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The History and Developments of Maine's Essential Programs and Services Program

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Report to

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Introduction

The goal of this report is to describe the history, development and current status of one of the key components of Maine's school funding formula; that is, the Essential Programs and Services cost determination portion of the formula. In Spring 2010 the Maine Legislature passed a resolution which, in part, requested that the Maine Commissioner of Education and the Maine Education Policy Research Institute (MEPRI):

> conduct a review of certain education finance and policy issues associated with The Essential Programs and Services Funding Act established under the Maine Revised Statutes, Title 20-A, chapter 606-B. In conducting this review, the Commissioner of Education and the Maine Education Policy Research Institute shall:
>
> 1. Analyze the components of the essential programs and services funding formula, including analyses of:
>
> A. The original policy goal or educational objective established for each of the essential programs and services cost components and a detailed description of the original and current methodology used to calculate the resources determined to be adequate for each cost component;

In recent years there have been significant changes made in Maine's funding formula. With passage of the Essential Programs and Services (EPS) Funding Act in 2004, Maine moved to an adequacy-based funding system. This act, together with a successful statewide referendum and the subsequent passage of LD1, ushered in three major changes in Maine's school funding formula: (1) a change in the calculation of the total cost of K-12 education; (2) a change in the state/local cost sharing formula; and (3) a substantial increase in the amount of state funding of local K-12 education.

This report describes the history and the development of the EPS cost determination portion of the formula, and describes how the costs are currently calculated. Descriptions of the second and third major changes in the school funding formula appear in separate materials which are being developed by the Maine Department of Education.

The Essential Programs and Services model is based on two fundamental premises. First, there should be adequate resources in each of Maine's school administrative units and schools to

achieve desired outcomes. Second, there should be equity in the distribution of these adequate resources among Maine's school administrative units; where equity is defined as similar school administrative units should be treated similarly in the school funding formula, and dissimilar school administrative units should be treated dissimilarly.

History and Development

The history and development of Maine's Essential Programs and Services program dates back to the late 1990s. Prior to 1997, the cost of educating Maine's children was based on what is known as an expenditure-driven formula. Whatever was *spent* in any given year by the state and local communities was considered what it *costs* to educate our youth. The total cost for the next year was simply what had been spent in previous years (generally two year-old expenditures), plus an additional amount to account for inflation. In 1997, the formula was changed to a guaranteed-foundation program. In theory, the state guaranteed a certain amount of funding, an equal foundation amount, for each child in a school district. However, this guarantee was adjusted downward based on the amount of state funds the Maine Legislature approved for education in any given year. Thus, the educational costs in Maine have been based on past expenditures (prior to 1997) or an adjusted guarantee amount (after 1997), which over time resulted in considerable disparities in educational funds available to different school districts across the state.

In 1996 the Maine Legislature passed LD958, which directed the Maine State Board of Education (SBE) to develop an implementation plan for the definition and funding of essential programs and services. To fulfill this directive, the State Board established a committee which developed the conceptual framework for the plan. The work of this original committee ended in early spring 1997 because of insufficient funds to complete the plan. In spring 1997 the Maine Legislature passed LD1137 providing funding for continuing the committee work. With the passage of LD1137, the Essential Programs and Services (EPS) committee was reconstituted and resumed its work in July 1997. LD1137, Section 10-1, stated in part:

> Beginning July, 1997 the State Board of Education shall develop for the Legislature an implementation plan for funding essential programs and services. The plan must be based on the criteria for student learning developed by the Task Force on *Learning Results* and established in Public Law 1995, Chapter 649 and in rules adopted by the board and the Department of Education. The plan must include establishment of a system

to measure and ensure that schools are held accountable for student *Learning Results*.

