses specifically the identified needs in the school. Also, are the psychologists and speech teacher used for special education?
- Assistant Principals (High School)—one for each subject. What will they do beyond logistics? How are they connected to programmatic needs for changing what happens to students as opposed to system maintenance? Can their jobs be done by department chairs?
- On additional assumptions—What is meant by prekindergarten? What ages? What is purpose and quality of program? Who will attend?
- Pp. 8-12—job descriptions are useful, but how do they fit into programs as opposed to individual roles?
- Instructional programs of X, Y, and Z are vague.
- Instructional programs more generally are lists, subjects, time blocks, and resources, not the educational challenges and strategies for addressing them in the larger sense.

PJP 2

- Many of same questions as for PJP 1 on vagueness of program, formulas and ratios.
- Extended day and Extended year summer seem premised on students with failures. But, to pass Regents proficiencies should include much higher proportion of students and focus on enrichment, not just remediation of failures.
- Professional Development (10 of 19) is extremely vague.
- Program design assumptions (2 of 17) show no assessment and evaluation of professional development.
- Elementary level predicated on proportions of students labeled in each category such as “struggling”. But, very much higher proportions of students are not meeting proficiency standards in these districts.
- (p. 3 of 17)—listing of guidance counselors, psychologists, and social workers. How will they be used and fit into overall school organization and instructional strategies?
- (p. 6 of 17)—tutors based upon 34 percent of population and light intensity of services and summer school for only 16 percent of students. What is to be accomplished, and how about other students who do not meet proficiency?

- At high school, similar issues on summer school where only 1 of 6 students is provided for and only 1 of 4 for extended day with no information on content.

I have looked at my notes on other PJP's and have similar comments, so I will not repeat them. I have not commented on special education, an area on which I do not have expertise.

Postscript

I think that to a large extent the panels did an excellent job. Their organization and instructions by the project were also excellent. However, the concerns that I have relate to how to interpret this information in the context of adequacy for getting students to proficiency and to high school completion. The linkage is not clear, nor are the strategies.

DR. KENJI HAKUTA EXPERT PANELIST REPORT

Dr. Kenji Hakuta served as a member of the external panel of experts, providing extensive knowledge and experience with the education of English language learners. Dr. Hakuta has been a Professor of Education at Stanford University since 1989, and is an expert in the politics of language acquisition and education policy. His research interests are in developmental psycholinguistic issues as they occur in diverse socio-cultural and K-12 educational settings. Dr. Hakuta regularly serves as an expert on the topics of bilingualism and limited-English-proficient students for local, state and federal policymakers. Dr. Hakuta holds a Ph.D. in Experimental Psychology from Harvard University, and was elected to the National Academy of Education in 1996. He is currently the Chair of the Board of Trustees of the Center for Applied Linguistics, and a member of the committee on English as a New Language for the National Board for Professional Teaching Standards. He is also serving as a member of the Commission on Learning in the Elementary Grades for the Carnegie Corporation of New York.

I have had the opportunity to examine the work of the PJP expert panels, and would like to offer my observations. In so doing, I have my biases, which I need to reveal.

- The first is that teaching English learners in schools should be a shared responsibility by all teachers in a school, and not just those teachers who have traditionally been given the assignment (i.e., ESL, bilingual, or resource teachers and aides).
- The second is that there needs to be good articulation between the ESL and the content components of the curriculum (the latter often being addressed in other states by instructional approaches referred to as “sheltered instruction” or “SDAIE”). A corollary is that ESL instruction alone is insufficient for English language learners.
- The third is that full development of academic proficiency in English is something that takes time for most children, and there are enormous individual variations in the time course as well. Thus, around any assumption such as the number of ELL students in a school, there are large gray zones, especially if the school data were to be modeled longitudinally.

My first comment regarding the work of the panels is that they deal with the English language learner factor by tweaking on the number of ESL teachers in the school. Setting aside for now the issue of what an appropriate student-teacher ratio would be for ESL teachers at the elementary, middle and high school levels, this approach does not address either how the school culture would, as a whole, treat ELL students – for example, how professional development activities could be targeted to address ELL needs and how non-ESL teachers could be trained in approaches to teach academic content to ELLs. With a few notable exceptions, professional development components of the programs are generically stated, and I did not notice plans that specified a focus on ELLs, for example in sheltered instruction or SDAIE strategies, or in whole-school training on topics pertaining to ELLs.

The second observation is that the level of support for ESL teachers is quite variable across panels, and in general the student-teacher ratio appears to be quite high. It is difficult to know what an ideal ratio would be that meets the condition of “adequacy”, and this would also depend on the organization of the instruction. But as an “add-on” which seems to be the model taken by the panels, it would seem safe to say that between a quarter to a third of the instructional time for an ELL student should be devoted to English language development. Thus, in a high school with 6 periods, for example, 2 periods should be devoted to ESL (with varying degrees of content infusion). It might be reasonable to expect smaller class sizes than regular content -- one might assume 25 students per class to be adequate. If so, a given ESL teacher would be able to serve 75 students, i.e., a ratio of 75:1 would be appropriate at the high school (and perhaps middle school) level. In elementary grades, it would be better in smaller groups, and so one might assume that 60:1 would be more appropriate.

I did a rough analysis of the ratios being recommended by the panels, and they are on the attached excel spreadsheets. Not all panels were explicit about ESL teachers for each task, so in Sheet 2, I made the assumption that where unspecified, the panel did not see the need for additional ESL teachers. The ratio numbers are considerably larger than the range of 75:1 to 60:1. In further discussions, I would recommend that the panels be asked to discuss further what kinds of assumptions are going into assigning ESL teachers, and how they are to be integrated into the overall curriculum of the school.

With respect to professional development, I was disappointed that the panels did not specify training for content teachers (i.e., non-ESL teachers) in methodology related to teaching content and language. I realize that the New York State ESL certification includes some coursework that addresses content methodology. However, I also think that all personnel in schools with appreciable numbers of ELLs should receive this training as well. How much training? One model with which I am familiar, SIOP (Sheltered Instruction Observation Protocol, developed by Deborah Short and colleagues at CAL), recommends 30-40 hours (5-6 full days) of workshops for content teachers (who are not very familiar with sheltered instruction or ESL methods) plus onsite coaching and/or classroom observations and feedback where possible. The estimate should not assume that all teachers receive this training at once, but might for example train one-fifth of the teachers in the school on any given year, with earlier trained teachers serving as mentors for trainees in subsequent years.

I hope that these comments are helpful. Please let me know if I can clarify or amplify my observations.

DR. MARGARET McLAUGHLIN EXPERT PANELIST REPORT

Dr. Margaret McLaughlin served on the external panel of experts, providing expertise in special education. Dr. McLaughlin has been involved in special education all of her professional career, beginning as a teacher of students with serious emotional and behavior disorders. She is the Associate Director of the Institute for the Study of Exceptional Children, a research institute within the College of Education, University of Maryland, and directs several national projects investigating educational reform and students with disabilities. Dr. McLaughlin co-chaired the National Academy of Sciences Committee on Goals 2000 and Students with Disabilities, which resulted in the report *Educating One and All*. She is also a member of the NAS Committee on the disproportionate representation of minority students in special education.

Response to Questions:

- 1. Do the Instructional programs specified by the panels seem reasonable to provide pr-k-21 year old students with disabilities in New York State with an adequate education?**

The simple answer to this question is, “yes”. However, I want to put that answer in the following context.

First, it is important to recognize that students with disabilities who receive special education fall generally into two broad categories: those with clearly medically defined disabilities; and those that are “judgmental” (Reschly, 1999). The former includes students with physical and sensory impairments as well as those with various syndromes and conditions that have clearly defined clinical characteristics. Included among the judgmental categories are those students with learning and/or behavior disorders who experience great difficulty in acquiring specific academic skills and content who are diagnosed as having a disability mostly as a process of deduction. That is, the disability label is applied only after a multidisciplinary team rules out cognitive delay, lack of language facility, or lack of educational opportunity. Judgmental categories typically include learning disabilities, emotional disturbance, and mild mental retardation.

In school year 2000/01 364,069 students ages 6-17 were receiving special education and related services in NY. This represented 9.17% of the enrollment. Students with learning disabilities accounted for 4.8%, those with emotional disturbance 1.41%, and those classified as mental retardation (across mild to severe) .37%. Children with speech and language disabilities accounted for another %. Of the 6-21 year olds enrolled in special education, 349,503 were reported as educated within regular public schools, of whom about 52% were spending 80% or more of their school day in general education classrooms while about 34% were educated primarily in special classes. (Only about 14% seem to be in the category of 60% in general education and 40% in special education.)

Children identified as having a disability in one of the judgmental categories are rarely identified until after they have entered public school and usually not until around grades 3-4. Referrals to special education come from general education teachers and are based on low achievement with or without behavior problems (Reschly, 1999). These categories have disproportionate representation of minority students (Donovan & Cross, 2002). Research indicates that general education classroom variables, including teacher competence and quality of instructional interventions, can reduce a child’s risk of being referred and identified for special education (Donovan & Cross, 2002). Therefore, the overall assumptions upon which the PJP recommendations are based seem sound in that one might expect that a stronger general education program will result in fewer referrals to special education and perhaps less intensive special educational interventions for those students who may be identified for special education.

I agree with the overall assumption that an “adequate” education be defined in terms of *progress toward* successful completion of Regents courses and passing the required Regents Exams. Even though special education students in NY are also eligible to take a Regent’s Competency Test (RCT), the special education PJP that I attended did accept the goal of increasing the pass rate on the Regent’s Exams, albeit with some degree of skepticism. Most special educators and parents endorse setting high expectations and providing access to the challenging curriculum resulting from state standards. They also believe that this will result in better results for students with disabilities. Notwithstanding these beliefs, few if any believe that *all* students with disabilities will meet the goal of passing all Regent Exams.

A contextual factor that complicates my analysis of the work of the Special Education PJPs (SEPJP) is the overly legalistic nature of special education and the resulting state and local regulations and policies and the traditions that govern district practices. Special education in NY operates within a tightly regulated environment and a tradition of separate and compartmentalized programs. For example a special educator from NYC was particularly concerned about including FTE for a school-based professional person whose responsibility it would be to oversee the IEP process. While this is not a bad idea, it was a judgement based on current legal requirements (likely as a result of a consent decree) as opposed to a judgment that this results in better outcomes for students. Another example is the way in which SEPJP seemed to think about students with disabilities. They did not describe the range of educational need or program features, as much as estimate the proportion of the population that would be in each of the following types of classes: 20:1:1; 12:1:1; or 8:1:1. These current ratios exist in state regulation for certain categories of students and carry legal consequences. However, the ratios have not been tested against student outcomes or performance. Thus, in a different regulatory environment, one that carefully monitors student progress and has transparent accountability for that progress, the ratios may not be required.

The instructional programs specified by both GE and SE panels do reflect the goal of greater inclusion of students with disabilities into regular schools, not necessarily classrooms. The GE and SE panels estimated that between 5-2% of these students would be educated somewhere other than the regular school. This is probably realistic given the tradition of using segregated placements in NY. However, I think that the 2-5% should be applied across the district population and not by school. Thus, in a district of 1387, we might expect 28-69 students who might need a placement *for some point in time* outside of a general education building. Using the most conservative ratios, because these are likely to be students with more severe disabilities we could estimate a need for a total of 3-9 classrooms, somewhere. I am not sure whether it would be more cost effective to tuition the students out or create more services in the district. However, the revised estimates should reduce the per school cost estimates. (I realize that these students were never considered in the resource calculations at the school, but I wanted to make a comment about the larger assumptions.)

All of the PJPs recognized that early intervention is critical and that an early intensive reading literacy program is likely to reduce the need for remedial and/or special

education services later. This certainly seems to be supported by research in the area of reading, although we still find about 7% of the students who receive intensive research-based intervention requiring continuous special education support of some kind because they never reach the level of fluency of their peers. I think it is fair to say that early intervention may “cure” some reading problems and reduce the severity of others. [Just recently I saw some data in a large suburban county that had initiated intensive early reading and math programs in a group of about 20 low-income schools. The schools also had all-day kindergarten, class sizes in k-3 of 15, etc. The data show a 16% reduction in referrals to special education at 3rd grade. What we don’t know is the long-term impact. Will these children keep up with the curriculum?]

While the focus on early intervention is sound, the panels seemed to specify only early reading literacy. Program descriptions in the area of mathematics were absent. Furthermore, none of the panels made any comments about the value of *early universal* screening and intervention for social and behavioral adjustment. Overall, there is a scarcity of detail about any of the behavioral support programs to be implemented and the qualifications of personnel who will implement them.

Finally, I want to say that in the final analysis the adequacy of resources will depend of course on the quality of the instructional programs and capacity of staff to implement those programs. Moreover, as noted by the SEPJPs, there will also have to be willingness on the part of general educators to assume more responsibility for children with diverse learning and behavioral needs and to not abdicate responsibility to special education. This will require more than just a reduction in class size, but an attitudinal shift as well.

2. Do the observed relationships for each panel between program, resource specifications, and demographics match your expectations?

The changes in personnel that the SEPJPs made in response to increase in identification rates and poverty rates are consistent with what I would expect. For students with disabilities, the increases in FTE correspond to some degree with the current NY ratios. Therefore, as the percentage and numbers of students with disabilities increased, so too did the FTE of teachers, without much regard for efficiencies of scale or program design. For example, after a certain point of perhaps 3-4 special educators who can manage a case load of 15 or so students, additional teachers may not be as important as having more paraeducators to actually implement some of the interventions. Each of the PJP's also expects fewer students to require more specialized special education placements as a result of a richer general education program. I agree with this assessment.

In addition, the SEPJPs added additional personnel including behavioral specialists, Applied Behavioral Analyst, and psychiatrist, to address potential behavior problems in schools with higher poverty rates. It is consistent with my experience that students who receive special education in high poverty urban schools have much more challenging behaviors and extremely severe learning difficulties. I have seen children in elementary special education classrooms who do not have even the most basic pre-literacy skills. In

addition, behavioral issues include extreme hyperactivity, impulsivity, and aggression. Poverty increases exposure to a number of risk factors, which exacerbate any intra-child disability (Donovan & Cross, 2002; Shonkoff & Phillips, 2000).

Therefore, it is reasonable to expect greater need for specialized personnel and perhaps greater need for some specialized placements for students with IEPs in high poverty schools. Nonetheless, I think the addition of a psychiatrist is not justified in any of the research. In fact most of the research on effective behavioral interventions indicate that well-trained teachers and school psychologists can implement the strategies. The fact that families may need counseling and support is not explicitly addressed in the school or district allocations and probably shouldn't be. Yet, for the school interventions to work, some agency has to support the larger social needs, including adequate stable foster care, wrap around services, etc.

I am a bit concerned that the GEPJPs did not appear to address behavioral issues, particularly in the urban schools. In fact, research (Kellum, et al) shows that children who are exposed to chaotic kindergarten and first grades are significantly likely to score higher on aggression measures in later elementary school than those who were in orderly classrooms. (There is also an observed effect on 3rd grade reading levels, with students who had chaotic classrooms scoring significantly lower on 3rd grade assessments.) Thus, I would suggest that all of the high poverty elementary schools focus on universal early identification and intervention in the social and behavioral area (see Donovan & Cross, 2002). Further, all schools need to ensure that classrooms are orderly and focused (which just lowering the class size will not guarantee). Thus, I recommend that all of the schools need to implement school-wide behavior support programs. None of these recommendations will require additional staff.

3. What does the existing research literature tell us about the specifics of the instructional programs and the proposed resource utilization patterns developed by the panels?

The existing research concerning students with disabilities is often categorized by disability. We have research conducted on students with learning disabilities, emotional disturbance, severe cognitive disabilities, visual impairments, and so on. But, to understand what might constitute “special education” for those students with the most common categories of disabilities I cite two recent reviews. The following characteristics define effective instruction for students with Learning Disabilities (Vaughn & Linan-Thompson, 2003):

1. Smaller group sizes, including student pairs and one-on-one instruction
2. Intervention is of sufficient duration for each student to achieve mastery (Some research found that two 50 minute one on one instruction per day for two school years was required for students with severe reading disabilities to achieve and maintain significant reading gains. However, fewer than 50% of the students were able to exit special education services even with this intensity of intervention.)
3. More homogeneity among reading levels in an instructional group
4. Reading instruction tailored to individual student needs

For students with Emotional and Behavior Disorders effective practices include (Landrum, Tankersley, & Kauffman, 2003):

1. Programs must address inappropriate behavior; academic learning problems; and unsatisfactory interpersonal relationships
2. A behavioral approach utilizing basis Applied Behavior Analysis is the most effective
3. Students need to learn a variety of ways to regulate and monitor their behavior
4. School and class-wide behavioral supports and academic supports are required
5. Direct instruction in how to develop and maintain social relations, including use of language, opportunities to practice and receive feedback, etc.

The interventions listed above do not require additional professionals (e.g. teachers, psychologists, etc.) *to implement*. In fact, research has indicated that well-trained paraprofessionals can achieve the same effects as special education teachers when they are implementing carefully scripted intensive reading programs and behavioral interventions. Therefore, in my opinion the schools need more paraeducators and could consider reducing the teacher FTE. I suggest at least one special education paraeducator per classroom and perhaps enough special educators for case loads of 15 students. I would want a school psychologist for every 200 students in the more poverty impacted school districts. The professional development resources need to be increased to include intensive and ongoing training of paraeducators as well as special education teachers to ensure that these individuals are extremely well trained in the specific interventions.

I do believe that the schools need to have access to highly trained behavioral specialists who can assist in developing school and class wide behavioral plans as well as individual intervention plans. I am unaware of any established ratios for such positions, but I do not believe that every school would need such a person full-time. Yet, initially the system will need to invest heavily in professional development and support teachers with this expertise. Initially, the needs would be greater in those schools most impacted by poverty and at upper elementary and middle schools. This is definitely a resource that should be able to be faded over time. Therefore, I think I would contract for these services so that they can be very intensive in the beginning years and reduced as schools build their own in-house capacity.

Specialized instructional interventions are required for students with moderate to significant cognitive disabilities as well as those with sensory disabilities. The SEPJPs have adequate staff to meet these needs, including specialized professionals such as OT, PT, Orientation and Mobility Specialists. However, I cannot comment on what other staff, such as interpreters, might be needed to fully integrate students with sensory difficulties into regular education classrooms.

4. As the programs and services for these special need populations have been substantially interwoven with the core “general” education program, we believe that extracting, and separately reporting the marginal cost of services for these subpopulations will not be straightforward. What do you see as the pros and cons of

attempting to present disaggregations of these costs, and if you consider it advisable to present them, can you propose approaches for doing so?

I believe that you need to disaggregate the marginal costs for educating students with disabilities. I feel that this is important to insure that we have accountability for the funding that is allocated as well as to keep special education funding visible. I think it is increasingly easy to argue that special education is “just” good general education and therefore let’s just put it all together and get smaller class sizes and everything will be fine. I hope that the descriptions of practices that I briefly stated above do give some idea of the level of intensity and individualization required for children with disabilities to make progress in school. These levels of services will never be able to be provided within a general class environment, even if the class has only 15 students.

Of course we know that special education includes therapies and other interventions provided by specialists such as OT, PT, O& M, etc. In addition, those teachers who assume a greater role in educating students with significant disabilities are clearly special education resources.

That said, I believe that the speech and language aides, psychologists, behavioral and reading specialists (and other academic support specialists) should be a cost shared with general education. Further, I believe that certain special education teachers (e.g., the ones allocated at 20:1 and 12:1) could also play a major role in early intervention and prevention of learning and behavior problems if they are used more efficiently in the schools. Both the HR and S bills that reauthorize the IDEA permit up to 15% of the PART B dollars that flow to the district (or state?) to be used for prevention in the primary grades. I think that special education personnel and other costs that are solely special education directed should be separated from total allocations. Then I would distribute the remaining costs across the population in a school or district, apportioning a percent to special education and a portion to general education. However, I don’t know if there is an empirical basis for how to allocate those funds.

5 & 7. Are there more cost-effective ways to organize resources than those proposed by the panels? Have the panels proposed more resources than are necessary to produce the desired outcomes?

I am going to answer these questions together, although I recognize that they are separate questions. As I have noted above in other questions, I think that the use of ratios to define the number of special education teachers is not supported by research nor will necessarily achieve the desired outcomes in the absence of clear program models and intensive professional development. I believe that much more can be done by skillful paraeducators working under the direction of a teacher than we have seen to date in practice or that the SEPJPs acknowledged.

I also do not believe that the number of students designated to receive BOCES or “self-contained” programs is accurate and I do believe that the schools could do more within their walls, particularly at the elementary and middle school levels. Thus, the costs for

the presumed BOCES placements and 8:1:1 classes could be fed back into the school to support more paraeducators to support students.

The cost associated with psychologists seems to be most attributed to special education testing as opposed to intervention with behavioral issues. This is not an efficient or effective use of their time. However, I am not certain that this is something that is negotiable under current regulation. Therefore, I suspect that the psychologists should probably be increased to accommodate both assessments and mental health support to students.

The Child Study Team proposed by two GEPJPs is comprised of some very specialized professionals and not educators. The core of these teams should be strong teachers and educators. While schools need access to specialists, the amount of time designated for the Child Study Team seems high and I am not sure that these individuals will be instructionally oriented. I would suggest that such teams include teachers and that adjustments in teacher case load or class size may need to be made to provide the time for the teachers to observe and model interventions in classrooms.

Another area not really addressed by the SEPJPs is the amount of time special education teachers spend doing IEPs. While the SEPJP did allocate some additional clerical time, I think the clerical time should be increased and that at least one full-time high level clerical person be assigned across schools to manage all processes, procedures, and actual writing of IEPs. An average IEP is estimated to require about 1.5 hours to complete, excluding the meeting time. In the elementary school, which has an enrollment of 774 and a 9% identification rate for special education, 70 students will have IEPs. This translates to 17 six-hour school days to complete the IEPs. It seems to be more efficient to shift some of those hours to a lower-salaried person. This would mean that the teachers could focus on communicating with parents, assessing progress, consulting with other teachers and specialists to design goals and interventions, but the formulation of these into a document could be managed by someone else.

6. Have the panels included sufficient amounts and the proper resources to maximize the likelihood that the specified student population will have an adequate opportunity to meet the specified outcome standard?

To the extent of my knowledge and what we currently know about interventions for students with disabilities, my answer is “yes”. (In fact, as I stated above, the number of teachers seems excessive.) However, I must say that while we can and will see greater progress for this sub-population, it is not at all likely that we will achieve the stated goal of 100% passing the Regents Exams.

My only concern is that in our zealousness to achieve the above goal we may deny some portion of students with disabilities high quality and meaningful career and vocational experiences that will help them successfully transition to adult life. The SEPJPs did not really specify what such a school-based program would look like. There would likely be some job coordinators and additional assistants to support the

more severely involved students, but these are (hopefully) resources that exist in BOCES programs that might be reallocated to schools should career vocational programs be developed. I don't believe that additional FTE are necessary, beyond the need for more paraeducators, but a different type or configuration of staff might be required within the high school.

8.& 9. What other information should we consider in attempting to summarize these results and prepare the final report for this project? Would you expect the programs as designed to have any effect on subsequent cohorts in future years?

I think that there are two things I would keep in mind relative to the above questions. First, it is important to keep in mind that special education has always functioned as a sort of "triage" in schools. That is, referrals and identification emerge from general education classrooms and reflect the capacity and willingness of those classroom teachers to adjust to diverse learners. Certainly putting more academic supports into a school should reduce the need to refer and subsequently identify special education students. But, we really don't know. We do know that schools across the demographic spectrum continue to identify and serve special education students. Furthermore, we know that strong legal entitlements to service exist in current federal law and can operate in ways that are separate from whatever we might be able to control in terms of resources.

Overall, I would hope to see fewer students identified for special education and those that do require special education and related services to have less severe and/or complex needs. This is likely to be the case in lower poverty schools, but I think that we will need more than good preschools to achieve the kind of changes we want in special education. We will need very early intervention with children and with their families. Furthermore, we will have to demand that general educators accept greater responsibility for diverse learners.

Second, I think that the judgments of the SEPJPs regarding program resources are too influenced by current regulatory and administrative arrangements and not reflective of what could be done in a school that might use resources more flexibly. I do think that there are children with bona fide and socially constructed disabilities within the schools and that these children require a level of intervention that cannot be provided in general education classrooms without additional support. In addition research suggests that some students, perhaps smaller than the percent now served, but not insignificant, do not respond to even the best interventions. These students will need continued special education supports. However, I do hope that the amount of that support will be reduced and that more of the support may be able to be delivered by general educators, paraeducators, and not always special educators.

Therefore, I suggest that you be open to more flexible use of staff with the caveat that the districts, 1) adopt a very specific set of research-based interventions in literacy and behavioral adjustment (at minimum); and 2) invest heavily in developing the skills of a

cadre of paraeducators in implementing those interventions with individual children. Furthermore, you should expect to see

10. Is there any particular population...that you feel were not adequately addressed by any or all of the panels?

No.

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DR. GARY NATRIELLO EXPERT PANELIST REPORT

Dr. Gary Natriello served on the external panel of experts, providing expertise in the sociology of education and programs for at-risk youth. Dr. Natriello is Professor of Sociology and Education in the Department of Human Development at Teachers College, Columbia University. Professor Natriello directs the Teachers College Evaluation Center and is the executive editor of the *Teachers College Record*. His is also a past editor of the *American Educational Research Journal* and a past-chair of the Publications Committee of the American Educational Research Association. In 2000 Professor Natriello co-founded Frameworkers Consulting, a software development and services firm that works with publishers, educational organizations, and research institutions to maximize the educational value of online technologies. Professor Natriello is a Senior Research Scientist at the Institute of Urban and Minority Education at Teachers College and a Faculty Fellow of the Institute for Social and Economic Research and Policy at Columbia University. His prior affiliations have included the Center for the Social Organization of Schools and the National Center for Research on Effective Schooling for Disadvantaged Youth, both at Johns Hopkins University. Professor Natriello teaches graduate courses in the social organization of schools and classrooms, the social dimensions of assessment processes, the sociology of online learning, and research methods.

Expert Review Report
Gary Natriello

Introduction

To set the stage for the comments to follow, I want to review the nature of my assignment and the materials I relied upon in preparing this report. I was asked by Michael Rebell of the Campaign for Fiscal Equity to review the work of the Professional Judgment Panels with a particular focus on the impact on disadvantaged students of the plan recommended by the panels. In preparing to write this report I reviewed the written results of the work of the Professional Judgment Panels provided by the AIR/MAP team. I also had the opportunity to observe the meeting of the summary Professional Judgment Panel on December 10, 2003 and the Stakeholder Meeting on December 11, 2003.

This report is presented in three sections. First, I highlight some general issues and concerns. Second, I provide responses to the questions posed in the instructions for expert reviewers. Third, I provide comments on the discussion points presented at the December 11th stakeholder meeting.