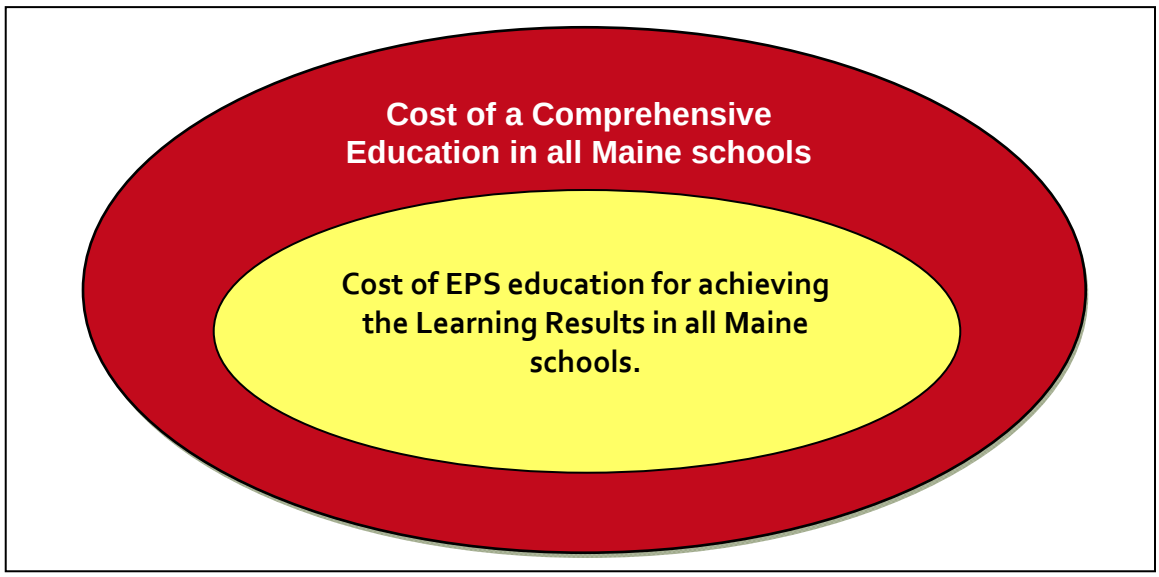
In accordance with LD1137, the State Board of Education reconstituted an Essential Programs and Services committee and charged it to:

- identify the school resources, financial and other, needed for all Maine students to achieve the *Learning Results* standards.
- estimate the cost statewide of those essential resources.
- develop a system for holding schools accountable for student achievement of the *Learning Results*.
- describe a process for developing a transition plan for implementing the committee's recommendations.

The State Board of Education established a seventeen (17) member committee, representing a wide range of education constituencies (See Appendix A). The committee, chaired by Mr. Weston Bonney, a member of the State Board of Education, in turn contracted for research and consultative assistance with the University of Southern Maine office of the Maine Education Policy Research Institute.

The committee work was guided by one fundamental principle: the purpose of developing the new approach for funding K-12 education was to **insure that all schools had the programs and services that were essential if all students were to have equitable educational opportunities to achieve the *Learning Results*.** This principle was a key one for several reasons. First, the legislation did not request a new funding approach for *all* the programs and services schools may provide to meet the needs of children, but rather an approach for providing the programs and services necessary for achieving the *Learning Results*. Accordingly, while the committee identified some additional programs and services it believed should be available in all schools and communities, the Essential Programs and Services (EPS) Model developed by the committee focused only on those resources it believed were needed for achieving the *Learning Results*. Figure 1 provides a graphic depiction of this key principle.

Figure 1: Costs of Maine K-12 Education



Second, providing equitable opportunities in all Maine schools would, the committee concluded, require differing levels of resources in different schools. Some children have specialized needs (i.e., special education, disadvantaged youth, limited English proficiency children, etc.). Schools would need more resources to insure that these children could achieve the *Learning Results*. Thus, the committee recognized that providing equitable opportunities required more than just providing an equal amount of resources to support each student.

Third, the legislative charge was to insure student equity. The committee recognized that taxpayer equity and the formula for fairly distributing the state portion of education resources were also important, but fell beyond the scope of the committee's work.

Based on this fundamental principle, the committee also identified several premises which it used to guide its deliberations, findings, and recommendations. These were as follows:

1. Many of the *Learning Results* could be achieved within existing resources, although some curriculum, instruction, and assessment practices might be subject to change. Where *Learning Results* could not be achieved with existing levels of resources and with greater efficiency in the use of these resources, additional resources would need to be added.
2. Prototypical school models based on average school sizes found in Maine would serve as the basis for defining, describing, and recommending the essential programs and services.
3. The EPS components were to be identified and defined based on empirical evidence, actual costs, and best practices wherever available. Expert advice was also going to be used in developing the EPS Model.

4. The components of the new Essential Programs and Services (EPS) Model should be defined by the parameters of the legislative charge, and not by a pre-established total cost figure. Aggregate costs would only be calculated after the model had been developed.
5. State subsidy should be distributed as a lump sum of general purpose aid, and local communities should decide how the resources will be distributed among programs and services. The three exceptions were to be funds in the areas of special resources for K-2 grade students, technology, and student assessment. State funds for these three exceptions would be available only if there was evidence that the funds were being spent for these three particular purposes.
6. The committee decided that the recommended EPS Model would not include provisions for capital investment, capital replacement, and technology hardware. These were to be defined and funded under separate provisions and legislation.
7. The accountability system was to be based on a "steering from a distance" principle. The committee believed the local community is in the best position to decide how to use school resources as long as these resources are used effectively in helping all students achieve the *Learning Results*. The state should only intervene when there was substantial, sustained evidence that students were not being provided equitable opportunities. The state should then have an accountability plan in place with systems to assist local communities in improving student performance.

Definition of Essential Programs and Services

The first step of the work of the committee entailed defining what were to be considered essential programs and services. Based on the legislative charge, the committee developed definitions for essential programs and services as follows:

Essential Programs were defined as those programs and courses Maine schools need to offer **all** students so that they could meet the *Learning Results* standards in the eight *Learning Results* program areas of:

a. Career Preparation
b. English and Language Arts
c. Health and Physical Education
d. Mathematics
e. Modern and Classical Languages
f. Science and Technology
g. Social Studies
h. Visual and Performing Arts

Essential Services were those resources and services required to insure that each Maine student was offered an equitable opportunity to achieve the *Learning Results* standards contained in the eight essential programs. These resources and services were categorized into the following components:

Essential Services

A. School Personnel

1. regular classroom and special subject teachers
2. education technicians
3. counseling/guidance staff
4. library staff
5. health staff
6. administrative staff
7. support/clerical staff
8. substitute teachers

B. Supplies and Equipment

C. Resources for Specialized Student Populations

1. special needs pupils
2. Limited English Proficiency (LEP) pupils
3. disadvantaged youth
4. primary (K-2) grade children

D. Specialized Services

1. professional development
2. instructional leadership support
3. student assessment
4. technology
5. co-curricular and extra-curricular student learning

E. District Services

1. system administration
2. maintenance of operations

F. School Level Adjustments

1. vocational education
2. teacher educational attainment
3. transportation
4. small schools
5. debt services

Prototypical School Model

The committee developed three prototypical schools and grade configurations to facilitate the EPS model building process. These three prototypical schools were:

School Level	Number of Students
Elementary School (Grade K-5)	250
Middle School (Grades 6-8)	400
Secondary School (Grades 9-12)	500

The number of students assigned to each school level was based on actual average school sizes found in Maine schools in 1996-97. Using these three grade-configured prototypical schools, the

committee defined the levels and costs of resources and services needed in these schools to ensure that all students have equitable opportunities to achieve the *Learning Results*.

Methodology for Determining Levels of Resources and Services and Costs

A key step in the committee's work involved what at that time was called "a costing out" study. Three different approaches were being used by various states and other agencies in conducting costing out studies. These were:

1. Professional Judgment Approach: Researchers ask professional educators to decide what level of resources are needed to provide an adequate education.
2. Successful District Approach : Researchers use the level of resources found in successful schools to establish an adequate education.
3. Cost Function Approach: Researchers use statistical analysis of the cost of various school functions to establish adequate education costs.

Each of these three approaches had strengths and weaknesses, so the EPS committee chose to use a hybrid approach, using features from each of the three approaches.

The committee used four key sources of information and data to inform its work. Whenever possible, multiple sources were used in making decisions and recommendations. One source of evidence was **empirical information on Maine schools**. If available, information on current practices in Maine was examined. Unfortunately, this information was very limited in several areas.

In addition to this information, data describing higher and lower performing Maine schools were used in exploring the relationships between school resources and performance, and in defining proposed program and service levels. More specifically, resources and expenditures in schools performing at particularly high or low levels on the Maine Educational Assessments (MEAs) were examined for purposes of recommending resource levels.

Finally, in some areas under consideration by the committee, there was no empirical information available. Consequently, a survey study was conducted with all Maine school districts in order to collect the needed information.

A second source was **evidence from existing or proposed models**. By the late 1990s the Education Commission of the States (ECS) had identified ten states (including Maine) which were attempting to define a "core" education and core education costs. Each of these states was

contacted, and where available, models were collected. Three states, Massachusetts, New Jersey and Wyoming, had made substantial progress in developing prototypical models and these were reviewed in detail by the committee.