Section 1 - General Observations and Concerns

Strengths of the Process - The Professional Judgment Panel process and the entire methodology employed by the AIR/MAP team has a number of strengths that make it particularly appropriate for developing estimates of the costs of providing a sound basic education in New York State. The involvement of professional educators and the focus on the school as the primary unit of analysis for the exercise have several important benefits. First, the professional judgment panels allow for the input of educators practicing in a diverse set of school districts in New York State. Second, the structured nature of the panel activities ensure that the panels consider a wide range of resource issues and that they attempt to match resources to different contextual factors (e.g., school size, student demographics).

Extending the Process to Include Composition Effects - Although the Professional Judgment Panel process as planned and executed by the AIR/MAP team represents a state-of-the-art approach, extending the process to encompass at least two additional planning stages could strengthen the exercise further. One additional stage would ask the Professional Judgment Panelists to consider the combined effects of their recommendations. The individual recommendations of the panels offer sound advice, but such recommendations leave the combined impact of the individual recommendations unanalyzed. Combining the individual recommendations and reconciling conflicting effects of certain recommendations would add to the sophistication of the results of the panel process.

Extending the Process to Include a Structured Stakeholders Stage - A second additional stage would continue the Professional Judgment Panel exercise by having other stakeholders join the panels to continue to refine the recommendations. The process used in the New York Adequacy study did include a stakeholders meeting at which the members of the summary professional judgment panel discussed their recommendations, but the other stakeholders did not participate in the same kind of planning activities as those of the panels. Continuing the planning exercises with other stakeholders could lead to further refinement of the panel recommendations. This exercise could be particularly informative if it had the same structured design as the current Professional Judgment Panel exercises.

Opportunity or Success – It is unclear whether the Professional Judgment Panels focused on the opportunity for a sound basic education or actually achieving success. For example, in commenting on their own programs of recommendations most of the panels express high levels of confidence in the efficacy of their strategies which would put them at odds with both research and practical experience with the education of disadvantaged children.

Differential Sensitivity – It appears that in some cases those panels with the most experience with the education of disadvantaged students rated the resource needs of such students lower than panels with experience in other settings. This raises the prospect that

educators in heavily disadvantaged settings may lower expectations for the provision of educational services.

School Size – Although assuming larger school sizes in districts serving larger concentrations of disadvantaged students recognizes the current situation in the state, school size and the problems of large schools do not appear to be adequately considered in the deliberations and plans of the panels.

Program Narratives – The panels appear to have developed detailed programs at each level, but the panel reports do not provide the kind of explicit and detailed narratives that would be useful for fully evaluating their efforts.

Assumptions about Quality of Staff – There may be an unintended bias built into the panel process regarding staff quality. Professional educators are selected to participate on the panels because of their accomplishments. It appears that some of the recommendations of the panels are based on the assumption that high caliber staff will be widely available throughout the state. This may have led the panels to a set of recommendations that grant wide latitude and autonomy to professional educators in the schools. One example of this can be seen in the general program guidelines (as opposed to specific prescriptions) offered for each level of schooling. Another example is the folding in of funds for vulnerable groups (e.g., ELL, Special Ed.) with the general program resources. Such strategies grant discretion to professional educators, but they also rely on them to protect the interests of the vulnerable groups of students.

Unintended Consequences – A number of the recommendations of the panels seem likely to set in motion unintended consequences that could create further disadvantages for already disadvantaged students. For example, policies that create new demands for staffing (e.g., toddler, early childhood, full-day kindergarten, reduced class size) will create new demands for staff. Without a plan to enhance the supply of qualified staff, it is likely that schools serving larger proportions of disadvantaged students will see their best staff members recruited away by other schools to fill the positions created as a result of the finance reform. Many of the same policies that create additional demand for staff will create new demands for facilities. Since schools and districts serving larger proportions of disadvantaged students are already those more likely to be facing facilities problems and shortages, the new policies are likely to have a disproportionately negative impact on these schools and districts. Even if facilities needs are addressed through other reforms, the short-term impact is likely to be negative on schools serving disadvantaged students in light of the time needed to plan and develop new facilities.

Absence of Dynamic Dimensions – The plans developed by the professional judgment panels provide a static view of the system. They do not include provisions for initial transition to a new system for school finance, and they lack mechanisms to allow the finance system to adapt to changing conditions. At some point these concerns must be addressed.

Section 2

Responses to Questions Posed to Expert Reviewers

1. *Do the instructional programs specified by the panels seem reasonable to provide K-12 public school students in New York State with an adequate education? Do the resources specified in the excel worksheets match with the instructional programs described in the narrative report by the panels?*

The resources specified in the worksheets do appear to align with the instructional programs of the panels. The instructional programs are certainly plausible configurations of educational activities and services. However, the proof of the proposed programs will be in the student outcomes that such programs generate over time. Similar configurations of resources in other states have failed to generate student outcomes consistent with passage on the New York State assessments. Nevertheless, there may be some advantages in the flexible approach adopted by the panels that would allow resources to be deployed more effectively than they have been in other venues under other circumstances.

The panel members indicated a high degree of confidence that the programs they proposed would provide students with an opportunity to receive a sound basic education. However, the available research and the broader base of experience in other states would lead one to have less confidence. One way to address this issue is to develop a base of experience with the resources and programs proposed by the panels with particular reference to student outcomes on the New York State assessments. If substantial numbers of students continue to fail to achieve successful outcomes on the state assessments, adjustments can be made to increase the instructional resources funded.

It should be noted that the panels have tended to front-load resources in the early years with their proposals for new early-childhood, pre-school, and kindergarten services and their concentration of resources in the early elementary grades. Again, this is not an unreasonable approach; concentrating resources in the early years may be the most efficacious and the most efficient way to distribute educational resources across the student school career. However, it is important to recognize that the panels have tended not to invest as much in the secondary school years, and that may leave many current secondary school students somewhat underserved. Moreover, the panel recommendations ignore the well-known fade-out effect that has been repeatedly demonstrated for disadvantaged students. The impact of targeted assistance early in the educational careers of disadvantaged students tends to fade-out if special efforts are not made on a continuing basis as such students progress through school. Although there are probably various reasons for such effects, the most apparent one is that students placed at risk by their family and neighborhood circumstances continue to require additional support as long as those same family and neighborhood circumstances persist. Efforts to “inoculate” such students early in their educational careers tend not to have persistent effects later in their careers to the degree that would promise success on state assessments such as those adopted in New York State. Of course, this is not to imply that the

recommendations to provide additional support early in the educational careers of students are inappropriate; rather it implies that it is likely to be necessary to continue such support throughout the schooling career for disadvantaged students.

2. Do the observed relationships for each panel between program, resource specifications, and demographics match your expectations? Please think about this both as within a panel's own exercises as well as across the panels. That is, would we expect a smooth pattern of allocated resources/expenditures with respect to the variation in poverty and incidence of English language learners both within and across the PJP categories?

The resource distribution strategies of the panels appear to attempt to address two competing needs. First, the panels specified a richer base of resources than is currently available in many school districts in New York State. This appears to be an attempt to address the need for greater student performance in the wake of the higher standards imbedded in the state assessments. Second, the panels recognized the need to provide additional resources as the proportion of students in poverty in a district increased. The panels were less sensitive to the need to increase resources as the proportions of students with special needs (e.g., ELL, Special Education) increased. Instead, they relied on the resources in the base program to allow educators to address the special needs of these students.

The panels appear to be working toward a consensus that would enlist the support of both those who are concerned with providing a sound basic education to the general student population and those who are focused on the needs of disadvantaged students in particular. This may be the best political strategy available to generate sufficient support statewide to secure passage of the necessary legislation to reform the educational finance system.

However, the approach taken by the panels places the needs of the general student population first and then adds more resources to address the special needs of disadvantaged students. This approach has two consequences. First, it means that the overall cost of the reform will be greater than if efforts were focused on disadvantaged students alone. Clearly, there are many students and schools within the state that already meet the state standards, yet the approach adopted by the panels is likely to result in greater state resources for these students and schools. Second, it means that the resources that can be focused on disadvantaged students will be somewhat constrained in the wake of the overall across-the-board increase.

To cite one example, consider the recommendations for pre-school and kindergarten. Several of the panels recommended pre-school services for all students, and the summary panel recommended full-day kindergarten for all students. Although it is impossible to disagree with the desirability of such offerings, making them available to all students will require resources that will not be available for more focused efforts with disadvantaged students.

The panels do make adjustments in resources to reflect increasing concentrations of poverty, but these adjustments appear to reflect thinking that is more formulaic and less attentive than the thinking underlying the development of the base program. It is impossible for me to determine from the written record alone whether the thinking behind the resource enhancements connected to increasing levels of student poverty were more than the resulting formulae, but there is no evidence that they were.

There are some aspects of the panel reports that highlight the need for further consideration of the needs of schools with high concentrations of disadvantaged students. For example, although the panel recommendations include increasing resources in the face of higher concentrations of students in poverty (see Exhibit 4), the panel process also resulted in recommendations for lower per pupil expenditures as schools increase in size (see Exhibit 3). The combined impact of these two recommendations deserves further examination. If students in poverty are more likely to attend larger schools, then the panels' recommendations for increased resources in the face of increased poverty may be attenuated by the recommendations of lower per pupil expenditures in larger schools.

3. What does the existing research literature tell us about the specifics of the instructional programs and the proposed resource utilization pattern developed by the panels? Are there specific, strong alternative configurations that are backed by research that should be incorporated?

The panel recommendations result in broad directions for the instructional program at each grade level as opposed to specific and detailed program designs. Most of the details provided by the panels center on the staff required at each level, and given the high proportion of resources devoted to staffing, it is not unreasonable to focus on staffing requirements in a costing exercise. This may be appropriate as a way to develop a model that allows local educators sufficient latitude to adjust the program to local needs. The concentration on early literacy is not an unreasonable course of action, and the elements specified for the middle and high school programs are sensible.

There are two alternative approaches that might have been adopted by the panels. First, the panels could have recommended one or more of the whole school reform models that have been subjected to evaluation for their impact on student learning (e.g., Success for All, Talent Development). Such models have been recommended in other venues as the basis for school level program and resource planning. These models have the advantage of being detailed enough to allow a reasonable understanding of the resource requirements. However, the whole school reform models can be viewed as overly prescriptive by local educators,

Second, the panels could have designed a program to prepare students to pass the New York State assessments. Such a program might be more focused than the broader approach recommended by the panels. If the assessments represent the outcomes of a sound basic education, then the panels could have elected to eliminate everything not essential to passing the assessments from the recommended school programs. This approach might have resulted in a substantially less costly set of recommendations, but it

would have directly attacked the broad educational programs currently offered in many school districts in New York State.

4. As the programs and services for these special need populations have been substantially interwoven with the core “general” education program, we believe that extracting, and separately reporting the marginal cost of services for these subpopulations will not be straightforward. What do you see as the pros and cons of attempting to present disaggregations of these costs, and if you consider it advisable to present them, can you propose approaches for doing so?

There are several considerations that might be made when assessing the strategy of weaving the programs and services for special need populations into the core general program. The panels found it advantageous to specify a robust general education program and then to assume that such a base program could accommodate the special needs of certain groups of students. This approach may be useful politically as attempts are made to build a base of support for the finance program, and it may allow for greater flexibility and perhaps even efficiency at the district and school level. However, like many other aspects of the panels’ approach, the policy of imbedding resources to accommodate special needs into the general program assumes a highly professional, ethical, and powerful group of educators at the school and district level. Such a group of educators will be necessary to ensure that the needs of special groups are not placed second to those of the general student population. In this regard, educators may receive help from the state assessment program that holds schools accountable for the performance of all students, including those with special needs.

5. Are there more cost effective ways to organize resources than those proposed by any or all of the panels?

One obvious alternative to the approach built into the panel process would be a set of policies that reduces the concentrations of disadvantaging student characteristics (e.g., poverty, ELL, special ed.) in certain schools and districts. Because our current models of school and program organization assume relatively small concentrations of such characteristics, concentrations that can be handled within normal school operations, situations that result in higher proportions of students with such characteristics place schools in a position where student academic success is unlikely. Alternative models for dealing with high concentrations of students with disadvantaging characteristics, (e.g., case management approaches, one-on-one tutoring, residential facilities), typically require greater resources than those provided even under the most generous assumptions.

The panels have not provided for these kinds of resource intensive approaches that are likely to be required in situations where there are very high concentrations of students with disadvantaging characteristics. The panels could provide for such high resource requirements, or they could recommend policies to reduce the number of schools with high concentrations of poverty and other disadvantaging characteristics. Of course, the last alternative falls outside the scope of the work of the panels. It is important to acknowledge that providing educational services designed to allow students to meet state

standards is likely to be less expensive in settings where the concentrations of poverty and other disadvantaging characteristics are not high.

This question highlights what is potentially a very substantial problem that appears to be built into the assumptions used by the panels in developing the model programs and accompanying resource estimates. For the most part, it is a strength of the panel process that resource and program planning occurs at the school level. This allows the panels to develop a practical on-the-ground view of the resources in operation. However, because the panel process seems to assume school-level allocations of resources with adjustments for existing disparities in concentrations of disadvantaging student characteristics, it has the potential to reinforce existing concentrations of students with such characteristics if the resource allocation process adopted follows the school-level model. If the state adopts a process of school-level allocation based on district or neighborhood poverty or other student characteristics, there may be an unintended effect of reinforcing existing concentrations of students in poverty and special needs students as schools and districts seek to maintain resource allocations by maintaining existing student populations.

One alternative that might be considered as a way to avoid reification of existing distributions of students within schools and districts would be to arrive at per student cost estimates for the various student demographics and then to allow students to move among schools and districts while carrying resources with them at the individual level. This would allow students, parents, and schools to make enrollment decisions, and then have those enrollment decisions immediately reflected in resource allocations. Although, I see this approach primarily as a way to avoid locking schools and districts into current student enrollment patterns, an additional benefit might be the development of a “market” for disadvantages. To create such a market it would be necessary to allow schools and families to exchange enrollment bids, prices at which students would be allowed to enroll in certain schools. Schools, for example, might seek a combination of students that achieves the resources needed to support a certain mix of staff and programs. Schools could seek students without disadvantages, or they could seek a smaller number of students with disadvantages who would bring larger allocations.

6. Have the panels included sufficient amounts and the proper resources to maximize the likelihood that the specified student population will have an adequate opportunity to meet the specified outcome standard? If no, can you provide detail in regard to specifically where these resources are lacking?

Although the panels have provided additional resources for certain specific student populations, it is unlikely that these resources will “maximize the likelihood that the specified student population will have an adequate opportunity to meet the specified outcome standard.” “Maximizing the likelihood” suggests that nothing more can be done, and that is clearly not the case. An alternative strategy would be to provide for a mechanism that ratchets up resources in the face of continuing student failure to reach the specified outcome standard. The panel recommendations do not provide for such an escalating mechanism.

7. Have the panels proposed more resources than are necessary to produce the desired outcomes? If yes, can you provide detail in regard to specifically where these resources might be cut?

In view of the constraints faced by the panels, they seem to have avoided proposing resources in excess of those required to produce the desired outcomes. (Indeed, one could argue that they may have not provided sufficient funds for disadvantaged students, particularly when such students are highly concentrated in a certain schools and districts.) However, the overall educational system could operate with fewer resources if three conditions were changed. First, by actively seeking to reduce concentrations of students with disadvantaging characteristics, it should be possible to reduce the costs of operating schools to address the needs of such students. Second, by limiting the school program to those areas directly affecting student performance on the state assessments, it should be possible to reduce overall system costs without increasing the failure rate on the examinations; in fact, focusing the system in this way might enhance performance on the examinations. Third, by ceasing to fund students and schools once they meet the assessment standards, it should be possible to reduce costs substantially. I view each of these changes as politically unacceptable, and I note them here primarily to make the case that a very substantial proportion of overall system costs have little to do with enabling students to meet the Regents Learning Standards. Rather, they reflect long-standing preferences and conventions.

8. What other information should we consider in attempting to summarize these results and in preparing the final report for this project?

Although facilities are not included within the scope of work for the professional judgment panels, the panel recommendations carry very substantial implications for facilities. The panels have recommended early childhood education, pre-school, full-day kindergarten, and reduced class sizes. Recommendations of this sort place enormous burdens on school facilities, facilities that are already under stress as schools attempt to meet the new Regents standards. Any presentation of the panel recommendations will be incomplete without careful consideration of the implied new demands for facilities. Facilities issues should play a particularly prominent role in discussions of the phasing of new programs since refurbishing and creating facilities require time.

9. The panels proposed programs that were designed as a snapshot in time. Would you expect the programs as designed to have any effect on subsequent cohorts in future years? For example, would the resource needs of future students change once elements of the specified programs, e.g., pre-school, were fully implemented?

There is a temptation to assume that early interventions designed to address student learning problems will result in reduced needs for students when they reach middle school and high school. There is abundant evidence that such is not likely to be the case for disadvantaged students if the conditions creating the disadvantage (conditions in the family and community) persist. Disadvantaged students are likely to require additional support at each stage of their school careers. This is not to deny the long-term beneficial

impact of early efforts to support the development of disadvantaged students; it is a recognition that even the long-term benefits are not likely to be sufficient to make additional efforts at later grade levels unnecessary.

The situation may be more encouraging for students without obvious disadvantaging characteristics. Such students may require fewer special resources at higher grade levels. However, because there is less systematic research on these students and because we have little understanding of the role of family-supplied non-school resources, there is no reliable way to determine whether there will be a financial benefit to the system from early investments in the schooling of the non-disadvantaged.

10. *Is there any particular population, e.g., English language learners, special education, that you feel were not adequately addressed by any or all of the panels?*

My major concern has to do with populations of students at risk when they are highly concentrated in certain schools and districts. Even in those situations where they recommend the most additional resources for students with disadvantaging characteristics (e.g., students in poverty), the panels only provide for incremental adjustments in school resources. The panels do not fully appreciate that at certain concentrations, the traditional model of schooling, the model that underlines the basic programs specified by the panels, breaks down and must be replaced with a fundamentally different approach that is often substantially more labor intensive.

Section 3

Comments on the Discussion Points Presented at the December 11th Stakeholder Meeting

Discussion Points

New York K-12 School Funding Adequacy Study: Stakeholder Meeting

The education outcome goal stated for this project is *Provide all students a full opportunity to meet the Regent's Learning Standards and to obtain a Regent's diploma.* With this goal in mind, please provide us with your thoughts on the following recommendations for an *adequate education* as generated through the PJP process:

1. General education resources that increase fairly substantially in alignment with district poverty.

Although the general strategy of increasing general education resources as the proportion of students in poverty increases in a school is appropriate, it is not certain that the configuration of resources envisioned will prove adequate to the task of educating disadvantaged students, particularly when those students are present in high concentrations. High concentrations of disadvantaged students may require a fundamentally different (and more expensive) model for the delivery of educational services.

2. Special education very integrated with general education services, for the most part at neighborhood schools. Ample special education resources, but base resources do not rise proportionate to expansion in special education enrollments. (I.e. districts with 14% SE identification do not get twice the special education funding as districts with 7% SE identification).

This integrated strategy for funding special education has some pedagogical and organizational advantages associated with the increased flexibility for local educators. The positioning of resources to meet special education needs within the general program budget diminishes the incentive to over-identify students for special services, but the recommendation to increase special education funding at a rate lower than the rate of increase in special education enrollments leaves schools and districts particularly vulnerable to funding inadequacies in the face of high concentrations of students with special needs.

3. Resources that generally do not increase with rising percentages of English learners (ELs) at the school.

The panels appear to assume that resources geared to English learners can be substituted for other resources and so additional resources are not envisioned. However, this assumption may need to be adjusted to account for limitations in the supply of

appropriate personnel. This adjustment should be considered by the AIR/MAP team based on their analysis of the teacher market.

4. A full-day kindergarten program.

This strategy is a sensible way to increase the resources available at the early stages of the student educational career. While a full-day kindergarten program will benefit all students, there are likely to be relatively greater benefits for disadvantaged students. The staffing and facilities requirements of this strategy will need to be considered in any implementation effort.

5. Availability of a full-day pre-school program, funded at the district level proportional to their percentage of students in poverty.

Like full-day kindergarten, a full-day pre-school program will offer benefits to young children, particularly those who are disadvantaged. Although the panel recommendations focus on students in poverty, local schools are likely to experience a demand for high quality pre-school opportunities for all families. The facilities and staffing requirements need special consideration in any implementation plan. The limited supply of qualified pre-school teachers is a special concern. Aligning pre-school opportunities with the k-12 system is likely to generate pressure to match k-12 salaries, a move that will substantially increase the cost of pre-school education.

6. Availability of a half-day toddler program (for 3 year olds), funded at the district level proportional to their percentage of students in poverty.

A high-quality half-day toddler program is a reasonable element in any program to extend opportunities to students, particularly disadvantaged students. As with the full-day kindergarten and pre-school initiatives outlined above, this strategy will generate calls on facilities and staffing that may be impossible to meet, particularly in the short-term. Care should be taken to avoid expanding this program more quickly than high quality staff and facilities can be developed.

7. If the state needs to provide some, but not all, of these services to meet the outcome standard listed above, how should they be prioritized? (e.g., possible trade-offs regarding school-age services (items 1-3 above) versus early intervention services (items 4-6 above).

There are at least three criteria that might be considered in setting priorities among the school-age and early intervention services.

First, the timing for the provision of services is recognized as an important element in considerations of the effectiveness of educational services. Early intervention services are conventionally deemed to be more effective and more efficient than services offered later in the student school career. Early intervention services are recognized as being preventative, and prevention is thought to be more efficient than remediation for educational

problems. However, there is wide recognition that early intervention services alone will not allow students to overcome the negative effects of persistent disadvantaging conditions in their families and communities. Nevertheless, the effectiveness criterion would argue for policies favoring early intervention over school-age services.

Second, decisions on allocating resources among school-age and early intervention services can be driven by the need to enable students to perform successfully on the state assessments. Since the most consequential assessments occur in the later stages of the schooling career of students, this criterion would argue for policies favoring school-age services over early intervention services. One alternative to favoring school-age services in the face of state assessments might be to relax the assessment standards until the impact of the finance reforms make their way through the system, i.e., until students receiving early intervention services move to the secondary level.

Third, decisions on allocating resources among school age and early intervention services can be driven by the practical dimensions of implementing services at these different levels. The early intervention strategies (full-day kindergarten program, pre-school program, toddler program) require substantial lead time to develop facilities and expand the supply of qualified staff. By contrast, the school-age strategies require less in the way of new facilities and new staff, though they do require greater use of current facilities and current staff. This implementation criterion would favor sequencing investments so that school-age initiatives precede early intervention initiatives.

I suspect that a major determinant among the criteria noted here is the time required to develop the substantial number of new staff needed to operate the early intervention programs. If there is not a surplus of highly qualified, fully certified early education staff, it will take years to launch appropriate preparation programs and graduate the professionals to manage and teach in the full-day kindergarten, pre-school, and toddler programs. The staff constraints will be exacerbated by the launching of similar early intervention efforts in neighboring states.

8. Are there other elements you believe should be added, subtracted, or traded off, to meet the education outcome standard listed above?

It seems unlikely that the state will have both the resources and the will to support fully an educational program that will afford all students an opportunity to meet the Regent's Learning Standards. If that is the case, then I suggest that careful consideration be given to revising the standards to conform to the available resources. This may mean adopting a set of outcome standards less broad and/or less ambitious than those presently in force. Although, such a course is less desirable than adopting a funding scheme and a program designed to meet the current standards, a deliberate and considered revision of the standards is preferable to the unplanned and thoughtless reductions that will inevitably occur in the absence of full financial support or planned reductions in standards and programs.

APPENDIX I

ANALYSIS OF SUCCESS IN NEW YORK SCHOOLS

For comparative purposes the research team has performed an analysis of school success among the universe of public schools in New York State. The motivation behind this exercise is simple, to provide the Summary Panel with an idea as to what resource profiles look like across schools with varying levels of success. The following section will be organized as follows: a) Concept of a School Success, b) Methodology and Data and c) Results.

Concept of School Success

One simple approach to investigating which schools are relatively more “successful” or not is to simply take some outcome measure such as average test score, graduation rates, etc. for each school and identify those whose average is above some specified threshold. However, this simple method ignores the fact that public schools face widely diverse populations of students to which they are bound. Clearly, schools with relatively low numbers of students in poverty, with special education needs, and that have mother tongues other than English will perform better on average than their counterparts that have higher numbers of students with these characteristics. Therefore, any “fair” measure of success should take into account the relative need of schools rather than taking simple averages. The concept of success put forth here considers schools that “beat the odds” in a sense of performing significantly higher than would be expected *given the characteristics of their student body*.

Methodology and Data

The methodology we use draws on previous research performed that attempts to identify schools that are “beating the odds” vis-à-vis the implementation of statistical techniques and large scale data sets.³⁶ Namely, we apply a regression analysis procedure that allows the identification of relatively more or less successful schools while controlling for student need, which is proxied by several characteristics of the student population. The adjusted performance of each school is then categorized as “successful”, “average success” and “unsuccessful”. To be brief, the analysis can be highlighted with the following points:

- The investigation is employed separately at the elementary, middle and high school levels.³⁷
- School pass rates on standardized English and mathematics exams for various subpopulations in a school as well as attendance and dropout rates (the latter for high school only) serve as outcome measures.³⁸

³⁶ For examples research in this area the reader is referred to Stiefel et al. (1999).

³⁷ The elementary and middle school outcomes are available for the 4th and 8th grades, respectively, while the high school is based on the cohort of students that entered this level of schooling in the 1998-1999 school year.

- Student characteristics controlled for include the following: the percentage of students within a school in poverty (i.e., eligible for free or reduced lunch), identified as English language learners (ELL), or classified as belonging to a minority group.
- The analysis is based on outcomes and need data that spans the following four school years: 1998-1999, 1999-2000, 2000-2001 and 2001-2002. Using the latest four years worth of data ensures that a school must be consistently performing above or below expectations.
- To qualify as being “successful” overall a school must pass the following criterion:
 - 1) Its general education population must perform higher than expected given the student need it faces, which is proxied by characteristics of the student body (i.e., composition of school population with respect to poverty, English language learners and race).³⁹
 - 2) It must also perform higher than would be expected for at least one other subpopulation (i.e., disabled, minority or economically disadvantaged).
 - 3) None of the remaining subpopulation categories perform lower than would be expected conditional on student need.

We make use of data from two public sources made available by the New York State Department of Education (NYSED), the School Report Card (for both outcomes and need data) and the Institutional Master File (for need data).⁴⁰

Results

Exhibits 1 and 2, 3 and 4, and 5 and 6 document the main results of the analyses at the elementary, middle and high school levels, respectively. The first exhibit of each pair provides the average demographic and resource profiles across all schools broken out by school poverty. For instance, the first column in Exhibit 1 shows an average enrollment of 572 in schools with the lowest poverty (in the bottom 33% of all schools). The average percent of students in poverty in these schools are 7.1%, the average incidence of special education and ELL students is 9.8% and 2.0%, respectively. In addition, these schools employ 6.38 teachers (including core, special education and other teaching staff) per 100 students enrolled. This translates to approximate 36 to 37 teachers serving the 572 students.