In addition, the committee reviewed data included in the reports from two previously proposed Maine models. The concept of school funding of essential programs and services was first introduced into the Maine policy arena by the 1994 report of the Governor's Task Force on School Funding. This task force identified the components of an EPS model, and a subcommittee working with Department of Education staff developed the model, including specific staff and other resource categories and funding levels.

The 1995 report of the Committee to Study Organizational and Tax Issues in Public Schools, the so-called Rosser Commission, also included an EPS model. This model was very similar to the 1994 task force model, and a copy appears in Appendix B. Although both the task force and commission completed their work before passage of LD1137, and, therefore, did not have the *Learning Results* standards as the target for recommending new funding levels, the committee did find the earlier work helpful as it developed the proposed EPS Model.

The third source of evidence was the **national literature on school resources and performance**. The relationships among school resources, funding, and student performance have been the subject of empirical research for over 25 years. Although this research historically had produced mixed findings and considerable debate, more recent studies (e.g., Achilles, Finn & Bain, 1997; Wenglinsky, 1997; Ferguson & Ladd, 1996; Murnane & Levy, 1995; Hedges, Laine, & Greenwald, 1994; Verstegen, 1994) had yielded better understandings of the connections between resources and student performance. This more recent information was used by the committee in its deliberations.

The fourth key source was **expert testimony** from individuals who had specific knowledge and experience covering the topics under consideration. The committee solicited expert advice and testimony from a wide spectrum of individuals and groups. These included experts from Massachusetts, New Jersey, Ohio, and Wyoming, the Maine Department of Education, and various educational organizations in Maine. A listing of the experts consulted appears in Appendix C. Finally, the committee held over 25 public forums and meetings at which comments on the draft report were provided by over 420 individuals.

Description of Essential Programs and Services Components

The model components and their original costs as established by the EPS committee are described in this section.

A. School Personnel

1. Regular classroom and special subject teachers (not including special education teachers)

The committee recognize that classroom teachers and special subject teachers (e.g., visual and performing art teachers, physical education teachers, etc.) were the essential component in any EPS model. It is these regular classroom teachers and subject specialists who would develop the curriculum, provide the instruction, and administer and interpret a vast majority of the assessments used in helping all students achieve the *Learning Results*.

The committee believed a large portion of the content and standards in the *Learning Results* could be achieved within existing staff levels. However, the committee concluded that in order for all the *Learning Results* to be achieved by all students, additional resources were needed.

One method of describing the amount of teacher resources in a school is in terms of teacher to student ratios. The committee received evidence that the average teacher-student ratios found in Maine schools were approximately 1-18 for grades K-8 and 1-16 for grades 9-12. A 1-18 ratio means one teacher for every eighteen students. This means that on average, there is one teacher for every 18 students in Maine's elementary schools and one high school teacher for every 16 secondary students. Both the 1994 Governor's Task Force and the 1995 Rosser Commission recommended teacher-student ratios different than was existing practice.

An examination of the teacher – student ratios in higher and lower performing schools revealed no significant difference in ratios in these schools. That is to say, similar teacher-student ratios were found in both higher and lower performing schools.

Because the committee believed additional teacher resources would be needed to meet all eight Learning Results program areas, the committee concluded that the EPS Model FTE (full-time equivalent) teacher-student ratios (excluding special education) should be as follows:

Grade Level	FTE Teacher-Student Ratio
Grades K-5	1-17
Grades 6-8	1-16
Grades 9-12	1-15

Resource recommendations in the area of special education were determined separately and the EPS committee recommendations for this EPS component appear in a separate section of this report.

2. Education Technicians

The committee concluded that classroom teachers would need additional instructional assistance in helping all students achieve the *Learning Results*. The committee used information from the school district survey, and the previous task force and commission reports, in establishing the proposed EPS model ratios. The committee established that there should be one FTE classroom instructional support education technician for every 100 K-8 elementary students (1-100) and one FTE technician for every 250 secondary students (1-250).

3. Counseling and Guidance Personnel

Both the 1994 Governor's Task Force and the so-called Rosser Commission recommended guidance staff-student ratios of 1-400 for grades K-8 and 1-250 for 9-12. The existing ratio of counseling/guidance staff to students statewide in 1997 was approximately 1-400. However, the committee concluded that this ratio was too high to meet the *Learning Results*. The committee chose to use the nationally recommended ratios. The recommended counseling/guidance staff-student ratios for the EPS Model were: 1-350 for grades K-8 and 1-250 for grades 9-12.