³⁸ Passing is defined as scoring at a Level 3 or better on the CTB English and mathematics tests for elementary and middle schools, and at 65 or higher on the Regents exams of the same subjects for high schools. In the spirit of No Child Left Behind Act of 2001, for each school the minimum pass rate (in accordance with the definition above) of the English and mathematics test is used. Potential reporting bias due to non-response on either test is controlled for in the regression analysis via inclusion of dummy indicators. The subpopulations include those students in general education, special education, identified as a minority, and economically disadvantaged.

³⁹ The determination of success for each subpopulation was made by regressing the standardized (by PJP category, grade and year) logarithmically transformed (to account for proportionate nature of the outcomes) pass rate on the percent of student body: in poverty (i.e., eligible for free or reduced lunch), identified as an English language learner, and categorized as belonging to a minority group. Schools whose observed pass rate was significantly higher than would be predicted by the estimated subpopulation-specific model were deemed “successful” for this group of students.

⁴⁰ We refer readers to the NYSED website for documentation of these data (<http://www.nysesd.gov>).

The second exhibit of each pair (i.e., Exhibits 2, 4 and 6) are in an identical format, but now limited to only those schools that have been categorized by our procedure as being successful. Across these schools the average enrollment ranges from 554 to 620 for elementary schools, 726 to 782 for middle schools, and 807 to 872 for high schools. When looking at the resource profiles, it is worth noting the general declining trend in resources per 100 pupils as poverty increases.

The final exhibit provides demographic and resource profiles for the subsamples of very small schools across the three schooling levels. This was done to provide some information to aid the Summary PJP Team in completing resource specifications pertaining to necessarily small schools.

It is important to recognize an issue that makes this analysis problematic. In order to accommodate the relatively high standards put forth by the new accountability system in New York and, more generally, by the No Child Left Behind Act of 2001, the definition of “success” was set at a quite stringent level. Namely, following the criteria listed above the analysis produce relatively few “successful” schools.⁴¹ To this end, the staffing profiles listed are based on a very small sample of schools thought to be “successful”. With such a small collection of schools it is difficult to consider the resulting staffing profiles as “representative” against which to compare those constructed by the PJPs.

References

Stiefel, L., R. Rubenstein & A.E. Schwartz (1999), “Using Adjusted Performance Measures for Evaluating Resource Use”, *Public Budgeting and Finance*, Fall 1999, V. 19 N. 3, pp. 67-87.

⁴¹ This was the case even after allowing for a less rigorous standard by which the difference between observed and predicted performance could qualify as “significant”.

Exhibit 1		All Elementary Schools by Poverty Level		
Enrollment, Demographics and Full-Time-Equivalent Personnel		<i>Low poverty</i>	<i>Medium poverty</i>	<i>High poverty</i>
Description of resource		<i>Lowest third</i>	<i>Middle Third</i>	<i>Highest Third</i>
(1)	(2)	(3)	(4)	
Number of schools		526	396	364
School Size				
Average school enrollment		572	565	618
Demographic Data				
% free & reduced priced lunch students	7.1	32.7	79.2	
% students eligible for special education	9.8	12.5	12.6	
% English Language Learners	2.0	4.0	12.8	
Full-Time-Equivalent Personnel per 100 students enrolled in the school:				
Teachers (incl. core, special ed, & other)	6.38	6.83	6.83	
Guidance counselors	0.03	0.06	0.09	
Psychologists	0.09	0.06	0.04	
Social workers	0.03	0.03	0.05	
Other pupil support personnel	-	-	0.01	
School nurse	0.15	0.11	0.03	
Librarians	0.15	0.13	0.11	
Principals	0.16	0.15	0.15	
Assistant Principals	0.03	0.05	0.15	
Other professional staff	0.02	0.03	0.06	
Full-Time-Equivalent Personnel in the school:				
Teachers (incl. core, special ed, & other)	36.5	38.6	42.2	
Guidance counselors	0.2	0.3	0.6	
Psychologists	0.5	0.3	0.2	
Social workers	0.2	0.2	0.3	
Other pupil support personnel	-	-	0.1	
School nurse	0.9	0.6	0.2	
Librarians	0.9	0.7	0.7	
Principals	0.9	0.8	0.9	
Assistant Principals	0.2	0.3	0.9	
Other professional staff	0.1	0.2	0.4	

Exhibit 2		Successful Elementary Schools by Poverty Level		
Enrollment, Demographics and Full-Time-Equivalent Personnel		<i>Low poverty</i>	<i>Medium poverty</i>	<i>High poverty</i>
Description of resource		<i>Lowest third</i>	<i>Middle Third</i>	<i>Highest Third</i>
(1)	(2)	(3)	(4)	
Number of schools		43	39	40
School Size				
Average school enrollment		554	538	620
Demographic Data				
% free & reduced priced lunch students	7.0	32.7	74.8	
% students eligible for special education	9.6	12.3	11.4	
% English Language Learners	2.1	4.1	11.9	
Full-Time-Equivalent Personnel per 100 students enrolled in the school:				
Teachers (incl. core, special ed, & other)	6.54	6.91	6.55	
Guidance counselors	0.05	0.05	0.09	
Psychologists	0.12	0.05	0.04	
Social workers	0.01	0.05	0.02	
Other pupil support personnel	-	-	-	
School nurse	0.16	0.11	0.03	
Librarians	0.17	0.12	0.11	
Principals	0.18	0.15	0.16	
Assistant Principals	0.05	0.04	0.14	
Other professional staff	0.03	0.05	0.04	
Full-Time-Equivalent Personnel in the school:				
Teachers (incl. core, special ed, & other)	36.2	37.2	40.6	
Guidance counselors	0.3	0.3	0.6	
Psychologists	0.7	0.3	0.2	
Social workers	0.1	0.3	0.1	
Other pupil support personnel	-	-	-	
School nurse	0.9	0.6	0.2	
Librarians	0.9	0.6	0.7	
Principals	1.0	0.8	1.0	
Assistant Principals	0.3	0.2	0.9	
Other professional staff	0.2	0.3	0.2	

Exhibit 3		All Middle Schools by Poverty Level		
Enrollment, Demographics and Full-Time-Equivalent Personnel		<i>Low poverty</i>	<i>Medium poverty</i>	<i>High poverty</i>
Description of resource		<i>Lowest third</i>	<i>Middle Third</i>	<i>Highest Third</i>
(1)	(2)	(3)	(4)	
Number of schools		200	146	129
School Size				
Average school enrollment		741	722	747
Demographic Data				
% free & reduced priced lunch students	7.1	30.7	77.6	
% students eligible for special education	12.8	15.4	14.2	
% English Language Learners	0.9	2.3	12.2	
Full-Time-Equivalent Personnel per 100 students enrolled in the school:				
Teachers (incl. core, special ed, & other)	7.04	7.11	6.35	
Guidance counselors	0.32	0.27	0.17	
Psychologists	0.07	0.06	0.03	
Social workers	0.04	0.03	0.03	
Other pupil support personnel	0.01	0.01	0.03	
School nurse	0.12	0.10	0.01	
Librarians	0.13	0.12	0.11	
Principals	0.14	0.13	0.13	
Assistant Principals	0.12	0.12	0.21	
Other professional staff	0.15	0.09	0.11	
Full-Time-Equivalent Personnel in the school:				
Teachers (incl. core, special ed, & other)	52.1	10.4	47.5	
Guidance counselors	2.3	0.4	1.2	
Psychologists	0.5	0.1	0.2	
Social workers	0.3	0.0	0.2	
Other pupil support personnel	0.1	0.0	0.2	
School nurse	0.9	0.1	0.1	
Librarians	1.0	0.2	0.8	
Principals	1.0	0.2	0.9	
Assistant Principals	0.9	0.2	1.5	
Other professional staff	1.1	0.1	0.8	

Exhibit 4		Successful Middle Schools by Poverty Level		
Enrollment, Demographics and Full-Time-Equivalent Personnel		Low poverty Lowest third	Medium poverty Middle Third	High poverty Highest Third
Description of resource	(1)	(2)	(3)	(4)
Number of schools		20	12	8
School Size				
Average school enrollment		726	782	769
Demographic Data				
% free & reduced priced lunch students		6.8	32.1	78.8
% students eligible for special education		13.4	16.1	15.8
% English Language Learners		0.8	1.7	11.6
Full-Time-Equivalent Personnel per 100 students enrolled in the school:				
Teachers (incl. core, special ed, & other)		6.99	7.62	5.83
Guidance counselors		0.33	0.26	0.10
Psychologists		0.05	0.09	-
Social workers		0.04	0.01	-
Other pupil support personnel		0.01	0.01	0.01
School nurse		0.12	0.08	0.02
Librarians		0.13	0.11	0.10
Principals		0.14	0.13	0.11
Assistant Principals		0.12	0.14	0.15
Other professional staff		0.16	0.06	0.18
Full-Time-Equivalent Personnel in the school:				
Teachers (incl. core, special ed, & other)		50.7	59.6	44.8
Guidance counselors		2.4	2.0	0.8
Psychologists		0.4	0.7	-
Social workers		0.3	0.1	-
Other pupil support personnel		0.1	0.1	0.1
School nurse		0.9	0.6	0.2
Librarians		0.9	0.9	0.8
Principals		1.0	1.0	0.8
Assistant Principals		0.9	1.1	1.2
Other professional staff		1.2	0.5	1.4

Exhibit 5		All High Schools by Poverty Level		
Enrollment, Demographics and Full-Time-Equivalent Personnel		<i>Low poverty</i>	<i>Medium poverty</i>	<i>High poverty</i>
Description of resource		<i>Lowest third</i>	<i>Middle Third</i>	<i>Highest Third</i>
(1)	(2)	(3)	(4)	
Number of schools		147	114	68
School Size				
Average school enrollment		855	793	855
Demographic Data				
% free & reduced priced lunch students	4.8	17.8	50.8	
% students eligible for special education	12.9	13.9	13.8	
% English Language Learners	1.3	1.3	11.2	
Full-Time-Equivalent Personnel per 100 students enrolled in the school:				
Teachers (incl. core, special ed, & other)	6.79	6.55	6.27	
Guidance counselors	0.42	0.33	0.28	
Psychologists	0.07	0.04	0.03	
Social workers	0.05	0.03	0.06	
Other pupil support personnel	0.02	0.02	0.09	
School nurse	0.11	0.10	0.03	
Librarians	0.13	0.12	0.10	
Principals	0.12	0.13	0.11	
Assistant Principals	0.16	0.11	0.23	
Other professional staff	0.32	0.24	0.20	
Full-Time-Equivalent Personnel in the school:				
Teachers (incl. core, special ed, & other)	58.0	51.9	53.6	
Guidance counselors	3.6	2.6	2.4	
Psychologists	0.6	0.3	0.3	
Social workers	0.4	0.2	0.5	
Other pupil support personnel	0.2	0.1	0.7	
School nurse	0.9	0.8	0.3	
Librarians	1.1	0.9	0.9	
Principals	1.0	1.0	0.9	
Assistant Principals	1.4	0.9	2.0	
Other professional staff	2.8	1.9	1.7	

Exhibit 6		Successful High Schools by Poverty Level		
Enrollment, Demographics and Full-Time-Equivalent Personnel		<i>Low poverty</i>	<i>Medium poverty</i>	<i>High poverty</i>
Description of resource		<i>Lowest third</i>	<i>Middle Third</i>	<i>Highest Third</i>
(1)	(2)	(3)	(4)	
Number of schools		23	12	15
School Size				
Average school enrollment		872	807	830
Demographic Data				
% free & reduced priced lunch students	3.3	14.4	56.7	
% students eligible for special education	12.8	12.5	11.4	
% English Language Learners	0.9	1.0	18.9	
Full-Time-Equivalent Personnel per 100 students enrolled in the school:				
Teachers (incl. core, special ed, & other)	7.16	6.48	5.61	
Guidance counselors	0.45	0.33	0.22	
Psychologists	0.08	0.03	0.03	
Social workers	0.05	0.03	0.02	
Other pupil support personnel	0.03	0.07	0.10	
School nurse	0.10	0.09	0.01	
Librarians	0.15	0.11	0.11	
Principals	0.12	0.13	0.09	
Assistant Principals	0.16	0.17	0.24	
Other professional staff	0.32	0.16	0.22	
Full-Time-Equivalent Personnel in the school:				
Teachers (incl. core, special ed, & other)	62.4	52.3	46.6	
Guidance counselors	3.9	2.7	1.8	
Psychologists	0.7	0.2	0.2	
Social workers	0.5	0.2	0.2	
Other pupil support personnel	0.3	0.6	0.8	
School nurse	0.9	0.7	0.1	
Librarians	1.3	0.9	0.9	
Principals	1.1	1.1	0.8	
Assistant Principals	1.4	1.3	2.0	
Other professional staff	2.8	1.3	1.8	

Exhibit 7		Very Small Elementary, Middle, and High Schools with Average Success Levels		
Enrollment, Demographics and Full-Time-Equivalent Personnel		<i>Low poverty</i> <i>Elementary Schools</i>	<i>Medium poverty</i> <i>Middle Schools</i>	<i>High poverty</i> <i>High Schools</i>
Description of resource	(1)	(2)	(3)	(4)
Number of schools		83	120	62
School Size				
Average school enrollment		153	208	169
Demographic Data				
% free & reduced priced lunch students		37.4	50.2	53.3
% students eligible for special education		25.6	38.2	29.6
% English Language Learners		3.5	6.2	5.0
Full-Time-Equivalent Personnel per 100 students enrolled in the school:				
Teachers (incl. core, special ed, & other)		11.55	11.61	11.62
Guidance counselors		0.11	0.36	0.48
Psychologists		0.17	0.12	0.17
Social workers		0.10	0.10	0.18
Other pupil support personnel		0.02	0.04	0.08
School nurse		0.26	0.07	0.05
Librarians		0.12	0.13	0.13
Principals		0.36	0.31	0.40
Assistant Principals		0.13	0.22	0.21
Other professional staff		0.09	0.10	0.20
Full-Time-Equivalent Personnel in the school:				
Teachers (incl. core, special ed, & other)		17.7	24.2	19.7
Guidance counselors		0.2	0.8	0.8
Psychologists		0.3	0.3	0.3
Social workers		0.2	0.2	0.3
Other pupil support personnel		0.0	0.1	0.1
School nurse		0.4	0.1	0.1
Librarians		0.2	0.3	0.2
Principals		0.6	0.6	0.7
Assistant Principals		0.2	0.5	0.4
Other professional staff		0.1	0.2	0.3

APPENDIX J

GEOGRAPHIC COST OF EDUCATION INDEX (GCEI) VALUES BY DISTRICT BEDS CODE, WITH DISTRICT NAME

GCEI values based upon the fixed effects regression model, presented later in this appendix

District Name	District Code	GCEI Value
Albany City School District	010100	0.899104796
Berne-Knox-Westerlo Central School District	010201	0.891459823
Bethlehem Central School District	010306	0.899655835
Ravena-Coeymans-Selkirk Central School District	010402	0.904396103
Cohoes City School District	010500	0.897581672
South Colonie Central School District	010601	0.900362805
North Colonie Central School District	010605	0.900222974
Menands Union Free School District	010615	0.872322809
Maplewood Common School District	010622	0.858663685
Green Island Union Free School District	010701	0.872804654
Guilderland Central School District	010802	0.894715757
Voorheesville Central School District	011003	0.900459813
Watervliet City School District	011200	0.897049919
Alfred-Almond Central School District	020101	0.883147512
Andover Central School District	020601	0.874937771
Genesee Valley Central School District at Angelica-Belmont	020702	0.880929338
Belfast Central School District	020801	0.868701767
Canaseraga Central School District	021102	0.845844924
Friendship Central School District	021601	0.878555447
Fillmore Central School District	022001	0.877522657
Whitesville Central School District	022101	0.876400351
Cuba-Rushford Central School District	022302	0.902451503
Scio Central School District	022401	0.871607165
Wellsville Central School District	022601	0.902740699
Bolivar-Richburg Central School District	022902	0.883182873
Chenango Forks Central School District	030101	0.874356683
Binghamton City School District	030200	0.875735098
Harpursville Central School District	030501	0.881518394
Susquehanna Valley Central School District	030601	0.876269339
Chenango Valley Central School District	030701	0.875211867
Maine-Endwell Central School District	031101	0.874316543
Deposit Central School District	031301	0.878319641
Whitney Point Central School District	031401	0.872160426
Union-Endicott Central School District	031501	0.874839841
Johnson City Central School District	031502	0.875650141
Vestal Central School District	031601	0.875077835
Windsor Central School District	031701	0.886548171
West Valley Central School District	040204	0.896121203
Allegany - Limestone Central School District	040302	0.941863321
Ellicottville Central School District	040901	0.932674352
Franklinville Central School District	041101	0.924122931
Hinsdale Central School District	041401	0.908579347

Cattaraugus-Little Valley Central School District	042302	0.946667929
Olean City School District	042400	0.924046506
Gowanda Central School District	042801	0.91014934
Portville Central School District	042901	0.924833444
Randolph Central School District	043001	0.951044512
Randolph Academy Union Free School District	043011	0.910116067
Salamanca City School District	043200	0.940544849
Yorkshire-Pioneer Central School District	043501	0.913311461
Auburn City School District	050100	0.858160286
Weedsport Central School District	050301	0.85779613
Cato-Meridian Central School District	050401	0.859588806
Southern Cayuga Central School District	050701	0.838497835
Port Byron Central School District	051101	0.860493331
Moravia Central School District	051301	0.859197809
Union Springs Central School District	051901	0.861846823
Southwestern Central School District at Jamestown	060201	0.933759702
Frewsburg Central School District	060301	0.939551265
Cassadaga Valley Central School District	060401	0.936098086
Chautauqua Lake Central School District	060503	0.934025877
Pine Valley Central School District (South Dayton)	060601	0.897331646
Clymer Central School District	060701	0.904532362
Dunkirk City School District	060800	0.925976817
Bemus Point Central School District	061001	0.921642662
Falconer Central School District	061101	0.939339337
Silver Creek Central School District	061501	0.921865945
Forestville Central School District	061503	0.909653798
Panama Central School District	061601	0.919265839
Jamestown City School District	061700	0.938288342
Fredonia Central School District	062201	0.926236976
Brocton Central School District	062301	0.922504924
Ripley Central School District	062401	0.905102693
Sherman Central School District	062601	0.91712932
Westfield Central School District	062901	0.919615518
Elmira City School District	070600	0.860232161
Horseheads Central School District	070901	0.859620752
Elmira Heights Central School District	070902	0.859926653
Afton Central School District	080101	0.865839238
Bainbridge-Guilford Central School District	080201	0.87886599
Greene Central School District	080601	0.870670809
Unadilla Valley Central School District	081003	0.873488983
Norwich City School District	081200	0.877463757
Georgetown-South Otselic Central School District	081401	0.852648161
Oxford Academy and Central School District	081501	0.864867177
Sherburne-Earlville Central School District	082001	0.866349984
AuSable Valley Central School District	090201	0.867930104
Beekmantown Central School District	090301	0.873211241
Northeastern Clinton Central School District	090501	0.853006246
Chazy Union Free School District	090601	0.840924479
Northern Adirondack Central School District	090901	0.889226199
Peru Central School District	091101	0.861805989
Plattsburgh City School District	091200	0.873352845

Saranac Central School District	091402	0.89044098
Berkshire Union Free School District	100308	0.929998967
Taconic Hills Central School District	100501	0.966932716
Germantown Central School District	100902	0.951070543
Chatham Central School District	101001	0.958101395
Hudson City School District	101300	0.967028973
Kinderhook Central School District	101401	0.959853595
New Lebanon Central School District	101601	0.930988276
Cincinnatus Central School District	110101	0.822533286
Cortland City School District	110200	0.834111694
McGraw Central School District	110304	0.821001125
Homer Central School District	110701	0.833794121
Marathon Central School District	110901	0.83697882
Andes Central School District	120102	0.88613089
Downsville Central School District	120301	0.905850433
Charlotte Valley Central School District	120401	0.891865827
Delhi Central School District	120501	0.925296279
Franklin Central School District	120701	0.909171915
Hancock Central School District	120906	0.911843993
Margaretville Central School District	121401	0.911116874
Roxbury Central School District	121502	0.883453582
Sidney Central School District	121601	0.915488997
Stamford Central School District	121701	0.883531814
South Kortright Central School District	121702	0.901139562
Walton Central School District	121901	0.935665767
Beacon City School District	130200	1.065454866
Dover Union Free School District	130502	1.057727902
Hyde Park Central School District	130801	1.065969364
Northeast Central School District	131101	1.039271732
Pawling Central School District	131201	1.075641234
Pine Plains Central School District	131301	1.061118852
Poughkeepsie City School District	131500	1.065186329
Arlington Central School District	131601	1.073540528
Spackenkill Union Free School District	131602	1.064365858
Red Hook Central School District	131701	1.063567473
Rhinebeck Central School District	131801	1.062861552
Wappingers Central School District	132101	1.066975251
Millbrook Central School District	132201	1.055843046
Alden Central School District	140101	0.953017745
Amherst Central School District	140201	0.941547214
Williamsville Central School District	140203	0.943903922
Sweet Home Central School District	140207	0.942971231
East Aurora Union Free School District	140301	0.953104773
Buffalo City School District	140600	0.939843976
Cheektowaga Central School District	140701	0.940908501
Cheektowaga-Maryvale Union Free School District	140702	0.941553694
Cleveland Hill Union Free School District	140703	0.940968548
Depew Union Free School District	140707	0.942753431
Cheektowaga-Sloan Union Free School District	140709	0.940546873
Clarence Central School District	140801	0.94537245
Springville-Griffith Institute Central School District	141101	0.976693952

Eden Central School District	141201	0.972431663
Iroquois Central School District	141301	0.952580061
Evans-Brant Central School District (Lake Shore)	141401	0.941432824
Grand Island Central School District	141501	0.92075444
Hamburg Central School District	141601	0.969490274
Hopevale Union Free School District at Hamburg	141603	0.926704085
Frontier Central School District	141604	0.966686986
Holland Central School District	141701	0.968881688
Lackawanna City School District	141800	0.942164971
Lancaster Central School District	141901	0.943515243
Akron Central School District	142101	0.936739288
North Collins Central School District	142201	0.927743
Orchard Park Central School District	142301	0.968234447
Tonawanda City School District	142500	0.918927313
Kenmore-Tonawanda Union Free School District	142601	0.941933805
West Seneca Central School District	142801	0.942229029
Crown Point Central School District	150203	0.900586916
Elizabethtown-Lewis Central School District	150301	0.899161522
Keene Central School District	150601	0.886067915
Minerva Central School District	150801	0.906468465
Moriah Central School District	150901	0.911085754
Newcomb Central School District	151001	0.907623661
Lake Placid Central School District	151102	0.924496752
Schoroon Lake Central School District	151401	0.92086502
Ticonderoga Central School District	151501	0.941077848
Westport Central School District	151601	0.899006021
Willsboro Central School District	151701	0.897985587
Tupper Lake Central School District	160101	0.879332858
Chateaugay Central School District	160801	0.863447644
Salmon River Central School District	161201	0.859750282
Saranac Lake Central School District	161401	0.868800129
Malone Central School District	161501	0.860931935
Brushton-Moira Central School District	161601	0.849254249
Saint Regis Falls Central School District	161801	0.837036944
Wheelerville Union Free School District	170301	0.865437136
Gloversville City School District	170500	0.904620874
Johnstown City School District	170600	0.904205494
Mayfield Central School District	170801	0.90528567
Northville Central School District	170901	0.897605273
Oppenheim-Ephratah Central School District	171001	0.869796543
Broadalbin-Perth Central School District	171102	0.905189073
Alexander Central School District	180202	0.907875679
Batavia City School District	180300	0.908400062
Byron-Bergen Central School District	180701	0.90317256
Elba Central School District	180901	0.894197776
Le Roy Central School District	181001	0.903942564
Oakfield-Alabama Central School District	181101	0.909021904
Pavilion Central School District	181201	0.872193104
Pembroke Central School District	181302	0.902566232
Cairo-Durham Central School District	190301	0.912922816
Catskill Central School District	190401	0.914032984

Coxsackie-Athens Central School District	190501	0.915538323
Greenville Central School District	190701	0.915400491
Hunter-Tannersville Central School District	190901	0.93012916
Windham-Ashland-Jewett Central School District	191401	0.932353333
Piseco Common School District	200101	0.889215284
Indian Lake Central School District	200401	0.880854398
Inlet Common School District	200501	0.907162963
Lake Pleasant Central School District	200601	0.878942239
Long Lake Central School District	200701	0.888733934
Raquette Lake Union Free School District	200702	0.908337221
Wells Central School District	200901	0.896061446
West Canada Valley Central School District	210302	0.877958922
Frankfort-Schuyler Central School District	210402	0.888972656
Ilion Central School District	210501	0.890269948
Mohawk Central School District	210502	0.893217872
Herkimer Central School District	210601	0.893724435
Little Falls City School District	210800	0.893965927
Dolgeville Central School District	211003	0.893866513
Poland Central School District	211103	0.90233272
Van Hornesville-Owen D. Young Central School District	211701	0.864830386
Town of Webb Union Free School District	211901	0.898107421
Bridgewater-West Winfield Central School District (Mt. Markham)	212001	0.887563412
South Jefferson Central School District	220101	0.863622638
Alexandria Central School District	220202	0.870015443
Indian River Central School District	220301	0.895527324
General Brown Central School District	220401	0.868270124
Thousand Islands Central School District	220701	0.87228876
Sackets Harbor Central School District	221001	0.843219088
Lyme Central School District	221301	0.846532232
La Fargeville Central School District	221401	0.85832584
Watertown City School District	222000	0.893801436
Carthage Central School District	222201	0.894252994
Copenhagen Central School District	230201	0.817218707
Harrisville Central School District	230301	0.79845259
Lowville Academy & Central School District	230901	0.82606312
South Lewis Central School District	231101	0.836537768
Avon Central School District	240101	0.903769313
Caledonia-Mumford Central School District	240201	0.903649793
Geneseo Central School District	240401	0.88762839
Livonia Central School District	240801	0.917125566
Mount Morris Central School District	240901	0.890891975
Dansville Central School District	241001	0.91160085
Dalton-Nunda Central School District (Keshequa)	241101	0.897213968
York Central School District	241701	0.902170166
Brookfield Central School District	250109	0.872888824
Cazenovia Central School District	250201	0.915861993
De Ruyter Central School District	250301	0.905768031
Morrisville-Eaton Central School District	250401	0.906043483
Hamilton Central School District	250701	0.90926906
Canastota Central School District	250901	0.918150871
Madison Central School District	251101	0.898373291

Oneida City School District	251400	0.928685988
Stockbridge Valley Central School District	251501	0.907237857
Chittenango Central School District	251601	0.906298188
Brighton Central School District	260101	0.904062291
Gates-Chili Central School District	260401	0.905424932
Greece Central School District	260501	0.905960881
East Irondequoit Central School District	260801	0.90424869
West Irondequoit Central School District	260803	0.904297233
Honeoye Falls-Lima Central School District	260901	0.903009523
Spencerport Central School District	261001	0.902258174
Hilton Central School District	261101	0.89723426
Penfield Central School District	261201	0.905730413
Fairport Central School District	261301	0.907375747
East Rochester Union Free School District	261313	0.905764001
Pittsford Central School District	261401	0.906251831
Churchville-Chili Central School District	261501	0.904362127
Rochester City School District	261600	0.903139993
Rush-Henrietta Central School District	261701	0.906380251
Brockport Central School District	261801	0.897566963
Webster Central School District	261901	0.906672909
Wheatland-Chili Central School District	262001	0.895127319
Amsterdam City School District	270100	0.922266971
Canajoharie Central School District	270301	0.922905453
Fonda-Fultonville Central School District	270601	0.92145033
Fort Plain Central School District	270701	0.908491989
Saint Johnsville Central School District	271102	0.899774666
Glen Cove City School District	280100	1.051179019
Hempstead Union Free School District	280201	1.054539895
Uniondale Union Free School District	280202	1.055659263
East Meadow Union Free School District	280203	1.055704842
North Bellmore Union Free School District	280204	1.045996851
Levittown Union Free School District	280205	1.049517669
Seaford Union Free School District	280206	1.047468678
Bellmore Union Free School District	280207	1.046520228
Roosevelt Union Free School District	280208	1.056093659
Freeport Union Free School District	280209	1.044524555
Baldwin Union Free School District	280210	1.050581337
Oceanside Union Free School District	280211	1.049433742
Malverne Union Free School District	280212	1.051000099
Valley Stream 13 Union Free School District	280213	1.045334473
Hewlett-Woodmere Union Free School District	280214	1.039234197
Lawrence Union Free School District	280215	1.039000789
Elmont Union Free School District	280216	1.047027817
Franklin Square Union Free School District	280217	1.052725043
Garden City Union Free School District	280218	1.053320064
East Rockaway Union Free School District	280219	1.040535833
Lynbrook Union Free School District	280220	1.03993
Rockville Centre Union Free School District	280221	1.054765836
Floral Park-Bellerose Union Free School District	280222	1.051319112
Wantagh Union Free School District	280223	1.046697735
Valley Stream 24 Union Free School District	280224	1.038981251

Merrick Union Free School District	280225	1.045641989
Island Trees Union Free School District	280226	1.046385958
West Hempstead Union Free School District	280227	1.053395193
North Merrick Union Free School District	280229	1.049720843
Valley Stream 30 Union Free School District	280230	1.038246923
Island Park Union Free School District	280231	1.025825831
Valley Stream Central High School District	280251	1.040776118
Sewanhaka Central High School District	280252	1.048677166
Bellmore-Merrick Central High School District	280253	1.045883324
Long Beach City School District	280300	1.042419532
Westbury Union Free School District	280401	1.054769611
East Williston Union Free School District	280402	1.053467375
Roslyn Union Free School District	280403	1.05251452
Port Washington Union Free School District	280404	1.049547864
New Hyde Park-Garden City Park Union Free School District	280405	1.052066164
Manhasset Union Free School District	280406	1.050969112
Great Neck Union Free School District	280407	1.047103559
Herricks Union Free School District	280409	1.052709241
Mineola Union Free School District	280410	1.053267033
Carle Place Union Free School District	280411	1.054532134
North Shore Central School District	280501	1.052077814
Syosset Central School District	280502	1.054684142
Locust Valley Central School District	280503	1.05093165
Plainview-Old Bethpage Central School District	280504	1.055291028
Oyster Bay-East Norwich Central School District	280506	1.052230448
Jericho Union Free School District	280515	1.055483731
Hicksville Union Free School District	280517	1.056512788
Plainedge Union Free School District	280518	1.047413375
Bethpage Union Free School District	280521	1.050569174
Farmingdale Union Free School District	280522	1.047170454
Massapequa Union Free School District	280523	1.04852414
NYC-Chancellor's Office	300000	1.044237935
New York City Community School District # 1	310100	1.044237935
New York City Community School District # 2	310200	1.044237935
New York City Community School District # 3	310300	1.044237935
New York City Community School District # 4	310400	1.044237935
New York City Community School District # 5	310500	1.044237935
New York City Community School District # 6	310600	1.044237935
New York City District 75	317500	1.044237935
New York City Alternative Schools	317700	1.044237935
Manhattan High School District Office	317800	1.044237935
Chancellor's District 85 - Manhattan	318500	1.044237935
New York City Community School District # 7	320700	1.044237935
New York City Community School District # 8	320800	1.044237935
New York City Community School District # 9	320900	1.044237935
New York City Community School District #10	321000	1.044237935
New York City Community School District #11	321100	1.044237935
New York City Community School District #12	321200	1.044237935
Bronx District 75	327500	1.044237935
Bronx Alternative Schools	327700	1.044237935
Bronx High School District Office	327800	1.044237935

Chancellor's District 85 - Bronx	328500	1.044237935
New York City Community School District #13	331300	1.044237935
New York City Community School District #14	331400	1.044237935
New York City Community School District #15	331500	1.044237935
New York City Community School District #16	331600	1.044237935
New York City Community School District #17	331700	1.044237935
New York City Community School District #18	331800	1.044237935
New York City Community School District #19	331900	1.044237935
New York City Community School District #20	332000	1.044237935
New York City Community School District #21	332100	1.044237935
New York City Community School District #22	332200	1.044237935
New York City Community School District #23	332300	1.044237935
New York City Community School District #32	333200	1.044237935
Brooklyn District 75	337500	1.044237935
Brooklyn Alternative Schools	337700	1.044237935
Brooklyn High School District Office	337800	1.044237935
Chancellor's District 85 - Brooklyn	338500	1.044237935
New York City Community School District #24	342400	1.044237935
New York City Community School District #25	342500	1.044237935
New York City Community School District #26	342600	1.044237935
New York City Community School District #27	342700	1.044237935
New York City Community School District #28	342800	1.044237935
New York City Community School District #29	342900	1.044237935
New York City Community School District #30	343000	1.044237935
Queens District 75	347500	1.044237935
Queens Alternative Schools	347700	1.044237935
Queens High School District Office	347800	1.044237935
Chancellor's District 85 - Queens	348500	1.044237935
New York City Community School District #31	353100	1.044237935
Richmond District 75	357500	1.044237935
Staten Island Alternative Schools	357700	1.044237935
Basis High School District Office	357800	1.044237935
Lewiston-Porter Central School District	400301	0.92614308
Lockport City School District	400400	0.934942418
Newfane Central School District	400601	0.937727786
Niagara-Wheatfield Central School District	400701	0.921883501
Niagara Falls City School District	400800	0.92177622
North Tonawanda City School District	400900	0.918067233
Starpoint Central School District	401001	0.933077953
Royalton-Hartland Central School District	401201	0.936854678
Barker Central School District	401301	0.940127536
Wilson Central School District	401501	0.936234688
Adirondack Central School District	410401	0.935558409
Camden Central School District	410601	0.909333141
Clinton Central School District	411101	0.892701232
New Hartford Central School District	411501	0.885796483
New York Mills Union Free School District	411504	0.870968785
Sauquoit Valley Central School District	411603	0.884669039
Remsen Central School District	411701	0.90118736
Rome City School District	411800	0.896045825
Waterville Central School District	411902	0.882381751

Sherrill City School District	412000	0.889367228
Holland Patent Central School District	412201	0.912380541
Utica City School District	412300	0.88555631
Westmoreland Central School District	412801	0.892374198
Oriskany Central School District	412901	0.880587518
Whitesboro Central School District	412902	0.890688422
West Genesee Central School District	420101	0.899371693
North Syracuse Central School District	420303	0.899924086
East Syracuse-Minoa Central School District	420401	0.898666204
Jamesville-DeWitt Central School District	420411	0.897175238
Jordan-Elbridge Central School District	420501	0.907009628
Fabiус-Pompey Central School District	420601	0.907776072
Westhill Central School District	420701	0.897343585
Solvay Union Free School District	420702	0.897834949
La Fayette Central School District	420807	0.917960085
Baldwinsville Central School District	420901	0.90285716
Fayetteville-Manlius Central School District	421001	0.899996105
Marcellus Central School District	421101	0.90318051
Onondaga Central School District	421201	0.913891175
Liverpool Central School District	421501	0.900159263
Lyncourt Union Free School District	421504	0.872700924
Skaneateles Central School District	421601	0.905956442
Syracuse City School District	421800	0.896331631
Tully Central School District	421902	0.922240017
Canandaigua City School District	430300	0.908361147
East Bloomfield Central School District	430501	0.900618039
Geneva City School District	430700	0.913280518
Gorham-Middlesex Central School District (Marcus Whitman)	430901	0.908635551
Manchester-Shortsville Central School District (Red Jacket)	431101	0.89401057
Naples Central School District	431201	0.904920336
Phelps-Clifton Springs Central School District	431301	0.910448781
Honeoye Central School District	431401	0.914955413
Victor Central School District	431701	0.904182856
Washingtonville Central School District	440102	1.063009911
Chester Union Free School District	440201	1.039668853
Cornwall Central School District	440301	1.080157113
Pine Bush Central School District	440401	1.066079103
Goshen Central School District	440601	1.057610882
Highland Falls Central School District	440901	1.073780859
Middletown City School District	441000	1.060476757
Minisink Valley Central School District	441101	1.059342373
Monroe-Woodbury Central School District	441201	1.075478748
Kiryas Joel Village Union Free School District	441202	1.030096762
Valley Central School District (Montgomery)	441301	1.064089748
Newburgh City School District	441600	1.066663719
Port Jervis City School District	441800	1.068946142
Tuxedo Union Free School District	441903	1.05481
Warwick Valley Central School District	442101	1.067968807
Greenwood Lake Union Free School District	442111	1.056437809
Florida Union Free School District	442115	1.03908056
Albion Central School District	450101	0.92909475

Kendall Central School District	450607	0.926076172
Holley Central School District	450704	0.902396908
Medina Central School District	450801	0.93082284
Lyndonville Central School District	451001	0.919602984
Altmar-Parish-Williamstown Central School District	460102	0.957193244
Fulton City School District	460500	0.92770209
Hannibal Central School District	460701	0.930833999
Central Square Central School District	460801	0.919418617
Mexico Central School District	460901	0.929206571
Oswego City School District	461300	0.932147718
Pulaski Central School District	461801	0.934309762
Sandy Creek Central School District	461901	0.937390886
Phoenix Central School District	462001	0.92123326
Gilbertsville-Mount Upton Central School District	470202	0.907517036
Edmeston Central School District	470501	0.896003906
Laurens Central School District	470801	0.895182303
Schenevus Central School District	470901	0.8978721
Milford Central School District	471101	0.896859536
Morris Central School District	471201	0.897139856
Oneonta City School District	471400	0.921333833
Otego-Unadilla Central School District	471601	0.920596298
Cooperstown Central School District	471701	0.925939756
Richfield Springs Central School District	472001	0.910870773
Cherry Valley-Springfield Central School District	472202	0.926072119
Worcester Central School District	472506	0.898556808
Mahopac Central School District	480101	1.074956102
Carmel Central School District	480102	1.073197376
Haldane Central School District	480401	1.06201949
Garrison Union Free School District	480404	1.046570645
Putnam Valley Central School District	480503	1.074856934
Brewster Central School District	480601	1.071656791
Berlin Central School District	490101	0.917105294
Brunswick Central School District (Brittonkill)	490202	0.895214567
East Greenbush Central School District	490301	0.894385389
Hoosick Falls Central School District	490501	0.92180992
Lansingburgh Central School District	490601	0.895837588
North Greenbush Common School District (Williams)	490801	0.856788995
Wynantskill Union Free School District	490804	0.870088813
Rensselaer City School District	491200	0.896038773
Averill Park Central School District	491302	0.912527283
Hoosic Valley Central School District	491401	0.925286892
Schodack Central School District	491501	0.899040528
Troy City School District	491700	0.895223414
Clarkstown Central School District	500101	1.06732411
Nanuet Union Free School District	500108	1.06578861
Haverstraw-Stony Point Central School District (North Rockland)	500201	1.071511631
South Orangetown Central School District	500301	1.066586446
Nyack Union Free School District	500304	1.068754882
Pearl River Union Free School District	500308	1.064713856
Ramapo Central School District (Suffern)	500401	1.067666617
East Ramapo Central School District (Spring Valley)	500402	1.068013766

Edwin Gould Academy-Ramapo UFSD	500414	1.020690752
Brasher Falls Central School District	510101	0.8953499
Canton Central School District	510201	0.900838187
Clifton-Fine Central School District	510401	0.893052456
Colton-Pierrepont Central School District	510501	0.875864366
Gouverneur Central School District	511101	0.898986418
Hammond Central School District	511201	0.875842487
Hermon-DeKalb Central School District	511301	0.876139031
Lisbon Central School District	511602	0.877541781
Madrid-Waddington Central School District	511901	0.877119176
Massena Central School District	512001	0.893107227
Morristown Central School District	512101	0.867117423
Norwood-Norfolk Central School District	512201	0.89827258
Ogdensburg City School District	512300	0.891445275
Heuvelton Central School District	512404	0.877290344
Parishville-Hopkinton Central School District	512501	0.883816271
Potsdam Central School District	512902	0.900514309
Edwards-Knox Central School District	513102	0.885791691
Burnt Hills-Ballston Lake Central School District	520101	0.910390844
Shenendehowa Central School District	520302	0.896698648
Corinth Central School District	520401	0.925307745
Edinburg Common School District	520601	0.88546257
Galway Central School District	520701	0.914128869
Mechanicville City School District	521200	0.903350003
Ballston Spa Central School District	521301	0.913242938
South Glens Falls Central School District	521401	0.905625282
Schuylerville Central School District	521701	0.913379254
Saratoga Springs City School District	521800	0.913995752
Stillwater Central School District	522001	0.911589669
Waterford-Halfmoon Union Free School District	522101	0.878312846
Duanesburg Central School District	530101	0.87560749
Scotia-Glenville Central School District	530202	0.901070373
Niskayuna Central School District	530301	0.898323149
Schalmont Central School District	530501	0.898921804
Rotterdam-Mohonasen Central School District	530515	0.898249372
Schenectady City School District	530600	0.898501777
Gilboa-Conesville Central School District	540801	0.874448081
Jefferson Central School District	540901	0.874208038
Middleburgh Central School District	541001	0.892881876
Cobleskill-Richmondville Central School District	541102	0.892407746
Schoharie Central School District	541201	0.893405667
Sharon Springs Central School District	541401	0.900488937
Odessa-Montour Central School District	550101	0.86357585
Watkins Glen Central School District	550301	0.866918362
South Seneca Central School District	560501	0.84268309
Romulus Central School District	560603	0.829638369
Seneca Falls Central School District	560701	0.828053476
Waterloo Central School District	561006	0.829515993
Addison Central School District	570101	0.855825729
Avoca Central School District	570201	0.838131619
Bath Central School District	570302	0.852329742

Bradford Central School District	570401	0.829087186
Campbell-Savona Central School District	570603	0.853820544
Canisteo Central School District	570701	0.862665528
Corning City School District	571000	0.855299844
Greenwood Central School District	571501	0.840440443
Hornell City School District	571800	0.875146125
Arkport Central School District	571901	0.860689061
Prattsburgh Central School District	572301	0.836130379
Jasper-Troupsburg Central School District	572702	0.843573969
Hammondsport Central School District	572901	0.838405803
Wayland-Cohocton Central School District	573002	0.845604683
Babylon Union Free School District	580101	1.04951661
West Babylon Union Free School District	580102	1.048794821
North Babylon Union Free School District	580103	1.048357139
Lindenhurst Union Free School District	580104	1.049097136
Copiaque Union Free School District	580105	1.049004583
Amityville Union Free School District	580106	1.048839804
Deer Park Union Free School District	580107	1.047046511
Wyandanch Union Free School District	580109	1.047078471
Three Village Central School District	580201	1.0549719
Brookhaven-Comsewogue Union Free School District	580203	1.056237989
Sachem Central School District	580205	1.064682214
Port Jefferson Union Free School District	580206	1.054606048
Mount Sinai Union Free School District	580207	1.05611467
Miller Place Union Free School District	580208	1.055760438
Rocky Point Union Free School District	580209	1.057155324
Middle Country Central School District	580211	1.062509551
Longwood Central School District	580212	1.074038719
South Manor Union Free School District	580221	1.055044459
Patchogue-Medford Union Free School District	580224	1.076254323
William Floyd Union Free School District	580232	1.079357184
Center Moriches Union Free School District	580233	1.079574495
East Moriches Union Free School District	580234	1.052710467
South Country Central School District	580235	1.077847259
Eastport-South Manor Central High School District	580251	1.069373786
East Hampton Union Free School District	580301	1.080284124
Wainscott Common School District	580302	1.033108262
Amagansett Union Free School District	580303	1.035850693
Springs Union Free School District	580304	1.064011356
Sag Harbor Union Free School District	580305	1.060973498
Montauk Union Free School District	580306	1.056071995
Elwood Union Free School District	580401	1.056358717
Cold Spring Harbor Central School District	580402	1.052505831
Huntington Union Free School District	580403	1.053678957
Northport-East Northport Union Free School District	580404	1.054399746
Half Hollow Hills Central School District	580405	1.047613377
Harborfields Central School District	580406	1.055333331
Commack Union Free School District	580410	1.057978899
South Huntington Union Free School District	580413	1.049401799
Bay Shore Union Free School District	580501	1.062001992
Islip Union Free School District	580502	1.0628792

East Islip Union Free School District	580503	1.063318446
Sayville Union Free School District	580504	1.064461737
Bayport-Blue Point Union Free School District	580505	1.071456293
Hauppauge Union Free School District	580506	1.060242094
Connetquot Central School District	580507	1.062800158
West Islip Union Free School District	580509	1.052456625
Brentwood Union Free School District	580512	1.060804323
Central Islip Union Free School District	580513	1.061439548
Fire Island Union Free School District	580514	1.020902369
Shoreham-Wading River Central School District	580601	1.062155802
Riverhead Central School District	580602	1.065848743
Little Flower Union Free School District	580603	1.017708904
Shelter Island Union Free School District	580701	1.039515007
Smithtown Central School District	580801	1.05900856
Kings Park Central School District	580805	1.055116869
Remsenburg-Speonk Union Free School District	580901	1.024249595
Westhampton Beach Union Free School District	580902	1.070735283
Quogue Union Free School District	580903	1.025300551
Hampton Bays Union Free School District	580905	1.072981625
Southampton Union Free School District	580906	1.077224618
Bridgehampton Union Free School District	580909	1.031868541
Sagaponack Common School District	580910	1.032740457
Eastport Union Free School District	580911	1.052981196
Tuckahoe Common School District	580913	1.047290394
East Quogue Union Free School District	580917	1.041834262
Oysterponds Union Free School District	581002	1.023028568
Fishers Island Union Free School District	581004	1.029884874
Southold Union Free School District	581005	1.04965898
Greenport Union Free School District	581010	1.05041304
Mattituck-Cutchogue Union Free School District	581012	1.06629367
New Suffolk Common School District	581015	1.020265983
Fallsburg Central School District	590501	0.982296531
Eldred Central School District	590801	0.952922113
Liberty Central School District	590901	0.985237452
Tri-Valley Central School District	591201	0.984673993
Roscoe Central School District	591301	0.947580791
Livingston Manor Central School District	591302	0.972543511
Monticello Central School District	591401	0.979590277
Sullivan West Central School District	591502	0.986060879
Waverly Central School District	600101	0.86646145
Candor Central School District	600301	0.862280574
Newark Valley Central School District	600402	0.873891318
Owego-Apalachin Central School District	600601	0.874767424
Spencer-Van Etten Central School District	600801	0.876677094
Tioga Central School District	600903	0.840716424
Dryden Central School District	610301	0.869845271
George Junior Republic Union Free School District	610327	0.832539218
Groton Central School District	610501	0.877095473
Ithaca City School District	610600	0.872285613
Lansing Central School District	610801	0.870959059
Newfield Central School District	610901	0.869144223

Trumansburg Central School District	611001	0.872617768
West Park Union Free School District	620202	1.007835723
Kingston City School District	620600	1.056004077
Highland Central School District	620803	1.037058354
Rondout Valley Central School District	620901	1.057163175
Marlboro Central School District	621001	1.026485768
New Paltz Central School District	621101	1.054131713
Onteora Central School District	621201	1.088188069
Saugerties Central School District	621601	1.054598259
Wallkill Central School District	621801	1.025753383
Ellenville Central School District	622002	1.054925162
Bolton Central School District	630101	0.878403301
North Warren Central School District	630202	0.904425445
Glens Falls City School District	630300	0.89386797
Johnsburg Central School District	630601	0.879013531
Lake George Central School District	630701	0.917788463
Hadley-Luzerne Central School District	630801	0.919423643
Queensbury Union Free School District	630902	0.917077075
Glens Falls Common School District	630918	0.855497286
Warrensburg Central School District	631201	0.918157952
Argyle Central School District	640101	0.864656528
Fort Ann Central School District	640502	0.880066012
Fort Edward Union Free School District	640601	0.878889387
Granville Central School District	640701	0.900792273
Greenwich Central School District	640801	0.87651539
Hartford Central School District	641001	0.879339038
Hudson Falls Central School District	641301	0.892933958
Putnam Central School District	641401	0.864012264
Salem Central School District	641501	0.86354963
Cambridge Central School District	641610	0.8749069
Whitehall Central School District	641701	0.888167853
Newark Central School District	650101	0.916927529
Clyde-Savannah Central School District	650301	0.933191054
Lyons Central School District	650501	0.93182572
Marion Central School District	650701	0.927399993
Wayne Central School District	650801	0.918668932
Palmyra-Macedon Central School District	650901	0.911591481
Gananda Central School District	650902	0.924500377
Sodus Central School District	651201	0.931258211
Williamson Central School District	651402	0.928163663
North Rose-Wolcott Central School District	651501	0.933819883
Red Creek Central School District	651503	0.931716686
Katonah-Lewisboro Union Free School District	660101	1.068784797
Bedford Central School District	660102	1.064665362
Croton-Harmon Union Free School District	660202	1.070774935
Hendrick Hudson Central School District	660203	1.073237535
Eastchester Union Free School District	660301	1.044253766
Tuckahoe Union Free School District	660302	1.027709455
Bronxville Union Free School District	660303	1.043018106
Union Free School District of the Tarrytowns	660401	1.067332645
Irvington Union Free School District	660402	1.065198206

Dobbs Ferry Union Free School District	660403	1.063778914
Hastings-on-Hudson Union Free School District	660404	1.062667521
Ardsley Union Free School District	660405	1.063827226
Edgemont Union Free School District	660406	1.063492601
Greenburgh Central School District	660407	1.065503475
Elmsford Union Free School District	660409	1.04990208
Greenburgh-Graham Union Free School District	660410	1.033981015
Greenburgh Eleven Union Free School District	660411	1.034903611
Greenburgh-North Castle Union Free School District	660412	1.017694661
Abbott Union Free School District	660413	1.019717589
Harrison Central School District	660501	1.051172958
Mamaroneck Union Free School District	660701	1.046332806
Mount Pleasant Central School District	660801	1.064299987
Pocantico Hills Central School District	660802	1.034331486
Hawthorne-Cedar Knolls Union Free School District	660803	1.034445994
Mount Pleasant-Cottage Union Free School District	660804	1.035913896
Valhalla Union Free School District	660805	1.062938043
Mount Pleasant-Blythedale Union Free School District	660806	1.017467286
Pleasantville Union Free School District	660809	1.065138991
Mount Vernon City School District	660900	1.043536111
Chappaqua Central School District	661004	1.066538402
New Rochelle City School District	661100	1.044947343
Byram Hills Central School District	661201	1.062358135
North Salem Central School District	661301	1.072611014
Ossining Union Free School District	661401	1.068789992
Briarcliff Manor Union Free School District	661402	1.065456883
Peekskill City School District	661500	1.07435101
Pelham Union Free School District	661601	1.044397178
Rye City School District	661800	1.048929783
Rye Neck Union Free School District	661901	1.047552696
Port Chester-Rye Union Free School District	661904	1.061350493
Blind Brook-Rye Union Free School District	661905	1.060990209
Scarsdale Union Free School District	662001	1.046037629
Somers Central School District	662101	1.071949763
White Plains City School District	662200	1.054373688
Yonkers City School District	662300	1.055546953
Lakeland Central School District	662401	1.073993937
Yorktown Central School District	662402	1.072463025
Attica Central School District	670201	0.865880501
Letchworth Central School District	670401	0.876108342
Wyoming Central School District	671002	0.805898768
Perry Central School District	671201	0.828855795
Warsaw Central School District	671501	0.874935315
Penn Yan Central School District	680601	0.865011213
Dundee Central School District	680801	0.854438852

CENSUS MODEL REGRESSION ANALYSIS

	The Census Wage Model	
	Est.	St.Err.
Intercept	1.4998	0.2534
Hours Worked (log)	0.7633	0.0107
Weeks Worked (log)	1.0918	0.0230
Educational Attainment		
Bachelors degree	-0.1215	0.0102
Doctorate degree	0.0245	0.0143
Masters degree	-0.0519	0.0107
Female	-0.1589	0.0047
Age	0.0674	0.0012
Age Squared	-0.0006	0.0000
Ethnicity		
American Indian	-0.2307	0.0422
Black	-0.1252	0.0079
Chinese	-0.1507	0.0129
Filipino	-0.1412	0.0097
Japanese	0.1598	0.0312
Other race, nec	-0.2279	0.0154
Two or more major races	-0.1655	0.0157
Number of Observations	78540	
R-Square	0.4211	
Dependent variable: log of annual wage and salary earnings Estimation also includes fixed effects for 434 occupations and 26 labor market areas.		