4. Library Personnel

Adequate library staff, including librarians and library and media assistants, were also considered to be important to insure students had equal access to learning resources, including print and non-print materials, technological resources, and virtual libraries. In 1996 the Maine Educational Media Association and the Maine State Library had recommended a librarian-student ratio of 1-600 and an assistant/aide-student ratio of 1-300. Existing statewide practice in Maine was 1-975 for librarians and 1-680 for assistants/aides. The committee concluded that existing practice was insufficient to support the *Learning Results* achievement and recommended

the ratio be one FTE certified librarian for every 800 students (1-800) and a 1-500 ratio for library/media assistants.

5. Health Personnel

The committee felt that nurses and health staff must be sufficient in number to ensure students' health and safety, prerequisites for students to be ready and able to learn. The Maine State Board of Nursing did not have a recommended nurse-student ratio in 1997, but existing practice in Maine schools was approximately one FTE nurse per 1000 students. The committee concluded that the current ratio was too high and recommended a ratio of 1-800 students for all grades K-12 in the EPS model, a ratio that mirrored what was also recommended at that time by national organizations.

6. School Administrative Staff

The committee recognized that quality education rests in no small degree on strong, capable school leadership. Research indicated that strong school level administration is an important component in effective schools. Existing *school level* administrator (FTE principals and assistant principals) to student ratios in Maine were, on average, approximately 1-300. While the committee concluded that school administrators would need additional instructional leadership support to achieve the *Learning Results*, it believed existing ratios were sufficient to provide for the overall administrative and management roles in schools. Thus, the recommended ratios in the EPS model were 1-305 students for grades K-8 and 1-315 students for grades 9-12.

7. Support and Clerical Staff

Schools require reasonable levels of support staff in order to function effectively and efficiently. The EPS Committee believed these personnel were critical to the day-to-day operation of schools, for administrators, teachers, and other professional staff. The committee concluded the Governor's Task Force and Rosser Commission recommendations in this area were appropriate, and thus, recommended a FTE ratio of 1-200 students for all grades K-12.

8. Substitute Teachers

Substitute teachers were considered important for the smooth operation of schools. Results from the school district survey indicated that, on average, teachers were absent because of illness the equivalent of one-half day per pupil over the course of the school year. Thus, the proposed EPS model included provisions for substitute teachers at the rate of 0.5 days per pupil.

9. Personnel Benefits

A report by the Maine School Management Association in (March 1998) indicated that the average health insurance benefits package for teachers was approximately 15% of teachers' salaries for 1997-98. Accordingly, the committee recommended that 15% of all salaries be used in calculating health benefits costs in the proposed EPS model. The committee concluded that more information on total benefits was needed before a determination of total benefits cost could be made. Once this information was available and analyzed, the committee believed the 15% figure would need to be adjusted.

B. Supplies and Equipment

Supplies and equipment were required to support curriculum and instruction, student services, and staff and administrative functions. Existing expenditure levels in Maine schools in 1997 were, on average, $235 per K-8 pupil and $375 per 9-12 pupil, with no significant differences between the average amount found in higher and lower performing schools. However, because of funding constraints in recent years many Maine schools had been forced to cut their supplies and equipment budgets to levels which the committee concluded were inadequate to meet the additional needs in implementing the *Learning Results.* The recommended levels were established at $285 per pupil in grades K-8 and $430 per pupil in grades 9-12.

C. Resources for Specialized Student Populations

In order to insure that **all** students have equitable opportunities for achieving the *Learning Results*, the committee concluded that additional resources would be required to support programs for specialized student populations. These specialized populations were identified as; (1) children with special education needs; (2) Limited English Proficiency (LEP) students; (3) disadvantaged youth; and (4) and primary grade children. There are many ways to allocate additional resources for these children. The committee chose to use a weighting procedure. Weightings were to be cumulative for children qualifying for more than one specialized group.

1. Special Education Children

The *Learning Results* standards applied for all children, including children with special needs. In 1996, the State of Maine and local school systems combined spent approximately $140

million above regular education expenditures to provide the necessary programs and services for approximately 33,050 special education students. This represented approximately 15% of the total K-12 children in Maine's schools in 1996-1997.