TEACHER REGRESSION MODELS

Variable	Model Type							
	Fixed Effects		Quit-adjusted		Multi-year, 1999-2002		Single-year, 2002	
	Est.	St.Err.	Est.	St.Err.	Est.	St.Err.	Est.	St.Err.
Intercept	.	.	8.2850	0.0199	8.1330	0.0175	7.9330	0.0396
Lifereg Scale Parameter	.	.	0.1364	0.0002	.	.	.	.
log of Census Metro Statistical Area (CMSA) population density in 2000	0.0049	0.0048	0.0085	0.0015	-0.0078	0.0013	-0.0248	0.0029
log of CMSA population in 2000	0.0059	0.0037	0.0281	0.0013	0.0447	0.0011	0.0620	0.0025
CMSA population growth from 1990 to 2000	0.1470	0.0546	0.2954	0.0146	0.1723	0.0128	0.1139	0.0289
Furthest distance of a place within the MSA to a city with a population of 100,000 or greater	-0.0006	0.0001	-0.0001	0.0000	-0.0001	0.0000	-0.0003	0.0000
Herfindahl index for concentration of students in district, across the MSA of the district	-0.0050	0.0002	-0.0028	0.0001	-0.0011	0.0001	-0.0010	0.0003
Dummy variable for a Herfindahl index value greater than 40 for concentration of students	0.1658	0.0108	0.0970	0.0055	0.0547	0.0047	0.0832	0.0108
log of minimum value of an acre of land (from 1997 Ag Census) in MSA (or county if non-MSA)	0.1005	0.0068	0.1282	0.0020	0.1410	0.0018	0.1530	0.0040
MSA unemployment rate	0.0023	0.0009	0.0047	0.0003	0.0050	0.0003	0.0031	0.0006
Dummy variable for being in the MSA of NYC Metro Region	0.1113	0.0139	-0.0121	0.0065	-0.0767	0.0055	-0.1016	0.0120
Distance to NYC	0.0001	0.0000	0.0002	0.0000	0.0003	0.0000	0.0003	0.0000
Distance to nearest place with population of 100,000 or greater	0.0007	0.0001	0.0009	0.0000	0.0013	0.0000	0.0019	0.0001
Distance to nearest place with population of 100,000 or greater, squared	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Dummy variable for district enrollment less than 250	-0.0439	0.0073	-0.0544	0.0037	-0.0648	0.0033	-0.0606	0.0084
Dummy variable for district enrollment greater than or equal to 250 but less than 500	-0.0274	0.0034	-0.0525	0.0022	-0.0478	0.0019	-0.0359	0.0042
Dummy variable for district enrollment greater than or equal to 500 but less than 1,000	-0.0154	0.0019	-0.0471	0.0013	-0.0448	0.0011	-0.0396	0.0025
log of annual precipitation	0.1485	0.0083	0.1457	0.0029	0.1564	0.0026	0.1833	0.0058
02 Adjusted Year experience total indicator	.	.	0.0150	0.0014	0.0201	0.0012	0.0302	0.0027
03 Adjusted Year experience total indicator	.	.	0.0262	0.0014	0.0355	0.0012	0.0534	0.0026
04 Adjusted Year experience total indicator	.	.	0.0352	0.0015	0.0467	0.0013	0.0698	0.0028
05 Adjusted Year experience total indicator	.	.	0.0342	0.0015	0.0500	0.0013	0.0818	0.0028
06 Adjusted Year experience total indicator	.	.	0.0412	0.0016	0.0587	0.0014	0.0911	0.0030
07 Adjusted Year experience total indicator	.	.	0.0675	0.0017	0.0791	0.0014	0.0997	0.0031
08 Adjusted Year experience total indicator	.	.	0.0924	0.0017	0.1061	0.0015	0.1286	0.0033
09 Adjusted Year experience total indicator	.	.	0.1093	0.0017	0.1248	0.0015	0.1480	0.0033
10 Adjusted Year experience total indicator	.	.	0.1277	0.0017	0.1414	0.0015	0.1589	0.0034

Variable	Model Type (<i>continued</i>)					
	Fixed Effects		Quit-adjusted		Multi-year, 1999-2002	Single-year, 2002
11 Adjusted Year experience total indicator	.	.	0.1516	0.0017	0.1657	0.0015
12 Adjusted Year experience total indicator	.	.	0.1693	0.0018	0.1845	0.0016
13 Adjusted Year experience total indicator	.	.	0.1889	0.0018	0.2033	0.0016
14 Adjusted Year experience total indicator	.	.	0.2056	0.0018	0.2216	0.0016
15 Adjusted Year experience total indicator	.	.	0.2241	0.0018	0.2401	0.0016
16 Adjusted Year experience total indicator	.	.	0.2444	0.0018	0.2593	0.0016
17 Adjusted Year experience total indicator	.	.	0.2590	0.0019	0.2732	0.0016
18 Adjusted Year experience total indicator	.	.	0.2729	0.0019	0.2893	0.0017
19 Adjusted Year experience total indicator	.	.	0.2901	0.0019	0.3054	0.0017
20 Adjusted Year experience total indicator	.	.	0.3109	0.0019	0.3251	0.0017
21 Adjusted Year experience total indicator	.	.	0.3361	0.0019	0.3490	0.0017
22 Adjusted Year experience total indicator	.	.	0.3537	0.0019	0.3701	0.0017
23 Adjusted Year experience total indicator	.	.	0.3709	0.0020	0.3865	0.0017
24 Adjusted Year experience total indicator	.	.	0.3854	0.0020	0.4020	0.0017
25 Adjusted Year experience total indicator	.	.	0.4063	0.0020	0.4213	0.0017
26 Adjusted Year experience total indicator	.	.	0.4213	0.0019	0.4368	0.0017
27 Adjusted Year experience total indicator	.	.	0.4357	0.0019	0.4507	0.0017
28 Adjusted Year experience total indicator	.	.	0.4478	0.0019	0.4643	0.0017
29 Adjusted Year experience total indicator	.	.	0.4592	0.0019	0.4754	0.0017
30 Adjusted Year experience total indicator	.	.	0.4671	0.0019	0.4823	0.0017
31+ Adjusted Year experience total indicator	.	.	0.4889	0.0016	0.4905	0.0014
Missing Adjusted Year experience total indicator	.	.	0.1551	0.0015	0.1610	0.0013
Age	.	.	0.0025	0.0000	0.0023	0.0000
Certification is Temporary (dummy variable)	-0.0336	0.0014	-0.1126	0.0016	-0.1276	0.0013
Certification is Certificate Of Qualification (dummy variable)	-0.0553	0.0013	-0.0745	0.0015	-0.0732	0.0014
Certification is 5 year provisional (dummy variable)	0.1016	0.0011	-0.0685	0.0020	0.0521	0.0017
Certification is Permanent (dummy variable)	0.1145	0.0010	0.0260	0.0019	0.1380	0.0016
Dummy variable for having certification in Mathematics	0.0263	0.0019	0.0078	0.0023	0.0250	0.0020
Dummy variable for having certification in Science	0.0376	0.0018	0.0114	0.0022	0.0308	0.0018

Variable	Model Type (<i>continued</i>)							
	Fixed Effects		Quit-adjusted		Multi-year, 1999-2002		Single-year, 2002	
Dummy variable for having any portion of FTE in EN English	-0.0022	0.0010	-0.0027	0.0008	0.0032	0.0007	0.0076	0.0016
Dummy variable for having any portion of FTE in Mathematics	-0.0196	0.0017	-0.0102	0.0022	-0.0240	0.0019	-0.0387	0.0042
Dummy variable for having any portion of FTE in Physical Ed	-0.0054	0.0021	0.0005	0.0011	0.0053	0.0010	-0.0127	0.0021
Dummy variable for having any portion of FTE in Reading/Language Arts	-0.0156	0.0010	-0.0043	0.0012	-0.0086	0.0011	-0.0236	0.0023
Dummy variable for having any portion of FTE in Science	-0.0225	0.0016	-0.0123	0.0020	-0.0289	0.0017	-0.0628	0.0036
Dummy variable for having any portion of FTE in Social Science	0.0004	0.0012	-0.0066	0.0009	0.0057	0.0008	0.0182	0.0017
Percent of time spent teaching in an area of certification (including 5 year provisional cert)	-0.0018	0.0000	0.0003	0.0000	-0.0011	0.0000	-0.0046	0.0000
Any certification * Elementary school indicator (interaction variable)	0.0430	0.0009	-0.0003	0.0013	0.0254	0.0011	0.0822	0.0025
PMF Less than BA	0.0086	0.0075	0.1143	0.0052	0.1038	0.0045	0.0863	0.0100
Dummy variable for Bachelors + 30 or more hours	0.0342	0.0011	0.0705	0.0010	0.0722	0.0008	0.0694	0.0018
Dummy variable for Masters degree	0.0866	0.0010	0.0985	0.0008	0.1054	0.0007	0.1133	0.0015
Dummy variable for Masters + 30 or more hours	0.1283	0.0013	0.1911	0.0009	0.1982	0.0008	0.2045	0.0017
Dummy variable for Doctorate	0.1483	0.0066	0.1733	0.0023	0.1756	0.0020	0.1730	0.0045
School enrollment (from the IMF)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Year dummy variable for 1999	-0.1635	0.0004	-0.0741	0.0005	-0.1027	0.0006	0.0000	.
Year dummy variable for 2000	-0.1043	0.0004	-0.0280	0.0005	-0.0578	0.0006	0.0000	.
Year dummy variable for 2001	-0.0588	0.0003	0.0000	0.0000	-0.0403	0.0005	0.0000	.
Dummy variable for Job Category Resource Specialist	0.0659	0.0012	0.0020	0.0013	0.0285	0.0011	0.0532	0.0021
Dummy variable for Job Category Subject Matter Specialist	0.0053	0.0012	-0.0254	0.0012	-0.0177	0.0011	-0.0104	0.0023
Dummy variable for Job Category Media Specialist	-0.0259	0.0026	-0.0062	0.0017	-0.0030	0.0015	-0.0105	0.0032
Dummy variable for Male	.	.	0.0086	0.0005	0.0094	0.0005	0.0072	0.0011
Dummy variable for elementary school	-0.0631	0.0008	-0.0026	0.0013	-0.0236	0.0011	-0.0798	0.0024
Dummy variable for high school	-0.0180	0.0006	0.0122	0.0006	0.0194	0.0005	0.0378	0.0013

APPENDIX K

DISTRICT BY DISTRICT ACTUAL SPENDING AND PROJECTIONS OF "ADEQUACY" COSTS BY SIMULATION MODEL

District Code	District Name	Total 2001-02 Expenditures	Total Projected "Adequate" Expenditure - Stage 1	Total Projected "Adequate" Expenditure - Stage 2	Total Projected "Adequate" Expenditure - Stage 3	Total Projected "Adequate" Expenditure - Stage 3 With Lump Sum/Ratio Calculation
010100	Albany City School District	\$108,360,438	\$128,550,048	\$132,117,746	\$132,719,216	\$136,361,423
010201	Berne-Knox-Westerlo Central School District	\$11,428,364	\$12,538,819	\$12,634,721	\$12,573,405	\$12,723,622
010306	Bethlehem Central School District	\$43,425,718	\$47,794,430	\$47,760,896	\$47,515,046	\$48,188,248
010402	Ravena-Coeymans-Selkirk Central School District	\$25,520,249	\$26,697,198	\$26,926,115	\$26,841,438	\$27,107,306
010500	Cohoes City School District	\$24,582,840	\$31,364,771	\$31,916,075	\$31,670,574	\$34,144,603
010601	South Colonie Central School District	\$56,121,045	\$59,242,376	\$59,617,943	\$59,213,984	\$59,709,789
010605	North Colonie Central School District	\$48,105,271	\$56,185,857	\$56,276,919	\$55,470,823	\$56,752,458
010615	Menands Union Free School District	\$3,232,919	\$3,414,851	\$3,416,075	\$3,345,668	\$3,366,401
010622	Maplewood Common School District	\$1,539,024	\$1,857,781	\$1,836,181	\$1,776,592	\$1,817,264
010701	Green Island Union Free School District	\$3,289,282	\$3,756,474	\$3,816,272	\$3,762,682	\$3,855,061
010802	Guilderland Central School District	\$53,790,538	\$55,244,986	\$55,333,496	\$55,348,769	\$55,600,523
011003	Voorheesville Central School District	\$12,922,603	\$13,274,601	\$13,263,580	\$13,388,552	\$13,450,157
011200	Watervliet City School District	\$13,111,965	\$17,841,709	\$18,239,643	\$18,671,799	\$19,508,056
020101	Alfred-Almond Central School District	\$6,120,014	\$8,071,039	\$8,080,125	\$7,968,331	\$8,290,378
020601	Andover Central School District	\$4,309,577	\$5,279,096	\$5,341,786	\$5,265,433	\$5,460,256
020702	Genesee Valley Central School District at Angelica-Belmont	\$8,176,369	\$9,811,493	\$9,967,641	\$9,839,912	\$10,253,655
020801	Belfast Central School District	\$5,226,811	\$5,881,293	\$5,973,738	\$5,939,887	\$6,108,111
021102	Canaseraga Central School District	\$3,414,941	\$4,024,059	\$4,094,971	\$4,051,930	\$4,181,975
021601	Friendship Central School District	\$5,382,430	\$5,190,815	\$5,288,162	\$5,221,524	\$5,250,778
022001	Fillmore Central School District	\$7,059,202	\$8,069,717	\$8,200,392	\$8,366,937	\$8,616,489
022101	Whitesville Central School District	\$3,096,524	\$4,039,133	\$4,118,605	\$4,067,209	\$4,274,853
022302	Cuba-Rushford Central School District	\$11,911,599	\$13,533,230	\$13,672,406	\$13,467,872	\$13,797,535
022401	Scio Central School District	\$5,651,029	\$6,630,166	\$6,769,901	\$6,728,252	\$6,985,776
022601	Wellsville Central School District	\$15,448,704	\$18,224,994	\$18,466,865	\$18,644,078	\$19,195,585

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022902	Bolivar-Richburg Central School District	\$10,803,208	\$12,795,707	\$13,149,212	\$13,047,218	\$13,679,673
030101	Chenango Forks Central School District	\$18,466,163	\$21,893,925	\$22,161,570	\$21,947,236	\$22,583,459
030200	Binghamton City School District	\$63,535,541	\$83,694,183	\$85,994,269	\$85,852,462	\$90,600,550
030501	Harpursville Central School District	\$10,250,882	\$14,196,645	\$14,479,186	\$14,554,653	\$15,127,995
030601	Susquehanna Valley Central School District	\$20,767,526	\$25,314,170	\$25,476,526	\$25,156,592	\$25,871,965
030701	Chenango Valley Central School District	\$18,664,445	\$21,220,282	\$21,380,553	\$21,238,752	\$21,793,541
031101	Maine-Endwell Central School District	\$26,133,118	\$29,163,215	\$29,375,458	\$29,631,080	\$30,489,027
031301	Deposit Central School District	\$8,168,497	\$9,125,367	\$9,251,998	\$9,146,527	\$9,301,906
031401	Whitney Point Central School District	\$17,017,281	\$23,806,373	\$24,296,550	\$24,096,790	\$25,058,295
031501	Union-Endicott Central School District	\$42,071,232	\$51,840,173	\$52,189,790	\$51,752,995	\$54,211,133
031502	Johnson City Central School District	\$28,294,218	\$30,966,125	\$31,445,965	\$31,318,843	\$31,831,441
031601	Vestal Central School District	\$40,052,257	\$45,761,926	\$45,631,287	\$44,972,427	\$46,091,760
031701	Windsor Central School District	\$17,320,999	\$22,808,259	\$23,101,144	\$23,047,048	\$24,074,262
040204	West Valley Central School District	\$5,068,067	\$6,082,674	\$6,149,999	\$6,076,189	\$6,258,362
040302	Allegany - Limestone Central School District	\$15,148,490	\$18,770,232	\$18,809,767	\$18,791,442	\$19,513,581
040901	Ellicottville Central School District	\$7,026,217	\$7,828,473	\$7,865,159	\$8,017,898	\$8,281,624
041101	Franklinville Central School District	\$10,741,109	\$13,241,993	\$13,543,655	\$13,506,907	\$14,092,286
041401	Hinsdale Central School District	\$5,621,691	\$6,470,883	\$6,575,826	\$6,562,677	\$6,737,113
042302	Cattaraugus-Little Valley Central School District	\$13,623,238	\$16,757,067	\$16,963,943	\$16,724,525	\$17,288,915
042400	Olean City School District	\$25,363,139	\$32,123,004	\$32,547,810	\$32,140,393	\$33,379,230
042801	Gowanda Central School District	\$15,373,420	\$19,748,929	\$20,166,759	\$20,114,200	\$20,920,823
042901	Portville Central School District	\$9,942,784	\$13,195,074	\$13,294,395	\$13,317,355	\$14,038,518
043001	Randolph Central School District	\$11,148,445	\$13,216,193	\$13,479,638	\$13,479,837	\$13,925,631
043200	Salamanca City School District	\$15,861,880	\$20,497,528	\$20,895,110	\$20,614,240	\$21,548,419

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043501	Yorkshire-Pioneer Central School District	\$32,607,329	\$37,732,720	\$38,635,080	\$38,748,205	\$39,631,639
050100	Auburn City School District	\$44,089,590	\$56,854,540	\$57,463,738	\$56,846,426	\$58,965,779
050301	Weedsport Central School District	\$8,633,906	\$11,236,788	\$11,201,996	\$11,085,490	\$11,559,130
050401	Cato-Meridian Central School District	\$10,982,455	\$15,411,060	\$15,589,504	\$15,443,079	\$16,366,331
050701	Southern Cayuga Central School District	\$10,816,809	\$12,658,930	\$12,706,909	\$12,552,919	\$12,805,330
051101	Port Byron Central School District	\$10,591,877	\$14,365,279	\$14,553,063	\$14,366,585	\$14,956,224
051301	Moravia Central School District	\$12,119,238	\$13,894,751	\$14,023,664	\$14,152,252	\$14,474,456
051901	Union Springs Central School District	\$12,213,905	\$13,335,381	\$13,279,467	\$13,096,938	\$13,271,242
060201	Southwestern Central School District at Jamestown	\$15,589,233	\$20,463,637	\$20,492,774	\$20,146,366	\$20,785,961
060301	Frewsburg Central School District	\$8,839,338	\$12,619,212	\$12,691,602	\$12,690,598	\$13,496,465
060401	Cassadaga Valley Central School District	\$13,359,846	\$17,303,959	\$17,586,232	\$17,337,622	\$17,957,787
060503	Chautauqua Lake Central School District	\$22,771,223	\$23,624,731	\$23,768,193	\$23,588,461	\$23,965,755
060601	Pine Valley Central School District (South Dayton)	\$7,442,062	\$10,366,858	\$10,473,693	\$10,343,928	\$10,905,208
060701	Clymer Central School District	\$5,526,640	\$6,331,348	\$6,433,123	\$6,398,809	\$6,555,032
060800	Dunkirk City School District	\$25,440,123	\$30,514,206	\$31,241,797	\$31,257,901	\$32,130,776
061001	Bemus Point Central School District	\$7,690,689	\$9,800,802	\$9,755,826	\$9,657,019	\$10,116,744
061101	Falconer Central School District	\$11,796,912	\$17,360,790	\$17,497,307	\$17,209,993	\$18,056,390
061501	Silver Creek Central School District	\$12,206,933	\$15,343,532	\$15,605,592	\$15,627,106	\$16,131,479
061503	Forestville Central School District	\$6,509,963	\$7,909,482	\$8,019,978	\$7,910,976	\$8,170,930
061601	Panama Central School District	\$7,964,348	\$10,053,106	\$10,129,194	\$9,994,564	\$10,337,886
061700	Jamestown City School District	\$53,431,713	\$67,998,650	\$69,521,084	\$68,624,187	\$70,488,107
062201	Fredonia Central School District	\$17,969,788	\$23,029,311	\$23,131,248	\$22,844,141	\$23,731,710
062301	Brocton Central School District	\$8,606,300	\$9,996,780	\$10,176,687	\$10,035,349	\$10,242,970
062401	Ripley Central School District	\$5,153,510	\$6,038,510	\$6,182,997	\$6,110,949	\$6,247,361

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062601	Sherman Central School District	\$6,398,486	\$7,791,962	\$7,938,243	\$7,945,383	\$8,249,435
062901	Westfield Central School District	\$9,485,492	\$12,399,895	\$12,610,867	\$12,498,326	\$12,992,319
070600	Elmira City School District	\$84,226,134	\$95,794,160	\$97,712,948	\$96,851,458	\$100,286,953
070901	Horseheads Central School District	\$42,138,065	\$50,518,237	\$50,763,909	\$50,025,715	\$52,055,712
070902	Elmira Heights Central School District	\$11,546,667	\$13,917,345	\$14,044,163	\$14,011,070	\$14,548,999
080101	Afton Central School District	\$7,998,736	\$9,320,325	\$9,457,262	\$9,325,250	\$9,524,372
080201	Bainbridge-Guilford Central School District	\$10,051,412	\$12,416,108	\$12,493,820	\$12,359,884	\$12,830,021
080601	Greene Central School District	\$12,361,017	\$17,533,215	\$17,803,249	\$17,558,412	\$18,546,320
081003	Unadilla Valley Central School District	\$10,774,503	\$13,476,457	\$13,687,364	\$13,516,101	\$13,956,110
081200	Norwich City School District	\$21,852,793	\$25,975,085	\$26,302,828	\$26,375,498	\$27,375,999
081401	Georgetown-South Otselic Central School District	\$5,511,002	\$6,367,984	\$6,473,420	\$6,408,347	\$6,592,351
081501	Oxford Academy and Central School District	\$9,717,671	\$11,924,910	\$12,105,758	\$11,951,065	\$12,295,631
082001	Sherburne-Earlyville Central School District	\$18,202,092	\$22,066,147	\$22,475,464	\$22,875,372	\$23,613,716
090201	AuSable Valley Central School District	\$14,699,623	\$16,866,621	\$17,005,772	\$16,819,267	\$17,148,874
090301	Beekmantown Central School District	\$20,472,417	\$25,219,292	\$25,499,601	\$25,428,979	\$26,157,364
090501	Northeastern Clinton Central School District	\$15,511,415	\$18,904,910	\$19,041,956	\$18,774,262	\$19,183,575
090601	Chazy Union Free School District	\$4,922,623	\$6,202,975	\$6,170,142	\$6,080,901	\$6,241,269
090901	Northern Adirondack Central School District	\$10,633,893	\$14,158,521	\$14,432,611	\$14,372,012	\$14,879,492
091101	Peru Central School District	\$22,829,514	\$25,530,167	\$25,835,264	\$25,639,687	\$26,005,512
091200	Plattsburgh City School District	\$28,203,555	\$28,669,857	\$28,967,522	\$28,669,684	\$28,795,517
091402	Saranac Central School District	\$17,520,722	\$23,078,817	\$23,254,823	\$22,891,598	\$23,672,746
100501	Taconic Hills Central School District	\$20,139,084	\$24,242,239	\$24,530,708	\$24,510,830	\$25,446,896
100902	Germantown Central School District	\$7,755,722	\$8,609,460	\$8,668,469	\$8,865,648	\$9,029,580
101001	Chatham Central School District	\$15,191,223	\$18,311,354	\$18,394,059	\$18,400,515	\$19,002,902

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101300	Hudson City School District	\$25,536,864	\$32,359,518	\$33,014,497	\$33,229,486	\$34,591,746
101401	Kinderhook Central School District	\$20,395,118	\$28,338,261	\$28,505,053	\$28,293,038	\$29,756,581
101601	New Lebanon Central School District	\$7,828,723	\$8,417,849	\$8,498,746	\$8,388,185	\$8,468,569
110101	Cincinnatus Central School District	\$8,491,625	\$9,415,870	\$9,627,207	\$9,533,015	\$9,741,054
110200	Cortland City School District	\$26,924,720	\$34,311,246	\$34,785,135	\$34,077,914	\$35,319,924
110304	McGraw Central School District	\$6,322,867	\$8,031,029	\$8,125,696	\$8,052,094	\$8,467,473
110701	Homer Central School District	\$22,770,728	\$27,133,631	\$27,241,042	\$27,210,047	\$27,920,170
110901	Marathon Central School District	\$8,660,412	\$11,576,678	\$11,761,806	\$11,832,150	\$12,190,482
120102	Andes Central School District	\$2,266,127	\$2,416,340	\$2,454,277	\$2,426,257	\$2,451,990
120301	Downsville Central School District	\$5,028,855	\$4,683,767	\$4,746,790	\$4,683,720	\$4,672,646
120401	Charlotte Valley Central School District	\$4,328,485	\$6,417,027	\$6,566,908	\$6,515,251	\$6,883,423
120501	Delhi Central School District	\$10,895,086	\$14,550,571	\$14,698,983	\$14,520,300	\$15,218,388
120701	Franklin Central School District	\$4,474,752	\$5,407,840	\$5,505,837	\$5,454,522	\$5,677,597
120906	Hancock Central School District	\$6,814,127	\$7,421,804	\$7,577,971	\$7,509,926	\$7,715,335
121401	Margaretville Central School District	\$5,260,627	\$6,834,073	\$6,979,254	\$7,021,587	\$7,251,328
121502	Roxbury Central School District	\$5,855,501	\$5,209,297	\$5,249,939	\$5,192,672	\$5,072,968
121601	Sidney Central School District	\$15,086,680	\$19,796,595	\$20,054,829	\$19,805,022	\$20,647,250
121701	Stamford Central School District	\$4,774,820	\$6,240,867	\$6,372,467	\$6,350,057	\$6,624,245
121702	South Kortright Central School District	\$4,568,493	\$4,939,835	\$5,053,813	\$5,001,016	\$5,072,093
121901	Walton Central School District	\$11,470,550	\$15,404,390	\$15,626,691	\$15,548,428	\$16,211,339
130200	Beacon City School District	\$31,753,789	\$44,847,205	\$45,398,208	\$44,981,889	\$46,905,916
130502	Dover Union Free School District	\$16,085,473	\$24,414,359	\$24,693,800	\$24,351,688	\$25,718,770
130801	Hyde Park Central School District	\$44,124,022	\$57,417,816	\$57,442,837	\$57,077,518	\$59,034,564
131101	Northeast Central School District	\$12,070,230	\$13,518,674	\$13,602,560	\$13,424,638	\$13,618,248

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131201	Pawling Central School District	\$14,424,312	\$17,318,325	\$17,208,474	\$17,189,721	\$17,703,564
131301	Pine Plains Central School District	\$17,312,528	\$21,713,695	\$21,813,243	\$21,625,575	\$22,176,415
131500	Poughkeepsie City School District	\$58,270,937	\$71,643,406	\$73,428,458	\$72,899,340	\$74,542,670
131601	Arlington Central School District	\$82,320,947	\$105,881,963	\$105,643,952	\$105,973,325	\$109,518,345
131602	Spackenkill Union Free School District	\$19,335,015	\$21,885,647	\$21,768,433	\$21,569,558	\$21,907,955
131701	Red Hook Central School District	\$22,674,071	\$27,093,999	\$26,968,936	\$26,982,033	\$27,599,207
131801	Rhinebeck Central School District	\$14,406,280	\$15,618,567	\$15,597,977	\$15,571,867	\$15,746,496
132101	Wappingers Central School District	\$113,217,942	\$139,409,288	\$139,314,800	\$139,834,598	\$144,861,616
132201	Millbrook Central School District	\$12,289,912	\$14,750,843	\$14,638,886	\$14,318,925	\$14,606,063
140101	Alden Central School District	\$17,952,935	\$24,448,739	\$24,514,789	\$24,268,422	\$25,327,562
140201	Amherst Central School District	\$30,170,507	\$34,349,420	\$34,388,036	\$34,996,073	\$35,623,339
140203	Williamsville Central School District	\$106,853,894	\$112,846,816	\$112,161,457	\$113,790,050	\$115,089,511
140207	Sweet Home Central School District	\$43,744,002	\$48,126,536	\$48,349,889	\$47,981,735	\$48,760,911
140301	East Aurora Union Free School District	\$18,273,493	\$22,979,184	\$22,974,423	\$22,678,351	\$23,649,688
140600	Buffalo City School District	\$486,107,674	\$621,891,034	\$640,041,764	\$643,938,567	\$671,867,840
140701	Cheektowaga Central School District	\$22,312,563	\$27,093,918	\$27,368,241	\$27,645,563	\$28,589,973
140702	Cheektowaga-Maryvale Union Free School District	\$26,033,734	\$28,883,606	\$28,993,260	\$29,140,988	\$29,782,409
140703	Cleveland Hill Union Free School District	\$14,846,042	\$19,455,782	\$19,613,136	\$19,949,149	\$21,514,109
140707	Depew Union Free School District	\$26,110,449	\$26,451,466	\$26,762,559	\$27,377,601	\$27,571,876
140709	Cheektowaga-Sloan Union Free School District	\$16,319,824	\$18,913,539	\$19,136,912	\$18,825,701	\$19,419,975
140801	Clarence Central School District	\$38,050,838	\$47,654,003	\$47,503,744	\$47,486,536	\$49,328,240
141101	Springville-Griffith Institute Central School District	\$21,342,772	\$26,850,377	\$26,834,342	\$27,122,375	\$28,154,073
141201	Eden Central School District	\$15,244,177	\$20,516,683	\$20,437,728	\$20,253,107	\$21,147,675
141301	Iroquois Central School District	\$27,052,503	\$35,142,693	\$35,013,514	\$34,626,120	\$36,128,534