Analysis of special needs identification figures suggested inconsistencies in the application of identification criteria. In some communities, a majority of special education students were identified as having a particular type of special need (e.g., learning disability) while in other communities with similar characteristics a majority of students appeared to have a different type of special need (behavior problems or speech problems). In addition, analysis of the data revealed districts that were higher receivers of state aid had more identified special student needs, but less local funds available for providing the programs and services necessary to meet these special education needs. Low receivers, on-the-other-hand, generally had fewer children identified as having special needs, but many had greater local financial ability to provide special education programs and services. Consequently, fewer students were receiving more comprehensive services in low receiving districts while more students were receiving less comprehensive programs in high receiving districts. The committee believed this was inappropriate and created barriers for some children to achieve the *Learning Results* standards. The committee believed this could be alleviated by: 1) allocating the state's portion of special education expenditures on a year-to-year basis (without a two-year delay); 2) by implementing more consistent and standardized procedures for identification of special needs; and 3) by distributing state and local funds using a weighted formula. Specifically, the committee recommended a 2.10 weighting for each special education student, (i.e.; 210% of the state average per pupil expenditure) a weighting that reflected existing total state and local expenditures, but one which would increase special education student equity throughout the state. Further, the committee recommended implementing a waiver and appeals process by which local school districts could receive additional state subsidies for exceptional instances where the 2.1 weighting was insufficient to insure that special individual students receive equitable school programming. Finally, the committee recommended that implementation of this weighting formula be monitored closely to insure that the new standardized identification procedures were implemented in a consistent and equitable manner throughout the state.

2. Limited English Proficiency (LEP) Students

In 1997-98, there were 2,547 identified LEP students in over 94 schools spread across Maine. Data collected by the Bilingual Education and ESL office in the Maine Department of Education indicated there were several Maine school districts which had a substantial number of LEP students in their schools, and that the types of services provided these students varied widely depending upon the number and variety of LEP students located in a particular school district, and the manner in which these districts have chosen to provide services. This suggested to the committee there is no single best way to assist LEP students in achieving the *Learning Results*, but that additional resources would be needed. However, the Maine Department of Education had neither complete nor reliable data on the cost of providing additional services for LEP students. The same appeared to be the case in many other states. Information provided by the Education Commission of the States (ECS, 1997) revealed approximately 25 states provided extra LEP funds, ranging from a fixed, flat amount per pupil to per pupil expenditure weighting as high as 1.25. Little empirical research was available on the actual costs, but two studies (Parrish, Metsumoto, & Fowler, 20 1995; Parrish, 1994) had calculated the cost as approximately 15% above average costs. The committee concluded the national research findings were the most reliable source of information and, thus, recommended a 1.15 per pupil expenditure weighting for each LEP student (i.e., 115% of the state average per pupil expenditure for each LEP student). The committee also believed effective programs should enable LEP students to gain English proficiency and become fully mainstreamed into regular classrooms. However, it was unclear how long this process should take. Once this evidence was available, the committee recommended setting a limit on the number of years this 1.15 weighting was to be applied to individual students.

3. Disadvantaged Youth

Research has demonstrated that additional resources are needed in order to help many disadvantaged youth achieve higher levels of performance. However, the level of resources needed was not completely clear. In a majority of the states, free and reduced lunch counts were used to determine how much a school district would receive in additional funds. The Education Commission of the States (ECS, 1997) reported some states set these resources at a flat amount of funds (e.g., $70 per pupil) while others used a weighting system (e.g., 1.11 to 1.25 for the number of students who qualify for free & reduced lunch **above** a state average). After reviewing

the practices in other states, the committee concluded the Maine EPS Model should have a weighted cost for ***all*** students who qualify for free and reduced lunches, not just the number above the state average. The committee recommended a 1.02 per pupil cost factor in the model for all students who qualify for either free or reduced lunches.

The committee recognized the limitations of using free and reduced lunch eligibility as a definition of disadvantaged youth. In theory, once the *Learning Results* were implemented, disadvantaged youth might be more appropriately defined as those not reaching the standards. Maine's Comprehensive Assessment System Technical Advisory Committee (MCASTAC) was attempting to develop a system for assessing what it meant for schools to be making adequate progress in helping students achieve the *Learning Results*. Once this system was developed and implemented, the committee recommended re-examining the definition of disadvantaged youth to be used in determining costs and funding of school programs.