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141401	Evans-Brant Central School District (Lake Shore)	\$33,413,034	\$40,609,983	\$40,997,150	\$40,404,005	\$41,618,951
141501	Grand Island Central School District	\$29,547,866	\$34,301,593	\$34,280,429	\$34,082,093	\$34,868,408
141601	Hamburg Central School District	\$38,406,094	\$44,023,467	\$43,942,364	\$43,907,891	\$44,950,178
141604	Frontier Central School District	\$51,401,459	\$64,050,085	\$64,370,318	\$65,140,575	\$67,475,911
141701	Holland Central School District	\$10,684,823	\$16,422,194	\$16,469,502	\$16,292,433	\$17,525,334
141800	Lackawanna City School District	\$26,167,211	\$32,212,707	\$33,013,579	\$32,938,149	\$34,293,258
141901	Lancaster Central School District	\$48,884,013	\$63,985,889	\$64,148,049	\$63,972,479	\$67,308,514
142101	Akron Central School District	\$15,441,310	\$19,058,061	\$19,211,566	\$19,606,565	\$20,214,927
142201	North Collins Central School District	\$7,968,235	\$9,910,241	\$9,975,269	\$9,854,866	\$10,270,164
142301	Orchard Park Central School District	\$49,311,246	\$54,123,334	\$53,846,850	\$54,155,549	\$54,958,314
142500	Tonawanda City School District	\$23,099,984	\$28,224,060	\$28,523,446	\$28,015,878	\$28,992,753
142601	Kenmore-Tonawanda Union Free School District	\$95,649,040	\$104,207,783	\$104,878,797	\$104,383,557	\$106,339,846
142801	West Seneca Central School District	\$67,858,206	\$84,870,266	\$85,306,343	\$85,596,644	\$88,676,169
150203	Crown Point Central School District	\$4,052,846	\$4,651,438	\$4,716,549	\$4,659,367	\$4,769,471
150301	Elizabethtown-Lewis Central School District	\$4,414,876	\$5,571,357	\$5,640,363	\$5,572,454	\$5,751,727
150601	Keene Central School District	\$2,667,585	\$2,571,148	\$2,580,152	\$2,550,838	\$2,528,269
150801	Minerva Central School District	\$2,786,771	\$2,250,395	\$2,293,565	\$2,269,059	\$2,148,108
150901	Moriah Central School District	\$8,064,102	\$12,422,797	\$12,716,094	\$12,615,066	\$13,179,694
151001	Newcomb Central School District	\$2,780,513	\$1,660,947	\$1,678,775	\$1,667,790	\$1,460,944
151102	Lake Placid Central School District	\$8,932,455	\$10,998,740	\$11,095,482	\$10,964,420	\$11,294,946
151401	Schroon Lake Central School District	\$3,647,868	\$3,765,288	\$3,807,325	\$3,751,241	\$3,771,360
151501	Ticonderoga Central School District	\$10,797,104	\$15,980,030	\$16,340,971	\$16,189,404	\$17,073,742
151601	Westport Central School District	\$3,661,465	\$3,658,292	\$3,718,800	\$3,676,940	\$3,678,934
151701	Willsboro Central School District	\$5,412,716	\$5,649,511	\$5,725,608	\$5,670,410	\$5,767,690

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160101	Tupper Lake Central School District	\$9,905,099	\$12,898,127	\$13,016,298	\$13,050,904	\$13,499,929
160801	Chateaugay Central School District	\$6,281,168	\$8,037,511	\$8,161,009	\$8,067,449	\$8,468,070
161201	Salmon River Central School District	\$20,189,040	\$20,253,442	\$20,712,661	\$20,451,954	\$20,664,677
161401	Saranac Lake Central School District	\$16,895,913	\$19,490,744	\$19,588,144	\$19,357,466	\$19,808,084
161501	Malone Central School District	\$26,695,657	\$30,201,613	\$30,737,404	\$30,602,519	\$31,358,130
161601	Brushton-Moira Central School District	\$8,702,488	\$11,061,708	\$11,311,112	\$11,247,212	\$11,672,995
161801	Saint Regis Falls Central School District	\$4,574,772	\$4,744,480	\$4,813,083	\$4,760,530	\$4,874,300
170301	Wheelerville Union Free School District	\$2,239,152	\$2,177,386	\$2,189,596	\$2,140,351	\$2,122,294
170500	Gloversville City School District	\$32,514,555	\$39,825,421	\$40,543,119	\$40,176,546	\$41,618,746
170600	Johnstown City School District	\$18,242,992	\$25,854,737	\$26,186,650	\$25,757,175	\$27,209,822
170801	Mayfield Central School District	\$10,120,215	\$13,100,642	\$13,258,124	\$13,402,884	\$14,006,911
170901	Northville Central School District	\$6,501,962	\$6,518,703	\$6,538,967	\$6,488,856	\$6,549,558
171001	Oppenheim-Ephratah Central School District	\$4,761,479	\$5,308,288	\$5,385,874	\$5,325,814	\$5,464,415
171102	Broadalbin-Perth Central School District	\$14,102,420	\$20,644,287	\$20,719,067	\$20,621,393	\$21,711,882
180202	Alexander Central School District	\$10,483,419	\$11,697,649	\$11,712,188	\$11,788,580	\$11,988,350
180300	Batavia City School District	\$29,920,441	\$33,394,078	\$33,809,593	\$33,346,797	\$33,846,953
180701	Byron-Bergen Central School District	\$11,841,307	\$16,783,075	\$16,862,116	\$16,683,060	\$17,328,148
180901	Elba Central School District	\$6,354,174	\$7,094,496	\$7,144,944	\$7,049,813	\$7,155,687
181001	Le Roy Central School District	\$13,248,190	\$16,552,479	\$16,623,749	\$16,911,409	\$17,640,213
181101	Oakfield-Alabama Central School District	\$10,805,283	\$13,076,369	\$13,153,720	\$13,147,272	\$13,542,661
181201	Pavilion Central School District	\$9,021,913	\$11,514,226	\$11,586,436	\$11,475,431	\$11,992,544
181302	Pembroke Central School District	\$13,842,866	\$17,359,443	\$17,475,981	\$17,173,380	\$17,727,350
190301	Cairo-Durham Central School District	\$14,394,022	\$21,949,589	\$22,211,455	\$22,257,993	\$23,527,778
190401	Catskill Central School District	\$20,402,660	\$23,235,495	\$23,553,023	\$23,233,674	\$23,623,130

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190501	Coxsackie-Athens Central School District	\$13,571,253	\$18,285,728	\$18,315,411	\$18,082,239	\$18,884,283
190701	Greenville Central School District	\$13,761,788	\$17,222,013	\$17,438,804	\$17,538,679	\$18,136,769
190901	Hunter-Tannersville Central School District	\$6,588,037	\$7,370,834	\$7,412,653	\$7,337,172	\$7,473,334
191401	Windham-Ashland-Jewett Central School District	\$6,557,808	\$7,594,967	\$7,656,574	\$7,669,108	\$7,934,285
200401	Indian Lake Central School District	\$3,278,637	\$2,694,536	\$2,708,664	\$2,670,340	\$2,577,789
200601	Lake Pleasant Central School District	\$2,076,941	\$1,867,161	\$1,876,738	\$1,851,430	\$1,814,943
200701	Long Lake Central School District	\$2,803,358	\$1,585,635	\$1,576,942	\$1,565,626	\$1,400,602
200901	Wells Central School District	\$2,950,811	\$2,624,658	\$2,645,829	\$2,624,060	\$2,595,932
210302	West Canada Valley Central School District	\$8,600,364	\$11,314,935	\$11,408,329	\$11,364,082	\$11,834,223
210402	Frankfort-Schuyler Central School District	\$10,197,095	\$13,160,982	\$13,197,487	\$12,982,264	\$13,364,654
210501	Ilion Central School District	\$14,983,298	\$21,305,789	\$21,698,763	\$21,538,164	\$22,455,469
210502	Mohawk Central School District	\$8,672,922	\$12,011,047	\$12,178,423	\$12,247,315	\$12,845,720
210601	Herkimer Central School District	\$11,285,268	\$14,649,577	\$14,847,355	\$15,086,574	\$15,603,864
210800	Little Falls City School District	\$11,332,941	\$14,766,648	\$15,061,255	\$15,041,130	\$15,652,562
211003	Dolgeville Central School District	\$10,198,618	\$12,451,090	\$12,667,315	\$12,675,449	\$12,990,035
211103	Poland Central School District	\$7,544,404	\$9,939,994	\$10,127,076	\$9,997,080	\$10,421,004
211701	Van Hornesville-Owen D. Young Central School District	\$2,755,054	\$3,407,841	\$3,480,869	\$3,446,401	\$3,608,552
211901	Town of Webb Union Free School District	\$5,268,158	\$5,249,071	\$5,278,609	\$5,221,002	\$5,208,191
212001	Bridgewater-West Winfield Central School District (Mt. Markham)	\$14,473,526	\$18,612,858	\$18,777,746	\$18,782,318	\$19,464,912
220101	South Jefferson Central School District	\$15,827,663	\$22,376,852	\$22,707,521	\$22,451,864	\$23,521,912
220202	Alexandria Central School District	\$6,337,033	\$8,677,358	\$8,771,234	\$8,664,054	\$8,993,957
220301	Indian River Central School District	\$39,357,718	\$46,392,751	\$47,387,454	\$47,374,920	\$49,046,930
220401	General Brown Central School District	\$12,788,090	\$18,120,041	\$18,368,893	\$18,177,823	\$19,015,350
220701	Thousand Islands Central School District	\$11,890,954	\$14,895,744	\$15,028,840	\$14,823,680	\$15,331,557

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220909	Belleville Henderson Central School District	\$5,878,703	\$7,219,706	\$7,377,248	\$7,418,676	\$7,704,651
221001	Sackets Harbor Central School District	\$5,079,431	\$5,742,147	\$5,808,361	\$5,789,269	\$5,910,113
221301	Lyme Central School District	\$3,728,650	\$4,306,313	\$4,372,962	\$4,326,881	\$4,421,811
221401	La Fargeville Central School District	\$5,079,985	\$6,384,714	\$6,498,842	\$6,511,294	\$6,764,223
222000	Watertown City School District	\$37,279,676	\$51,072,154	\$52,266,436	\$52,193,517	\$54,904,071
222201	Carthage Central School District	\$27,726,744	\$36,026,062	\$36,563,295	\$36,234,914	\$37,619,068
230201	Copenhagen Central School District	\$5,446,638	\$7,200,342	\$7,323,573	\$7,241,060	\$7,522,082
230301	Harrisville Central School District	\$5,146,017	\$5,127,991	\$5,217,295	\$5,170,662	\$5,174,588
230901	Lowville Academy & Central School District	\$13,657,216	\$20,140,782	\$20,386,288	\$20,561,555	\$21,766,504
231101	South Lewis Central School District	\$13,042,981	\$16,245,992	\$16,584,353	\$16,414,437	\$17,054,649
231301	Beaver River Central School District	\$9,430,042	\$13,374,012	\$13,570,579	\$13,401,900	\$14,059,936
240101	Avon Central School District	\$11,030,328	\$13,844,476	\$13,808,140	\$13,608,727	\$14,152,103
240201	Caledonia-Mumford Central School District	\$11,347,572	\$14,864,954	\$14,895,114	\$14,820,454	\$15,375,326
240401	Geneseo Central School District	\$10,523,617	\$12,092,745	\$12,169,449	\$12,073,219	\$12,392,386
240801	Livonia Central School District	\$19,255,052	\$24,363,861	\$24,323,700	\$24,404,788	\$25,405,335
240901	Mount Morris Central School District	\$7,045,774	\$9,575,537	\$9,758,911	\$9,709,199	\$10,157,026
241001	Dansville Central School District	\$18,568,374	\$22,889,896	\$23,054,460	\$22,748,925	\$23,620,170
241101	Dalton-Nunda Central School District (Keshequa)	\$10,787,712	\$12,779,987	\$12,924,943	\$12,763,136	\$13,199,967
241701	York Central School District	\$9,306,061	\$12,284,373	\$12,569,359	\$12,559,148	\$13,100,008
250109	Brookfield Central School District	\$2,646,045	\$3,447,555	\$3,506,684	\$3,465,435	\$3,731,923
250201	Cazenovia Central School District	\$15,464,988	\$19,049,778	\$18,945,737	\$18,963,788	\$19,614,115
250301	De Ruyter Central School District	\$5,905,664	\$7,262,998	\$7,330,430	\$7,224,262	\$7,405,874
250401	Morrisville-Eaton Central School District	\$8,744,495	\$11,677,478	\$11,810,372	\$11,721,999	\$12,284,350
250701	Hamilton Central School District	\$7,323,543	\$9,320,448	\$9,381,836	\$9,259,102	\$9,560,377

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250901	Canastota Central School District	\$14,049,485	\$19,724,712	\$19,835,852	\$19,439,010	\$20,178,416
251101	Madison Central School District	\$5,162,980	\$5,461,954	\$5,502,575	\$5,442,711	\$5,477,518
251400	Oneida City School District	\$25,984,536	\$31,935,606	\$32,025,414	\$31,466,290	\$32,440,068
251501	Stockbridge Valley Central School District	\$5,386,958	\$7,207,373	\$7,338,967	\$7,373,210	\$7,742,885
251601	Chittenango Central School District	\$23,588,608	\$31,873,426	\$32,101,484	\$31,663,225	\$33,332,353
260101	Brighton Central School District	\$36,816,258	\$33,762,009	\$33,756,526	\$34,409,663	\$33,947,310
260401	Gates-Chili Central School District	\$58,282,967	\$57,660,226	\$58,622,556	\$58,493,959	\$58,515,139
260501	Greece Central School District	\$146,757,096	\$165,864,626	\$166,906,375	\$165,458,268	\$169,923,208
260801	East Irondequoit Central School District	\$38,722,384	\$44,976,746	\$45,463,806	\$45,214,513	\$46,613,753
260803	West Irondequoit Central School District	\$36,387,942	\$42,935,572	\$43,198,828	\$42,455,903	\$43,858,486
260901	Honeoye Falls-Lima Central School District	\$24,191,266	\$25,796,887	\$25,776,627	\$25,954,424	\$26,264,402
261001	Spencerport Central School District	\$40,232,656	\$42,490,498	\$43,023,142	\$43,827,401	\$44,324,191
261101	Hilton Central School District	\$41,471,093	\$41,828,488	\$42,051,275	\$42,640,052	\$42,810,129
261201	Penfield Central School District	\$55,900,676	\$52,523,530	\$52,732,130	\$52,960,904	\$52,478,184
261301	Fairport Central School District	\$73,094,861	\$70,066,237	\$70,361,913	\$72,068,596	\$71,920,305
261313	East Rochester Union Free School District	\$15,345,786	\$14,675,053	\$14,701,331	\$15,013,498	\$15,142,672
261401	Pittsford Central School District	\$65,625,318	\$58,899,152	\$58,683,920	\$58,854,195	\$57,814,128
261501	Churchville-Chili Central School District	\$44,860,714	\$48,600,702	\$48,942,484	\$49,063,747	\$49,651,185
261600	Rochester City School District	\$385,134,801	\$520,449,057	\$535,332,444	\$538,700,074	\$569,451,059
261701	Rush-Henrietta Central School District	\$69,790,777	\$66,602,290	\$67,201,920	\$67,303,129	\$66,860,846
261801	Brockport Central School District	\$42,589,999	\$49,493,647	\$50,242,381	\$50,692,088	\$52,394,585
261901	Webster Central School District	\$86,567,196	\$85,207,514	\$85,358,949	\$85,383,916	\$85,163,418
262001	Wheatland-Chili Central School District	\$12,155,313	\$12,131,847	\$12,232,230	\$12,253,493	\$12,268,797
270100	Amsterdam City School District	\$33,062,035	\$45,444,977	\$45,996,467	\$45,544,757	\$47,575,559

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270301	Canajoharie Central School District	\$12,468,175	\$15,037,706	\$15,261,197	\$15,059,392	\$15,659,700
270601	Fonda-Fultonville Central School District	\$14,925,609	\$19,595,926	\$19,798,945	\$19,930,295	\$20,732,990
270701	Fort Plain Central School District	\$13,764,069	\$14,662,653	\$14,823,186	\$14,739,670	\$14,914,471
271102	Saint Johnsville Central School District	\$5,838,249	\$7,012,961	\$7,148,261	\$7,066,680	\$7,359,753
280100	Glen Cove City School District	\$46,496,227	\$49,396,193	\$49,814,580	\$49,983,988	\$51,180,712
280201	Hempstead Union Free School District	\$103,801,439	\$109,328,277	\$111,024,633	\$112,259,299	\$114,430,074
280202	Uniondale Union Free School District	\$92,029,426	\$86,094,368	\$87,013,385	\$88,554,983	\$87,784,817
280203	East Meadow Union Free School District	\$104,225,125	\$89,218,550	\$89,198,789	\$91,010,219	\$89,100,214
280204	North Bellmore Union Free School District	\$26,016,740	\$30,506,775	\$30,227,145	\$29,433,456	\$29,963,992
280205	Levittown Union Free School District	\$108,446,592	\$93,205,408	\$93,193,494	\$94,645,505	\$92,345,388
280206	Seaford Union Free School District	\$33,475,980	\$30,848,509	\$30,663,100	\$31,001,193	\$30,541,996
280207	Bellmore Union Free School District	\$16,135,744	\$15,483,445	\$15,334,095	\$15,247,188	\$15,089,608
280208	Roosevelt Union Free School District	\$38,305,612	\$52,009,125	\$53,626,333	\$53,665,155	\$56,517,322
280209	Freeport Union Free School District	\$86,703,107	\$84,723,901	\$85,695,308	\$87,996,229	\$88,603,799
280210	Baldwin Union Free School District	\$67,484,089	\$63,549,425	\$62,666,225	\$62,515,906	\$61,671,015
280211	Oceanside Union Free School District	\$77,572,313	\$74,051,685	\$73,164,891	\$72,919,243	\$72,260,560
280212	Malverne Union Free School District	\$27,294,807	\$26,536,309	\$26,685,384	\$26,495,628	\$26,352,941
280213	Valley Stream 13 Union Free School District	\$23,963,456	\$25,376,425	\$25,191,934	\$25,299,956	\$25,488,996
280214	Hewlett-Woodmere Union Free School District	\$52,458,951	\$42,859,221	\$42,457,969	\$42,302,577	\$40,627,303
280215	Lawrence Union Free School District	\$70,723,222	\$53,581,146	\$54,226,043	\$53,877,626	\$51,465,549
280216	Elmont Union Free School District	\$41,469,561	\$52,595,857	\$52,630,203	\$54,051,111	\$56,389,423
280217	Franklin Square Union Free School District	\$19,242,863	\$20,161,816	\$20,205,683	\$20,608,217	\$20,836,733
280218	Garden City Union Free School District	\$58,750,877	\$48,090,151	\$47,831,510	\$48,011,031	\$46,041,201
280219	East Rockaway Union Free School District	\$17,247,850	\$17,740,179	\$17,771,999	\$17,464,818	\$17,502,017

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280220	Lynbrook Union Free School District	\$40,356,025	\$37,959,743	\$37,541,837	\$37,060,031	\$36,415,911
280221	Rockville Centre Union Free School District	\$54,556,326	\$46,690,337	\$46,589,421	\$46,198,968	\$44,782,289
280222	Floral Park-Bellerose Union Free School District	\$18,986,342	\$15,482,506	\$15,540,119	\$16,177,300	\$16,056,935
280223	Wantagh Union Free School District	\$40,126,570	\$38,893,385	\$38,651,766	\$38,866,534	\$38,648,579
280224	Valley Stream 24 Union Free School District	\$14,575,366	\$13,613,069	\$13,515,654	\$13,202,847	\$12,977,965
280225	Merrick Union Free School District	\$22,895,961	\$22,053,330	\$21,895,176	\$22,346,609	\$22,250,047
280226	Island Trees Union Free School District	\$32,378,510	\$31,885,543	\$31,704,121	\$31,920,561	\$31,840,968
280227	West Hempstead Union Free School District	\$30,706,651	\$30,946,708	\$30,720,265	\$30,426,033	\$30,380,961
280229	North Merrick Union Free School District	\$15,616,355	\$16,369,242	\$16,233,133	\$15,830,244	\$15,874,678
280230	Valley Stream 30 Union Free School District	\$18,951,503	\$19,022,565	\$18,919,382	\$19,131,756	\$19,161,267
280231	Island Park Union Free School District	\$14,222,328	\$12,969,854	\$13,036,682	\$12,801,272	\$12,524,868
280251	Valley Stream Central High School District	\$54,562,057	\$52,389,147	\$51,760,093	\$52,034,468	\$51,444,421
280252	Sewanhaka Central High School District	\$93,227,605	\$98,345,800	\$98,773,413	\$98,961,336	\$99,919,128
280253	Bellmore-Merrick Central High School District	\$70,491,889	\$67,798,898	\$66,808,521	\$67,012,403	\$66,370,703
280300	Long Beach City School District	\$74,993,245	\$60,849,854	\$61,050,051	\$61,137,625	\$59,481,702
280401	Westbury Union Free School District	\$57,290,778	\$59,494,777	\$61,043,967	\$62,528,177	\$63,918,101
280402	East Williston Union Free School District	\$28,987,846	\$21,248,145	\$21,026,923	\$21,046,604	\$19,903,891
280403	Roslyn Union Free School District	\$57,930,748	\$42,926,152	\$42,761,989	\$42,834,446	\$39,726,018
280404	Port Washington Union Free School District	\$73,627,041	\$57,862,954	\$57,456,624	\$58,288,731	\$55,774,364
280405	New Hyde Park-Garden City Park Union Free School District	\$18,184,192	\$19,066,250	\$19,121,428	\$18,713,213	\$19,059,737
280406	Manhasset Union Free School District	\$49,497,338	\$31,900,842	\$31,716,302	\$32,256,800	\$29,122,874
280407	Great Neck Union Free School District	\$112,262,905	\$83,945,386	\$83,722,726	\$84,729,620	\$79,551,169
280409	Herricks Union Free School District	\$55,242,321	\$46,776,310	\$46,624,292	\$47,148,003	\$45,631,160
280410	Mineola Union Free School District	\$57,898,372	\$38,699,434	\$38,746,089	\$38,654,909	\$35,902,248

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280411	Carle Place Union Free School District	\$25,108,317	\$21,871,453	\$21,647,783	\$21,522,815	\$20,796,545
280501	North Shore Central School District	\$47,652,653	\$37,539,349	\$37,270,257	\$36,935,305	\$35,059,571
280502	Syosset Central School District	\$97,528,173	\$79,808,952	\$78,784,542	\$77,939,428	\$74,307,156
280503	Locust Valley Central School District	\$36,501,907	\$30,119,395	\$29,894,881	\$29,947,119	\$28,553,006
280504	Plainview-Old Bethpage Central School District	\$70,488,374	\$60,810,658	\$60,173,605	\$59,507,619	\$57,624,073
280506	Oyster Bay-East Norwich Central School District	\$28,429,800	\$24,223,634	\$24,115,988	\$23,915,588	\$22,952,634
280515	Jericho Union Free School District	\$54,154,810	\$42,313,487	\$41,854,037	\$41,677,236	\$38,989,659
280517	Hicksville Union Free School District	\$65,895,983	\$65,912,852	\$65,777,664	\$65,168,540	\$65,253,013
280518	Plainedge Union Free School District	\$41,726,605	\$41,439,515	\$41,198,360	\$41,391,172	\$41,393,152
280521	Bethpage Union Free School District	\$42,023,805	\$38,722,870	\$38,757,221	\$38,522,805	\$37,676,781
280522	Farmingdale Union Free School District	\$87,312,339	\$78,215,827	\$77,921,064	\$79,688,302	\$78,330,464
280523	Massapequa Union Free School District	\$95,775,587	\$85,155,475	\$84,730,787	\$86,414,537	\$84,907,881
300000	New York City School District	\$11,410,166,613	\$15,078,528,417	\$15,515,607,288	\$15,874,591,491	\$16,580,538,490
400301	Lewiston-Porter Central School District	\$25,797,602	\$26,440,215	\$26,322,871	\$26,144,246	\$26,251,776
400400	Lockport City School District	\$57,780,643	\$67,801,195	\$68,446,106	\$67,877,954	\$69,376,335
400601	Newfane Central School District	\$19,397,590	\$24,190,762	\$24,263,524	\$23,964,904	\$24,689,798
400701	Niagara-Wheatfield Central School District	\$44,740,268	\$47,447,886	\$47,704,430	\$47,684,009	\$48,225,734
400800	Niagara Falls City School District	\$107,263,017	\$126,079,893	\$128,721,388	\$128,694,831	\$133,543,949
400900	North Tonawanda City School District	\$46,267,664	\$55,864,561	\$56,250,208	\$55,507,904	\$57,133,967
401001	Starpoint Central School District	\$21,485,815	\$26,345,406	\$26,376,793	\$26,839,623	\$27,704,580
401201	Royalton-Hartland Central School District	\$15,511,355	\$20,339,553	\$20,403,408	\$20,113,117	\$21,083,949
401301	Barker Central School District	\$14,148,224	\$15,155,128	\$15,333,285	\$15,237,385	\$15,599,861
401501	Wilson Central School District	\$18,427,901	\$22,060,265	\$22,253,089	\$22,030,015	\$22,787,262
410401	Adirondack Central School District	\$15,433,328	\$23,155,950	\$23,404,735	\$23,097,652	\$24,601,078

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410601	Camden Central School District	\$24,575,634	\$34,943,895	\$35,510,354	\$35,216,403	\$36,820,560
411101	Clinton Central School District	\$14,715,002	\$17,770,674	\$17,729,216	\$17,930,298	\$18,447,964
411501	New Hartford Central School District	\$28,266,089	\$28,862,116	\$28,643,942	\$28,323,134	\$28,333,992
411504	New York Mills Union Free School District	\$7,328,497	\$7,664,603	\$7,720,275	\$7,642,252	\$7,725,453
411603	Sauquoit Valley Central School District	\$12,216,654	\$14,681,786	\$14,757,246	\$14,781,223	\$15,212,981
411701	Remsen Central School District	\$7,700,830	\$8,786,643	\$8,895,141	\$8,803,866	\$8,965,229
411800	Rome City School District	\$68,298,835	\$75,786,594	\$77,038,656	\$75,954,670	\$77,774,624
411902	Waterville Central School District	\$10,003,287	\$12,527,635	\$12,697,408	\$12,579,867	\$12,961,500
412000	Sherrill City School District	\$22,510,823	\$27,508,125	\$27,773,429	\$27,447,008	\$28,271,239
412201	Holland Patent Central School District	\$16,914,279	\$22,312,267	\$22,416,063	\$22,148,524	\$23,249,183
412300	Utica City School District	\$81,859,934	\$114,130,110	\$117,612,787	\$119,388,191	\$127,461,747
412801	Westmoreland Central School District	\$10,958,479	\$13,947,350	\$14,061,261	\$14,029,216	\$14,630,678
412901	Oriskany Central School District	\$7,000,455	\$9,362,233	\$9,392,859	\$9,263,427	\$9,671,550
412902	Whitesboro Central School District	\$33,662,358	\$42,485,643	\$42,392,227	\$41,566,790	\$43,021,201
420101	West Genesee Central School District	\$41,167,132	\$49,785,740	\$49,959,598	\$50,084,633	\$51,560,960
420303	North Syracuse Central School District	\$91,435,822	\$100,377,744	\$101,534,066	\$102,701,879	\$104,856,017
420401	East Syracuse-Minoa Central School District	\$48,395,262	\$48,396,536	\$48,711,764	\$48,078,662	\$48,409,549
420411	Jamesville-DeWitt Central School District	\$26,783,052	\$28,503,876	\$28,440,482	\$28,257,794	\$28,477,600
420501	Jordan-Elbridge Central School District	\$16,099,732	\$20,170,177	\$20,166,567	\$19,854,428	\$20,490,587
420601	Fabius-Pompey Central School District	\$8,394,697	\$10,373,813	\$10,380,363	\$10,229,791	\$10,517,918
420701	Westhill Central School District	\$17,418,487	\$20,940,316	\$20,898,305	\$20,786,414	\$21,371,341
420702	Solvay Union Free School District	\$15,979,939	\$20,275,615	\$20,327,756	\$20,226,927	\$20,764,015
420807	La Fayette Central School District	\$13,539,653	\$14,407,228	\$14,580,475	\$14,519,269	\$14,683,857
420901	Baldwinsville Central School District	\$55,238,020	\$62,365,958	\$62,460,615	\$62,396,483	\$63,467,943

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421001	Fayetteville-Manlius Central School District	\$41,303,116	\$46,519,327	\$46,476,194	\$46,737,002	\$48,060,264
421101	Marcellus Central School District	\$16,209,911	\$21,159,635	\$21,199,967	\$21,629,054	\$22,638,687
421201	Onondaga Central School District	\$10,605,067	\$12,696,001	\$12,757,174	\$12,571,588	\$12,997,411
421501	Liverpool Central School District	\$90,315,750	\$98,247,660	\$98,315,955	\$97,153,786	\$98,472,211
421504	Lyncourt Union Free School District	\$3,404,279	\$4,437,908	\$4,440,974	\$4,331,072	\$4,538,495
421601	Skaneateles Central School District	\$16,544,528	\$20,808,468	\$20,709,901	\$20,352,695	\$21,220,478
421800	Syracuse City School District	\$243,016,191	\$316,031,670	\$324,832,858	\$327,655,482	\$342,554,438
421902	Tully Central School District	\$10,623,079	\$13,867,051	\$13,878,727	\$14,077,712	\$14,890,189
430300	Canandaigua City School District	\$38,339,249	\$40,865,065	\$41,206,474	\$42,145,447	\$42,713,122
430501	East Bloomfield Central School District	\$11,871,029	\$13,079,133	\$13,098,543	\$13,096,926	\$13,305,325
430700	Geneva City School District	\$27,157,950	\$32,950,551	\$33,495,394	\$33,807,735	\$34,806,951
430901	Gorham-Middlesex Central School District (Marcus Whitman)	\$16,458,685	\$20,645,674	\$20,756,089	\$20,458,478	\$21,227,873
431101	Manchester-Shortsville Central School District (Red Jacket)	\$10,999,379	\$10,999,426	\$11,009,233	\$10,861,708	\$10,838,613
431201	Naples Central School District	\$9,786,812	\$11,913,614	\$11,991,132	\$11,986,438	\$12,393,165
431301	Phelps-Clifton Springs Central School District	\$19,705,012	\$27,678,220	\$28,118,403	\$27,840,809	\$29,298,025
431401	Honeoye Central School District	\$9,587,942	\$12,395,015	\$12,380,258	\$12,354,521	\$12,793,129
431701	Victor Central School District	\$31,088,776	\$29,690,773	\$29,694,483	\$30,562,048	\$30,682,848
440102	Washingtonville Central School District	\$46,865,783	\$52,298,111	\$52,149,268	\$53,242,123	\$54,292,962
440201	Chester Union Free School District	\$10,762,725	\$12,618,294	\$12,596,785	\$12,662,767	\$12,948,947
440301	Cornwall Central School District	\$27,504,636	\$31,566,924	\$31,547,245	\$31,764,714	\$32,329,092
440401	Pine Bush Central School District	\$52,661,196	\$68,548,409	\$68,898,662	\$69,855,341	\$72,226,673
440601	Goshen Central School District	\$28,174,052	\$31,775,202	\$31,714,025	\$32,181,871	\$32,813,357
440901	Highland Falls Central School District	\$12,652,520	\$15,735,375	\$15,725,877	\$15,575,795	\$16,087,852
441000	Middletown City School District	\$73,835,428	\$89,082,962	\$90,980,126	\$92,662,501	\$96,759,779

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441101	Minisink Valley Central School District	\$38,656,900	\$47,102,883	\$47,128,840	\$47,524,293	\$48,713,567
441201	Monroe-Woodbury Central School District	\$74,109,538	\$82,396,051	\$81,755,449	\$82,612,804	\$84,509,157
441202	Kiryas Joel Village Union Free School District	\$14,725,957	\$6,303,875	\$6,405,497	\$6,545,787	\$5,815,428
441301	Valley Central School District (Montgomery)	\$43,911,379	\$60,070,800	\$60,507,801	\$60,209,086	\$62,401,064
441600	Newburgh City School District	\$135,593,336	\$178,632,946	\$182,617,867	\$186,319,597	\$195,228,972
441800	Port Jervis City School District	\$38,571,233	\$44,020,886	\$44,778,574	\$45,268,032	\$46,196,502
441903	Tuxedo Union Free School District	\$7,799,866	\$7,967,254	\$7,890,593	\$7,854,578	\$7,866,453
442101	Warwick Valley Central School District	\$41,620,879	\$51,847,727	\$51,578,640	\$51,724,338	\$53,628,855
442111	Greenwood Lake Union Free School District	\$8,855,467	\$9,754,307	\$9,719,663	\$9,550,824	\$9,675,150
442115	Florida Union Free School District	\$8,927,294	\$10,885,598	\$10,865,647	\$10,695,454	\$11,006,338
450101	Albion Central School District	\$24,879,008	\$30,866,532	\$31,245,458	\$31,988,514	\$33,075,931
450607	Kendall Central School District	\$10,419,885	\$12,799,659	\$12,874,197	\$12,939,592	\$13,280,751
450704	Holley Central School District	\$14,098,767	\$16,577,629	\$16,667,911	\$16,765,746	\$17,172,468
450801	Medina Central School District	\$20,079,994	\$26,094,852	\$26,328,082	\$26,115,576	\$26,895,515
451001	Lyndonville Central School District	\$8,021,508	\$10,015,002	\$10,137,610	\$10,010,896	\$10,366,996
460102	Altmar-Parish-Williamstown Central School District	\$16,415,231	\$24,259,125	\$24,619,394	\$24,265,898	\$25,481,874
460500	Fulton City School District	\$40,367,017	\$49,789,889	\$50,502,623	\$50,480,758	\$52,088,980
460701	Hannibal Central School District	\$14,854,456	\$21,593,090	\$21,964,378	\$21,803,857	\$22,879,995
460801	Central Square Central School District	\$44,807,754	\$64,859,649	\$65,693,698	\$64,873,738	\$68,845,077
460901	Mexico Central School District	\$24,288,988	\$32,026,143	\$32,363,961	\$32,137,163	\$33,546,121
461300	Oswego City School District	\$49,837,653	\$60,333,092	\$61,172,295	\$60,642,733	\$63,104,734
461801	Pulaski Central School District	\$11,368,268	\$13,860,130	\$13,975,830	\$14,207,355	\$14,756,011
461901	Sandy Creek Central School District	\$11,991,642	\$15,263,246	\$15,562,518	\$15,476,038	\$16,088,009
462001	Phoenix Central School District	\$26,133,249	\$29,539,673	\$30,060,362	\$30,663,556	\$31,329,187

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470202	Gilbertsville-Mount Upton Central School District	\$5,448,691	\$7,141,134	\$7,241,880	\$7,176,807	\$7,459,996
470501	Edmeston Central School District	\$4,942,349	\$7,121,299	\$7,237,686	\$7,303,813	\$7,677,401
470801	Laurens Central School District	\$4,211,976	\$5,803,729	\$5,909,276	\$5,850,421	\$6,130,424
470901	Schenevus Central School District	\$4,469,414	\$5,385,745	\$5,488,376	\$5,414,417	\$5,582,811
471101	Milford Central School District	\$5,021,868	\$6,269,533	\$6,403,047	\$6,374,386	\$6,587,926
471201	Morris Central School District	\$5,608,150	\$6,343,600	\$6,461,510	\$6,446,583	\$6,573,479
471400	Oneonta City School District	\$23,218,213	\$27,032,149	\$27,174,126	\$26,775,155	\$27,375,302
471601	Otego-Unadilla Central School District	\$11,897,937	\$15,859,600	\$16,096,139	\$15,861,881	\$16,458,378
471701	Cooperstown Central School District	\$11,075,420	\$13,936,366	\$14,037,457	\$13,962,653	\$14,419,598
472001	Richfield Springs Central School District	\$6,235,711	\$8,257,975	\$8,459,934	\$8,600,856	\$8,933,315
472202	Cherry Valley-Springfield Central School District	\$9,535,853	\$10,418,371	\$10,592,521	\$10,472,204	\$10,649,482
472506	Worcester Central School District	\$4,109,646	\$5,425,619	\$5,505,765	\$5,433,196	\$5,625,101
480101	Mahopac Central School District	\$60,726,052	\$59,298,173	\$58,799,230	\$59,507,106	\$59,286,410
480102	Carmel Central School District	\$60,471,315	\$55,168,958	\$55,131,154	\$55,763,474	\$55,116,432
480401	Haldane Central School District	\$10,610,799	\$10,756,748	\$10,635,704	\$10,568,488	\$10,561,833
480404	Garrison Union Free School District	\$4,164,512	\$3,753,495	\$3,712,901	\$3,596,093	\$3,515,425
480503	Putnam Valley Central School District	\$21,578,386	\$19,848,135	\$19,844,815	\$20,009,092	\$19,747,329
480601	Brewster Central School District	\$46,850,636	\$43,304,994	\$43,219,209	\$43,529,551	\$43,043,873
490101	Berlin Central School District	\$11,693,917	\$13,461,648	\$13,611,213	\$13,440,371	\$13,721,823
490202	Brunswick Central School District (Brittonkill)	\$14,360,049	\$18,320,423	\$18,498,456	\$18,659,766	\$19,337,756
490301	East Greenbush Central School District	\$48,876,184	\$52,283,117	\$52,260,506	\$51,539,475	\$52,037,851
490501	Hoosick Falls Central School District	\$12,116,381	\$16,649,977	\$16,822,215	\$16,666,507	\$17,272,917
490601	Lansingburgh Central School District	\$24,101,267	\$30,476,488	\$31,030,474	\$31,191,934	\$32,303,218
490804	Wynantskill Union Free School District	\$4,672,195	\$4,887,904	\$4,874,318	\$4,746,065	\$4,759,633

District Code	District Name	Total 2001-02 Expenditures	Total Projected "Adequate" Expenditure - Stage 1	Total Projected "Adequate" Expenditure - Stage 2	Total Projected "Adequate" Expenditure - Stage 3	Total Projected "Adequate" Expenditure - Stage 3 With Lump Sum/Ratio Calculation
491200	Rensselaer City School District	\$12,965,502	\$14,803,852	\$15,111,170	\$15,042,418	\$15,439,657
491302	Averill Park Central School District	\$32,938,639	\$38,106,541	\$38,230,680	\$37,871,515	\$38,612,253
491401	Hoosic Valley Central School District	\$10,851,669	\$13,699,583	\$13,658,487	\$13,474,381	\$13,851,682
491501	Schodack Central School District	\$11,070,469	\$14,061,862	\$14,015,461	\$13,868,143	\$14,407,577
491700	Troy City School District	\$57,948,102	\$65,231,622	\$67,024,112	\$66,569,828	\$68,202,195
500101	Clarkstown Central School District	\$106,585,303	\$114,652,629	\$113,573,238	\$112,493,413	\$113,538,350
500108	Nanuet Union Free School District	\$35,233,951	\$31,760,467	\$31,539,018	\$31,708,235	\$30,581,278
500201	Haverstraw-Stony Point Central School District (North Rockland)	\$112,308,774	\$105,432,997	\$107,190,830	\$109,043,304	\$108,773,970
500301	South Orangetown Central School District	\$48,293,012	\$40,776,775	\$40,699,469	\$40,679,396	\$39,473,829
500304	Nyack Union Free School District	\$41,886,944	\$38,321,853	\$38,531,666	\$38,406,147	\$37,918,042
500308	Pearl River Union Free School District	\$39,585,010	\$38,573,375	\$38,396,054	\$37,983,928	\$37,357,786
500401	Ramapo Central School District (Suffern)	\$65,911,288	\$54,708,044	\$54,690,224	\$54,376,319	\$52,650,378
500402	East Ramapo Central School District (Spring Valley)	\$131,735,220	\$134,498,497	\$137,405,017	\$137,189,337	\$138,587,403
510101	Brasher Falls Central School District	\$9,486,940	\$12,544,934	\$12,776,709	\$12,865,078	\$13,404,825
510201	Canton Central School District	\$15,505,661	\$18,313,301	\$18,521,419	\$18,480,679	\$19,067,636
510401	Clifton-Fine Central School District	\$5,716,816	\$5,453,836	\$5,585,450	\$5,528,480	\$5,549,094
510501	Colton-Pierrepont Central School District	\$5,527,821	\$5,517,001	\$5,596,066	\$5,534,890	\$5,581,156
511101	Gouverneur Central School District	\$18,677,048	\$21,703,278	\$22,112,497	\$21,899,721	\$22,406,185
511201	Hammond Central School District	\$3,140,755	\$4,077,084	\$4,133,467	\$4,071,700	\$4,222,525
511301	Hermon-DeKalb Central School District	\$5,342,413	\$5,460,570	\$5,541,613	\$5,470,681	\$5,549,500
511602	Lisbon Central School District	\$6,647,932	\$6,839,737	\$6,945,437	\$6,986,405	\$7,032,304
511901	Madrid-Waddington Central School District	\$7,887,945	\$10,650,301	\$10,800,248	\$10,665,535	\$11,206,489
512001	Massena Central School District	\$26,631,731	\$33,906,261	\$34,607,750	\$34,210,510	\$35,192,888
512101	Morristown Central School District	\$5,955,331	\$6,498,403	\$6,625,382	\$6,550,737	\$6,704,527

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512201	Norwood-Norfolk Central School District	\$11,080,882	\$14,764,162	\$15,065,027	\$15,142,720	\$15,830,950
512300	Ogdensburg City School District	\$23,652,054	\$32,245,559	\$33,003,317	\$32,675,878	\$34,453,808
512404	Heuvelton Central School District	\$7,155,896	\$7,974,911	\$8,158,416	\$8,259,397	\$8,455,523
512501	Parishville-Hopkinton Central School District	\$5,193,464	\$6,936,851	\$7,034,758	\$6,947,061	\$7,190,811
512902	Potsdam Central School District	\$14,786,813	\$18,374,915	\$18,591,705	\$18,607,998	\$19,277,382
513102	Edwards-Knox Central School District	\$7,529,414	\$10,865,850	\$11,105,437	\$10,992,277	\$11,616,873
520101	Burnt Hills-Ballston Lake Central School District	\$31,867,963	\$33,815,767	\$33,711,908	\$33,518,678	\$33,787,835
520302	Shenendehowa Central School District	\$93,349,352	\$98,159,461	\$98,206,549	\$99,123,311	\$100,176,193
520401	Corinth Central School District	\$12,664,725	\$15,860,808	\$15,953,198	\$15,809,077	\$16,378,890
520601	Edinburg Common School District	\$1,493,752	\$1,552,303	\$1,553,332	\$1,506,012	\$1,538,338
520701	Galway Central School District	\$11,805,648	\$16,448,047	\$16,481,510	\$16,505,433	\$17,202,959
521200	Mechanicville City School District	\$13,786,069	\$17,575,746	\$17,656,043	\$17,831,884	\$18,540,870
521301	Ballston Spa Central School District	\$50,505,325	\$49,630,249	\$49,988,120	\$50,516,914	\$50,518,574
521401	South Glens Falls Central School District	\$33,240,668	\$39,332,504	\$39,377,319	\$38,975,342	\$39,767,522
521701	Schuylerville Central School District	\$18,884,385	\$17,217,291	\$17,250,034	\$17,670,697	\$17,484,609
521800	Saratoga Springs City School District	\$66,150,117	\$74,702,493	\$74,753,569	\$74,527,165	\$75,526,164
522001	Stillwater Central School District	\$13,620,177	\$15,525,903	\$15,505,648	\$15,652,996	\$15,905,084
522101	Waterford-Halfmoon Union Free School District	\$10,113,380	\$10,108,018	\$10,173,184	\$9,999,203	\$9,985,104
530101	Duanesburg Central School District	\$7,915,939	\$10,234,397	\$10,247,580	\$10,106,894	\$10,492,143
530202	Scotia-Glenville Central School District	\$28,303,000	\$33,007,720	\$33,051,510	\$32,564,370	\$33,296,038
530301	Niskayuna Central School District	\$39,255,090	\$43,309,410	\$43,151,385	\$42,393,481	\$43,002,853
530501	Schalmont Central School District	\$24,858,684	\$23,811,191	\$23,753,447	\$23,518,961	\$23,334,275
530515	Rotterdam-Mohonasen Central School District	\$25,930,085	\$32,157,363	\$32,365,055	\$32,975,274	\$34,095,274
530600	Schenectady City School District	\$85,486,866	\$106,496,006	\$108,958,612	\$107,725,221	\$110,949,781

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540801	Gilboa-Conesville Central School District	\$4,979,407	\$5,102,299	\$5,181,702	\$5,117,849	\$5,142,380
540901	Jefferson Central School District	\$3,300,700	\$3,894,917	\$3,990,131	\$3,949,725	\$4,041,107
541001	Middleburgh Central School District	\$12,247,632	\$13,020,130	\$13,217,510	\$13,133,264	\$13,268,735
541102	Cobleskill-Richmondville Central School District	\$25,279,333	\$29,139,059	\$29,386,160	\$29,039,783	\$29,593,650
541201	Schoharie Central School District	\$11,436,994	\$14,061,269	\$14,219,629	\$14,325,044	\$14,652,919
541401	Sharon Springs Central School District	\$4,451,487	\$4,907,542	\$4,967,679	\$4,890,003	\$4,974,188
550101	Odessa-Montour Central School District	\$9,546,834	\$11,541,596	\$11,637,251	\$11,478,727	\$11,974,422
550301	Watkins Glen Central School District	\$14,807,554	\$16,337,846	\$16,374,495	\$16,310,087	\$16,728,167
560501	South Seneca Central School District	\$12,347,844	\$13,205,697	\$13,392,003	\$13,426,260	\$13,697,232
560603	Romulus Central School District	\$5,776,465	\$6,757,021	\$6,790,124	\$6,714,457	\$6,941,808
560701	Seneca Falls Central School District	\$13,583,982	\$16,695,429	\$16,799,562	\$16,603,137	\$17,081,217
561006	Waterloo Central School District	\$19,352,402	\$22,649,501	\$22,811,034	\$22,517,072	\$23,122,371
570101	Addison Central School District	\$14,823,381	\$15,791,397	\$16,084,303	\$16,218,742	\$16,527,629
570201	Avoca Central School District	\$6,827,874	\$7,696,419	\$7,830,102	\$7,980,905	\$8,197,675
570302	Bath Central School District	\$18,338,114	\$21,718,309	\$22,038,129	\$21,909,716	\$22,572,393
570401	Bradford Central School District	\$4,183,745	\$4,181,418	\$4,230,945	\$4,178,545	\$4,252,440
570603	Campbell-Savona Central School District	\$12,348,380	\$14,065,769	\$14,303,897	\$14,362,105	\$14,835,551
570701	Canisteo Central School District	\$9,289,948	\$11,567,520	\$11,741,333	\$11,739,845	\$12,164,037
571000	Corning City School District	\$61,930,224	\$72,369,521	\$73,178,045	\$72,520,844	\$75,211,979
571501	Greenwood Central School District	\$2,723,429	\$2,569,895	\$2,610,525	\$2,588,469	\$2,597,825
571800	Hornell City School District	\$18,980,755	\$26,426,218	\$27,074,573	\$26,951,599	\$28,456,257
571901	Arkport Central School District	\$5,522,305	\$6,944,933	\$6,990,961	\$7,088,550	\$7,358,164
572301	Prattsburgh Central School District	\$5,191,194	\$6,201,858	\$6,315,836	\$6,330,254	\$6,531,072
572702	Jasper-Troupsburg Central School District	\$6,200,311	\$7,092,319	\$7,216,441	\$7,116,730	\$7,321,238

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572901	Hammondsport Central School District	\$8,469,303	\$8,850,295	\$8,916,765	\$8,818,627	\$8,881,692
573002	Wayland-Cohocton Central School District	\$27,255,410	\$28,998,069	\$29,172,937	\$29,019,188	\$29,503,470
580101	Babylon Union Free School District	\$23,732,193	\$23,216,066	\$23,070,567	\$23,332,138	\$23,267,949
580102	West Babylon Union Free School District	\$57,334,531	\$59,121,094	\$59,183,803	\$58,671,689	\$58,883,031
580103	North Babylon Union Free School District	\$59,338,107	\$64,539,024	\$64,395,761	\$64,167,455	\$64,999,913
580104	Lindenhurst Union Free School District	\$79,486,602	\$89,483,606	\$89,216,757	\$89,374,140	\$91,040,962
580105	Copiaque Union Free School District	\$53,818,251	\$59,400,021	\$60,461,580	\$61,851,945	\$62,985,796
580106	Amityville Union Free School District	\$43,777,042	\$45,571,016	\$46,554,212	\$47,240,924	\$48,012,881
580107	Deer Park Union Free School District	\$57,684,312	\$52,155,338	\$52,184,826	\$52,794,759	\$52,305,495
580109	Wyandanch Union Free School District	\$32,810,545	\$34,199,362	\$34,783,897	\$35,686,148	\$36,519,171
580201	Three Village Central School District	\$93,164,309	\$92,572,634	\$91,638,651	\$93,760,048	\$93,896,130
580203	Brookhaven-Comsewogue Union Free School District	\$46,051,601	\$49,356,943	\$49,108,194	\$49,058,954	\$49,539,832
580205	Sachem Central School District	\$187,294,121	\$168,643,504	\$168,814,041	\$171,485,445	\$169,325,335
580206	Port Jefferson Union Free School District	\$23,835,458	\$16,569,929	\$16,389,182	\$16,303,977	\$15,015,569
580207	Mount Sinai Union Free School District	\$28,779,058	\$26,702,427	\$26,618,001	\$27,305,132	\$27,065,210
580208	Miller Place Union Free School District	\$34,140,605	\$33,482,304	\$33,288,368	\$33,891,303	\$33,843,631
580209	Rocky Point Union Free School District	\$38,548,543	\$38,378,979	\$38,292,533	\$39,278,412	\$39,385,499
580211	Middle Country Central School District	\$120,905,003	\$137,609,521	\$136,872,233	\$136,375,217	\$140,373,401
580212	Longwood Central School District	\$123,385,405	\$115,011,873	\$116,066,165	\$118,581,857	\$117,876,501
580221	South Manor Union Free School District	\$8,870,508	\$11,310,908	\$11,326,495	\$11,038,851	\$11,365,994
580224	Patchogue-Medford Union Free School District	\$98,607,749	\$108,806,430	\$108,685,888	\$110,187,765	\$112,002,002
580232	William Floyd Union Free School District	\$113,096,149	\$131,055,276	\$133,849,295	\$136,283,054	\$140,373,847
580233	Center Moriches Union Free School District	\$16,689,121	\$17,731,014	\$17,689,008	\$18,002,943	\$18,227,861
580234	East Moriches Union Free School District	\$8,614,742	\$7,278,545	\$7,272,035	\$7,467,357	\$7,357,012

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580235	South Country Central School District	\$64,093,833	\$62,214,375	\$62,740,850	\$63,217,593	\$63,219,799
580251	Eastport-South Manor Central High School District	\$14,066,387	\$12,984,426	\$12,807,962	\$12,857,098	\$12,668,735
580301	East Hampton Union Free School District	\$29,723,404	\$28,461,166	\$28,233,965	\$28,424,556	\$28,142,818
580303	Amagansett Union Free School District	\$4,021,536	\$2,267,634	\$2,261,285	\$2,197,586	\$1,853,304
580304	Springs Union Free School District	\$6,844,265	\$6,850,287	\$6,781,395	\$6,855,414	\$6,852,114
580305	Sag Harbor Union Free School District	\$15,273,783	\$12,420,700	\$12,272,765	\$12,116,751	\$11,604,462
580306	Montauk Union Free School District	\$6,333,578	\$6,336,479	\$6,276,846	\$6,201,996	\$6,176,163
580401	Elwood Union Free School District	\$27,809,974	\$28,628,462	\$28,655,227	\$29,004,374	\$29,274,229
580402	Cold Spring Harbor Central School District	\$27,552,057	\$26,038,508	\$25,885,560	\$25,564,992	\$25,162,248
580403	Huntington Union Free School District	\$61,656,895	\$59,596,976	\$59,841,933	\$59,834,170	\$59,531,607
580404	Northport-East Northport Union Free School District	\$83,753,591	\$74,691,333	\$74,360,587	\$73,974,734	\$72,281,098
580405	Half Hollow Hills Central School District	\$109,204,424	\$100,804,252	\$100,131,932	\$101,153,421	\$99,886,814
580406	Harborfields Central School District	\$36,953,227	\$37,898,034	\$37,832,550	\$38,476,592	\$38,730,998
580410	Commack Union Free School District	\$86,196,799	\$84,369,659	\$83,383,153	\$83,868,936	\$83,393,658
580413	South Huntington Union Free School District	\$77,537,340	\$76,487,542	\$77,002,320	\$78,902,014	\$79,141,186
580501	Bay Shore Union Free School District	\$74,670,730	\$76,635,931	\$77,610,916	\$77,914,081	\$78,422,735
580502	Islip Union Free School District	\$40,093,514	\$41,150,460	\$41,100,301	\$41,481,540	\$41,729,767
580503	East Islip Union Free School District	\$68,197,086	\$61,613,531	\$61,146,357	\$61,520,180	\$60,756,655
580504	Sayville Union Free School District	\$47,041,825	\$42,978,946	\$42,605,370	\$42,859,978	\$42,068,859
580505	Bayport-Blue Point Union Free School District	\$31,904,422	\$31,463,436	\$31,164,126	\$30,766,127	\$30,560,178
580506	Hauppauge Union Free School District	\$54,779,985	\$49,116,916	\$48,700,473	\$49,306,277	\$48,026,389
580507	Connetquot Central School District	\$91,714,603	\$86,426,150	\$86,271,485	\$86,294,245	\$85,310,165
580509	West Islip Union Free School District	\$60,938,267	\$67,929,466	\$67,146,706	\$66,554,976	\$67,490,431
580512	Brentwood Union Free School District	\$177,409,504	\$236,108,567	\$242,597,755	\$249,279,455	\$261,211,371

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580513	Central Islip Union Free School District	\$103,839,709	\$99,113,196	\$100,658,178	\$102,058,652	\$102,106,053
580514	Fire Island Union Free School District	\$2,707,652	\$1,339,706	\$1,331,235	\$1,301,723	\$980,099
580601	Shoreham-Wading River Central School District	\$32,415,170	\$33,455,919	\$33,069,280	\$32,703,788	\$32,767,793
580602	Riverhead Central School District	\$56,523,574	\$64,526,524	\$65,081,484	\$65,111,734	\$66,270,320
580701	Shelter Island Union Free School District	\$4,982,551	\$4,184,415	\$4,152,766	\$4,084,089	\$3,910,824
580801	Smithtown Central School District	\$118,325,058	\$110,468,649	\$110,017,467	\$110,750,155	\$109,357,529
580805	Kings Park Central School District	\$45,682,921	\$42,904,636	\$42,669,369	\$43,255,092	\$42,832,888
580901	Remsenburg-Speonk Union Free School District	\$3,016,633	\$2,505,914	\$2,489,464	\$2,401,229	\$2,269,957
580902	Westhampton Beach Union Free School District	\$25,629,173	\$23,951,277	\$23,773,626	\$23,667,719	\$23,322,198
580903	Quogue Union Free School District	\$2,839,683	\$1,653,670	\$1,651,927	\$1,599,388	\$1,398,643
580905	Hampton Bays Union Free School District	\$16,720,696	\$19,924,734	\$19,918,127	\$20,651,599	\$21,196,252
580906	Southampton Union Free School District	\$32,498,938	\$26,158,644	\$26,121,466	\$26,320,832	\$25,120,147
580909	Bridgehampton Union Free School District	\$6,919,355	\$3,395,443	\$3,412,752	\$3,387,362	\$2,767,481
580911	Eastport Union Free School District	\$7,303,622	\$8,704,410	\$8,578,418	\$9,007,093	\$9,195,698
580913	Tuckahoe Common School District	\$4,760,663	\$4,783,992	\$4,751,552	\$4,697,802	\$4,743,522
580917	East Quogue Union Free School District	\$6,137,740	\$5,823,896	\$5,782,438	\$5,627,449	\$5,546,631
581002	Oysterponds Union Free School District	\$1,970,822	\$1,790,027	\$1,768,362	\$1,710,798	\$1,655,405
581004	Fishers Island Union Free School District	\$2,101,137	\$1,140,523	\$1,124,686	\$1,120,433	\$938,318
581005	Southold Union Free School District	\$12,827,994	\$12,519,139	\$12,388,292	\$12,373,524	\$12,289,660
581010	Greenport Union Free School District	\$9,310,146	\$10,873,016	\$11,009,699	\$10,884,047	\$11,108,018
581012	Mattituck-Cutchogue Union Free School District	\$20,100,230	\$17,904,245	\$17,716,922	\$18,181,631	\$17,840,333
590501	Fallsburg Central School District	\$19,585,918	\$21,126,961	\$21,552,439	\$21,837,825	\$22,239,021
590801	Eldred Central School District	\$7,055,209	\$9,082,590	\$9,112,938	\$8,964,340	\$9,358,253
590901	Liberty Central School District	\$25,227,075	\$27,212,343	\$27,730,256	\$27,589,022	\$28,070,165

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591201	Tri-Valley Central School District	\$15,591,150	\$17,139,004	\$17,262,947	\$16,972,566	\$17,367,440
591301	Roscoe Central School District	\$4,532,109	\$4,353,122	\$4,419,400	\$4,367,881	\$4,387,344
591302	Livingston Manor Central School District	\$8,336,587	\$9,771,809	\$9,911,487	\$9,772,022	\$10,107,145
591401	Monticello Central School District	\$42,280,691	\$50,054,797	\$50,993,383	\$51,147,325	\$52,587,659
591502	Sullivan West Central School District	\$20,387,310	\$22,469,195	\$22,592,035	\$22,331,058	\$22,628,061
600101	Waverly Central School District	\$16,130,889	\$21,047,600	\$21,260,102	\$21,035,699	\$21,868,003
600301	Candor Central School District	\$8,329,627	\$12,337,000	\$12,462,683	\$12,444,662	\$13,177,260
600402	Newark Valley Central School District	\$14,881,877	\$18,148,855	\$18,319,813	\$18,112,483	\$18,643,099
600601	Owego-Apalachin Central School District	\$24,312,132	\$30,523,612	\$31,007,670	\$30,850,001	\$32,405,410
600801	Spencer-Van Etten Central School District	\$10,575,488	\$14,590,379	\$14,821,037	\$14,623,863	\$15,417,108
600903	Tioga Central School District	\$10,460,670	\$15,651,432	\$15,841,675	\$15,649,580	\$16,627,699
610301	Dryden Central School District	\$19,692,030	\$22,352,839	\$22,462,987	\$22,751,715	\$23,310,409
610501	Groton Central School District	\$10,902,583	\$13,461,166	\$13,562,237	\$13,596,819	\$14,017,646
610600	Ithaca City School District	\$64,572,439	\$66,588,523	\$67,496,807	\$66,946,745	\$67,589,991
610801	Lansing Central School District	\$14,355,668	\$14,942,180	\$14,904,359	\$14,784,268	\$14,851,805
610901	Newfield Central School District	\$10,744,682	\$13,242,488	\$13,402,264	\$13,295,701	\$13,860,127
611001	Trumansburg Central School District	\$12,526,032	\$16,681,389	\$16,813,863	\$16,765,174	\$17,630,089
620600	Kingston City School District	\$89,371,774	\$108,691,967	\$110,183,732	\$108,745,459	\$111,280,208
620803	Highland Central School District	\$24,651,215	\$27,314,423	\$27,674,669	\$28,097,800	\$28,647,316
620901	Rondout Valley Central School District	\$34,638,166	\$38,351,789	\$38,860,909	\$38,342,617	\$38,870,270
621001	Marlboro Central School District	\$23,881,793	\$25,428,870	\$25,453,436	\$25,447,125	\$25,664,836
621101	New Paltz Central School District	\$25,729,553	\$29,554,472	\$29,662,595	\$29,744,331	\$30,359,476
621201	Onteora Central School District	\$30,830,444	\$31,609,607	\$31,708,410	\$31,141,595	\$31,182,152
621601	Saugerties Central School District	\$31,930,297	\$42,709,069	\$43,295,598	\$42,831,692	\$44,331,742

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621801	Wallkill Central School District	\$34,473,274	\$40,466,341	\$40,682,841	\$41,138,799	\$42,124,444
622002	Ellenville Central School District	\$24,089,316	\$24,771,670	\$25,125,169	\$25,680,794	\$25,927,573
630101	Bolton Central School District	\$4,270,680	\$3,485,742	\$3,492,051	\$3,437,960	\$3,266,673
630202	North Warren Central School District	\$9,081,033	\$9,468,362	\$9,599,721	\$9,689,456	\$9,838,263
630300	Glens Falls City School District	\$24,548,225	\$31,124,597	\$31,343,470	\$30,944,216	\$32,163,305
630601	Johnsburg Central School District	\$6,121,934	\$5,701,581	\$5,761,768	\$5,692,681	\$5,636,479
630701	Lake George Central School District	\$11,192,688	\$12,622,864	\$12,593,059	\$12,639,951	\$12,813,290
630801	Hadley-Luzerne Central School District	\$12,460,136	\$14,327,098	\$14,472,062	\$14,282,022	\$14,570,893
630902	Queensbury Union Free School District	\$28,331,140	\$36,575,017	\$36,564,324	\$37,283,834	\$38,932,759
630918	Glens Falls Common School District	\$1,889,784	\$2,834,329	\$2,843,111	\$2,763,122	\$2,914,021
631201	Warrensburg Central School District	\$13,007,912	\$13,702,510	\$13,894,439	\$13,962,731	\$14,122,982
640101	Argyle Central School District	\$6,668,368	\$8,988,054	\$9,048,726	\$8,927,299	\$9,206,033
640502	Fort Ann Central School District	\$6,321,405	\$7,187,521	\$7,276,769	\$7,379,704	\$7,571,270
640601	Fort Edward Union Free School District	\$6,412,756	\$7,254,876	\$7,386,443	\$7,434,266	\$7,568,068
640701	Granville Central School District	\$12,058,351	\$17,415,973	\$17,635,150	\$17,375,209	\$18,043,044
640801	Greenwich Central School District	\$11,850,159	\$14,228,705	\$14,220,197	\$14,428,557	\$14,843,424
641001	Hartford Central School District	\$5,402,386	\$6,621,396	\$6,672,441	\$6,734,977	\$6,911,996
641301	Hudson Falls Central School District	\$22,685,949	\$29,104,190	\$29,496,544	\$29,337,056	\$30,408,009
641401	Putnam Central School District	\$842,636	\$585,376	\$576,650	\$557,684	\$507,718
641501	Salem Central School District	\$7,342,524	\$9,800,635	\$9,857,272	\$9,744,944	\$10,050,854
641610	Cambridge Central School District	\$10,384,228	\$13,147,604	\$13,270,101	\$13,373,004	\$13,774,398
641701	Whitehall Central School District	\$9,228,568	\$10,852,602	\$10,973,987	\$10,862,565	\$11,103,225
650101	Newark Central School District	\$28,513,890	\$32,003,405	\$32,465,612	\$32,529,744	\$33,216,778
650301	Clyde-Savannah Central School District	\$10,963,044	\$14,283,975	\$14,391,955	\$14,166,350	\$14,678,272

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650501	Lyons Central School District	\$12,288,613	\$15,267,910	\$15,671,360	\$15,811,845	\$16,297,572
650701	Marion Central School District	\$11,352,553	\$13,155,877	\$13,176,178	\$13,312,283	\$13,614,068
650801	Wayne Central School District	\$24,951,807	\$31,616,505	\$31,809,191	\$31,412,431	\$32,666,121
650901	Palmyra-Macedon Central School District	\$22,692,336	\$26,067,032	\$26,001,785	\$25,943,547	\$26,624,655
650902	Gananda Central School District	\$9,207,430	\$13,166,925	\$13,094,448	\$13,173,721	\$13,899,419
651201	Sodus Central School District	\$18,752,484	\$20,332,915	\$20,559,496	\$20,371,702	\$20,714,909
651402	Williamson Central School District	\$13,017,379	\$16,163,384	\$16,185,095	\$16,136,710	\$16,607,434
651501	North Rose-Wolcott Central School District	\$19,551,593	\$23,398,803	\$23,607,307	\$23,327,072	\$23,973,872
651503	Red Creek Central School District	\$13,145,992	\$17,499,816	\$17,701,642	\$17,638,321	\$18,427,459
660101	Katonah-Lewisboro Union Free School District	\$59,759,364	\$49,203,719	\$48,903,334	\$48,698,804	\$46,770,922
660102	Bedford Central School District	\$66,511,129	\$55,005,498	\$54,834,387	\$54,572,911	\$52,755,213
660202	Croton-Harmon Union Free School District	\$19,938,628	\$17,714,914	\$17,609,702	\$17,928,191	\$17,499,961
660203	Hendrick Hudson Central School District	\$41,251,393	\$37,934,175	\$37,631,931	\$37,359,163	\$36,688,657
660301	Eastchester Union Free School District	\$34,677,827	\$30,475,047	\$30,030,867	\$30,154,470	\$29,324,696
660302	Tuckahoe Union Free School District	\$13,933,509	\$13,144,735	\$13,083,914	\$12,952,270	\$12,790,624
660303	Bronxville Union Free School District	\$24,111,961	\$21,662,101	\$21,505,261	\$21,775,600	\$21,239,329
660401	Union Free School District of the Tarrytowns	\$34,254,833	\$33,176,548	\$33,473,338	\$33,787,900	\$33,834,766
660402	Irvington Union Free School District	\$26,699,197	\$24,426,354	\$24,110,885	\$24,080,770	\$23,580,303
660403	Dobbs Ferry Union Free School District	\$18,940,140	\$16,756,827	\$16,626,525	\$16,675,162	\$16,317,874
660404	Hastings-on-Hudson Union Free School District	\$21,922,799	\$20,003,940	\$19,759,330	\$19,952,319	\$19,632,484
660405	Ardsley Union Free School District	\$31,008,225	\$26,880,914	\$26,594,267	\$27,267,501	\$26,704,965
660406	Edgemont Union Free School District	\$25,819,335	\$22,465,026	\$22,195,857	\$21,945,948	\$21,216,474
660407	Greenburgh Central School District	\$38,497,724	\$31,872,908	\$32,220,200	\$31,980,770	\$31,240,700
660409	Elmsford Union Free School District	\$15,464,058	\$13,300,162	\$13,316,762	\$13,183,841	\$12,888,392

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660501	Harrison Central School District	\$56,051,046	\$47,309,781	\$46,898,294	\$46,678,756	\$44,998,665
660701	Mamaroneck Union Free School District	\$70,690,203	\$62,199,870	\$61,583,761	\$62,024,931	\$60,335,036
660801	Mount Pleasant Central School District	\$27,355,825	\$24,729,866	\$24,533,672	\$24,344,718	\$23,913,708
660802	Pocantico Hills Central School District	\$7,956,485	\$5,881,232	\$5,891,850	\$5,764,233	\$5,233,966
660805	Valhalla Union Free School District	\$19,524,377	\$18,494,051	\$18,312,335	\$17,987,414	\$17,698,032
660809	Pleasantville Union Free School District	\$23,464,584	\$21,300,190	\$21,152,347	\$21,407,172	\$21,039,990
660900	Mount Vernon City School District	\$125,770,802	\$142,945,791	\$145,548,168	\$146,668,095	\$151,188,928
661004	Chappaqua Central School District	\$57,537,574	\$45,215,427	\$44,930,436	\$45,550,830	\$43,421,760
661100	New Rochelle City School District	\$127,587,738	\$132,935,090	\$135,179,838	\$138,460,235	\$141,497,137
661201	Byram Hills Central School District	\$34,421,058	\$33,840,913	\$33,425,010	\$33,774,366	\$33,637,227
661301	North Salem Central School District	\$22,894,718	\$18,883,855	\$18,792,122	\$19,078,074	\$18,337,388
661401	Ossining Union Free School District	\$57,695,950	\$55,005,118	\$55,364,822	\$56,308,551	\$56,565,226
661402	Briarcliff Manor Union Free School District	\$24,278,343	\$19,815,314	\$19,738,192	\$20,116,159	\$19,376,441
661500	Peekskill City School District	\$42,921,859	\$47,430,736	\$48,034,875	\$47,782,039	\$48,616,175
661601	Pelham Union Free School District	\$32,513,792	\$33,281,105	\$32,948,781	\$32,392,451	\$32,372,072
661800	Rye City School District	\$40,964,725	\$35,340,633	\$34,922,825	\$34,919,575	\$33,876,436
661901	Rye Neck Union Free School District	\$19,089,444	\$18,957,169	\$18,768,137	\$18,473,572	\$18,333,186
661904	Port Chester-Rye Union Free School District	\$45,623,534	\$56,275,855	\$57,147,855	\$57,783,939	\$59,896,789
661905	Blind Brook-Rye Union Free School District	\$19,308,528	\$15,472,105	\$15,233,443	\$15,680,461	\$15,087,406
662001	Scarsdale Union Free School District	\$67,854,464	\$54,141,336	\$53,532,057	\$53,046,011	\$50,302,765
662101	Somers Central School District	\$43,106,352	\$37,192,925	\$36,785,607	\$37,449,965	\$36,546,673
662200	White Plains City School District	\$118,486,458	\$98,521,469	\$99,974,139	\$101,524,823	\$99,004,959
662300	Yonkers City School District	\$387,392,149	\$396,399,806	\$406,630,525	\$409,196,126	\$416,641,028
662401	Lakeland Central School District	\$75,746,322	\$71,899,269	\$71,648,191	\$71,997,721	\$71,378,859

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662402	Yorktown Central School District	\$48,135,354	\$48,521,740	\$48,177,799	\$47,790,259	\$47,740,446
670201	Attica Central School District	\$15,683,556	\$20,989,727	\$21,161,361	\$21,355,677	\$22,381,139
670401	Letchworth Central School District	\$11,245,556	\$17,973,049	\$18,277,111	\$18,101,944	\$19,434,537
671002	Wyoming Central School District	\$2,658,349	\$3,168,541	\$3,191,465	\$3,135,481	\$3,258,419
671201	Perry Central School District	\$11,599,552	\$11,410,568	\$11,476,319	\$11,776,952	\$11,872,091
671501	Warsaw Central School District	\$10,777,088	\$12,383,123	\$12,449,156	\$12,484,116	\$12,768,566
680601	Penn Yan Central School District	\$19,371,005	\$22,638,703	\$22,811,822	\$23,190,311	\$23,865,741
680801	Dundee Central School District	\$8,009,783	\$11,407,001	\$11,563,635	\$11,518,773	\$12,043,641

APPENDIX L

SELECTED SENSITIVITY ANALYSIS OF PROGRAM ALTERNATIVES

Every effort has been made to describe all assumptions underlying the estimates described in this report. Because the state-of-art of education related research, it is not possible to ensure that a given strategy or intervention will produce desired outcomes. Moreover, not all interventions that produce positive student outcomes are equally cost effective. Thus policy makers can reasonably adduce research evidence, or cite the lack thereof, to disagree with certain assumptions underlying the estimates in this report and arrive at different conclusions. Described below are some examples of how policy makers may conduct such sensitivity analysis. These are provided merely as examples and do not necessarily reflect recommendations by AIR/MAP.

Class Size

The final analysis of the professional judgment panels provided class sizes of 16.8 students for elementary schools (K-5), 22.6 students for middle schools, and 29.1 students for high schools for schools with 4.5 percent of students eligible for the federal meals program.⁴² As the concentration of poverty increases, the effective class sizes and pupil-teacher ratios were significantly lowered.

		<i>Eligible for free and reduced-priced lunch</i>	4.5%	34.2%	91.6%
Elementary	<i>Class size</i>	16.8	15.7	14.0	
	<i>Pupil-teacher ratio</i>	12.3	10.6	8.4	
	<i>Pupil-all prof. staff ratio</i>	9.9	8.6	6.8	
Middle	<i>Class size</i>	22.6	22.6	22.6	
	<i>Pupil-teacher ratio</i>	15.1	14.7	14.1	
	<i>Pupil-all prof. staff ratio</i>	12.3	11.9	11.3	
High	<i>Class size</i>	29.1	24.3	18.4	
	<i>Pupil-teacher ratio</i>	16.9	15.1	12.6	
	<i>Pupil-all prof. staff ratio</i>	13.1	12.1	10.3	

The literature on the effectiveness of small classes on student achievement is primarily limited to the primary grades of Kindergarten through third grade. The Tennessee STAR experiment reduced class sizes to 15 in the primary grades only. Therefore, any positive effects of lower class sizes, most measurable to those students in schools with high concentrations of poverty and/or minority students, can only be generalized to the primary grades. Average elementary school class sizes of fewer than 17 students in low-poverty schools and lowering to 14 students in high-poverty schools across all grades in the elementary school, though derived from professional judgment, is not necessarily supported by research. To increase class sizes by one student across all grade levels to

⁴² These are computed based on the core classroom teachers that may be inappropriate given the more specialized nature of the secondary school programs at the middle school and high school levels. The pupil-teacher ratios, at the 4.5 percent poverty level, for the middle school prototype was 15.1-to-1 and 16.9-to-1 for the high school prototype.

sizes still beyond those backed by research would decrease the costs put forward in this report by approximately \$720,614,025.

Preschool/Early Childhood Development

One of the many interventions suggested by one or more of the professional judgment panels was to provide preschool to four-year old children and early childhood development (ECD) programs to three-year old children. Specifically, as the concentration of students eligible for the federal free/reduced-lunch program increases, a greater proportion of potential four- and three-year old children should be served at no cost to the family

At approximately 13 students, the preschool program is projected to cost \$717 million. Using the allocation formula derived from the professional judgment panels, but adjusting class sizes for the preschool program up to 20 students would save over \$171 million for the same number of students served.

Four-Year Old Preschool -- Using Formula

Proposed (~13)	15	17	18	20
\$ 717,269,562	\$ (64,281,811)	\$ (113,994,479)	\$ (134,563,858)	\$ (171,562,773)

Utilizing the allocation formula derived from the professional judgment panels, i.e., the same number of children served, but adjusting class sizes from 16 to 20 would generate savings of nearly \$38 million.

Three-Year Old ECD -- Using Formula

Proposed (~16)	17	18	20
\$ 290,249,554	\$ (9,599,092)	\$ (19,614,583)	\$ (37,972,663)

Alternative Delivery of Preschool/ECD

The allocation formulas and types of programs for preschool (full-day program) and ECD were ultimately decided by the Summary Professional Judgment Panel. Though this allocation formula was ultimately reported in this report as the work of the professional judgment panels, there was not consensus among the eight general education PJP's about if and how much preschool and ECD should be offered. In fact, one panel did not utilize preschool at all and three panels did not utilize ECD as intervention strategies.

Furthermore, only five of eight panels utilized a full-day preschool program while two panels utilized ECD at only the highest levels of student need (poverty and ELL concentrations) in the course of their exercises. Given the diversity of opinions of

	Proposed (~13)	15	17	18	20
25%	\$ 683,454,868	\$ 622,203,535	\$ 574,834,503	\$ 555,234,839	\$ 520,933,044
35%	\$ 660,500,915	\$ 601,306,718	\$ 555,528,583	\$ 536,587,178	\$ 503,437,414
50%	\$ 622,531,115	\$ 566,739,779	\$ 523,593,263	\$ 505,740,729	\$ 474,496,626
65%	\$ 587,982,078	\$ 535,259,720	\$ 494,509,815	\$ 477,648,917	\$ 448,140,294
75%	\$ 563,621,213	\$ 513,109,391	\$ 474,045,814	\$ 457,882,660	\$ 429,595,175

whether and how much preschool/ECD should be offered, several alternative delivery mechanisms could be considered.

Same allocation formula, full-day programs for those above a poverty threshold, half-day program to all others

The current allocation formula delivers a full-day preschool program with class sizes of approximately 13 students. The costs in the above table reflect the possibility of a full-day program offered to those schools with higher concentrations of student poverty and a half-day program to those at lower poverty concentration thresholds. For instance, if the poverty threshold were set at 50 percent, then those schools with poverty concentrations greater than or equal to 50 percent would receive funding to provide a full-day program while those schools below 50 percent poverty concentrations would receive funding to provide a half-day program. At the current funding of approximately 13 students per class, the cost would be \$622.5 million, or nearly \$95 million less than the current formula projects. At class sizes of 18, the cost of the preschool program would be \$505.7 million, or \$211.5 million less than the current formula projects.

	Proposed (~13)	15	17	18	20
FRL Only	\$ 668,328,460	\$ 608,432,758	\$ 562,112,110	\$ 542,946,231	\$ 509,403,612
25%	\$ 624,982,951	\$ 568,981,880	\$ 525,655,432	\$ 507,732,587	\$ 476,365,428
35%	\$ 586,291,714	\$ 533,748,158	\$ 493,113,330	\$ 476,300,046	\$ 446,874,755
50%	\$ 519,061,170	\$ 472,542,826	\$ 436,567,627	\$ 421,682,336	\$ 395,631,267
65%	\$ 454,766,681	\$ 414,010,419	\$ 382,491,355	\$ 369,449,859	\$ 346,625,655
75%	\$ 408,299,889	\$ 371,653,366	\$ 343,358,991	\$ 331,651,759	\$ 311,162,679

Allocation of preschool funding according to poverty concentration

If full-day preschool program funding were provided to schools according to their poverty concentration only (not utilizing the allocation formula derived from the Summary PJP), the cost of the preschool program, with the same class size, would be \$668 million, nearly \$49 million less than the current allocation formula projects. If full-day preschool program funding were only provided to schools with poverty concentrations of 35 percent or more and with class sizes of 18, the preschool program would cost \$476.3 million, or nearly \$241 million less than the projected allocations.

Allocation of ECD funding according to poverty concentration

	Proposed (~16)	17	18	20
FRL Only	\$ 270,413,798	\$ 261,470,703	\$ 252,139,675	\$ 235,036,192
25%	\$ 253,008,928	\$ 244,641,453	\$ 235,911,005	\$ 219,908,368
35%	\$ 237,324,819	\$ 229,476,046	\$ 221,286,802	\$ 206,276,174
50%	\$ 210,147,143	\$ 203,197,187	\$ 195,975,748	\$ 182,654,089
65%	\$ 184,131,178	\$ 178,041,618	\$ 171,687,899	\$ 160,041,732
75%	\$ 165,286,212	\$ 159,819,890	\$ 154,116,444	\$ 143,662,208

If ECD program funding were provided to schools according to their poverty concentration only (not utilizing the allocation formula derived from the Summary PJP), the cost of the ECD program, with the same class size, would be \$270.4 million, nearly \$20 million less than the current allocation formula projects. If ECD program funding were only provided to schools with poverty concentrations of 35 percent or more and with class sizes of 18, the ECD program would cost \$221.3 million, or nearly \$69 million less than the projected allocations.

One or more of the original general education professional judgment panels advocated allocating preschool/ECD program funding under any of these scenarios –half-day preschool, according to poverty concentrations, etc.