4. Primary (K-2) Grade Children

The committee reviewed substantial evidence documenting the critical importance of the early years of schooling. For example, Slavin (1993) had found that academic failure in the primary grades is a reliable indicator of academic failure in the remaining school years. In addition, longitudinal studies consistently revealed that students who were reading below grade level after grade three often did not complete high school, even with the later interventions of remedial programs (Lloyd, 1978; Kennedy, Birman & Denaline, 1986; Slavin, 1993). There also was an equal body of evidence indicating extra resources used wisely in the early grades increased the academic achievement and social development of students, and prevented academic failures (Burts, 1993; Thompson, Bunnell, Foye, 1997; Achilles, Finn & Bain, 1997). Thus, the committee concluded that extra resources spent on the early grades would enhance the capabilities of schools to help *all* children achieve the *Learning Results* standards by the time students completed high school, and the committee included in the proposed model a 1.10 weighted per pupil cost factor for each child in grades K-2. These additional funds were to be available as a targeted grant to any school district submitting an appropriate plan describing how the additional resources will be used to enhance K-2 grade programming.

D. Specialized Services

The Committee identified five categories of additional specialized support services that should be included in the EPS model.

1. Professional Development

The EPS committee believed that sustained professional development was key in helping staff acquire and maintain the new skills and knowledge necessary for continually improving curriculum, instruction, and assessment practices. The committee believed some types of professional development programs and activities may be most effective if they are developed and delivered at the state or regional level. These should be funded apart from the EPS Model. But many other types of professional development must take place at the local level, and funds for these should be included in the EPS Model. Few studies had examined the amount districts spend on professional development activities, with findings from these studies indicating that the amount of funds ranged from 2.0% - 3.6% of a school district's operating expenditures (Little, et al, 1987; Miller, Lord, & Dorney, 1994; Education Commission of the States, 1997). In 1996, the Maine Department of Education did not systematically collect data on district level professional development expenditures. The committee attempted to obtain this information through the school district survey, and the evidence from this survey indicated that the reporting districts were currently spending approximately $50 per student on professional development, an amount equivalent to approximately 2% of a district's professional staff salaries in the proposed EPS Model. The committee believed this amount was appropriate, and included a $50 per pupil cost factor in the EPS Model.

2. Instructional Leadership Support

As noted earlier, the committee believed existing levels of school level administration were appropriate for providing the administrative and managerial support in schools. But additional resources were needed for instructional leadership. Implementing the *Learning Results* would require leadership in developing coordinated curriculum not only within classrooms, but across grade levels and across schools within a district. In addition, developing and implementing comprehensive local assessment systems which would certify achievement of the *Learning Results* standards would require coordination, guidance and leadership. Local systems were in the best position to know what type of leadership was needed and at what grade and school levels (e.g., team leaders, department heads, curriculum and assessment coordinators,

etc.). The committee recommended a $20 per pupil amount in the EPS Model to provide the funds necessary to support schools' instructional leadership needs in implementing and assessing the *Learning Results* and standards of achievement.

3. Student Assessment

Implementing and documenting achievement of the *Learning Results* would also require schools to create comprehensive local assessment systems which contained multiple assessments and measures of student performance. Local school districts were also to be responsible for certifying that all students have achieved the *Learning Results* standards. The new Maine Educational Assessment (MEA) could be used in certifying achievement of the *Learning Results,* but only in a very few academic subject areas. Student achievement of a majority of the *Learning Results* standards would need to be certified at the local district level. Thus, it was imperative that the local assessment systems were valid, fair and defensible. National studies had found that the cost of developing and maintaining these types of assessment systems may vary a great deal, depending upon levels of local expertise, availability of appropriate commercially developed tests, and the time and staff resources needed to develop and validate new local assessment tools. Some estimates ranged from $37 per pupil to $298 per pupil (Monk, 1997; Picus, 1997; Stecher & Klein, 1997). The Committee reviewed the available data and concluded a $100 per pupil cost factor should be included in the proposed Maine EPS Model. The committee also believed this should be viewed as targeted funds. That is, school districts should develop a program for using these assessment funds, and once approved, the district could receive the state portion of funds allocated within this EPS component.

4. Technology

Quality technological resources were deemed essential in implementing the *Learning Results.* Coupled with library resources, technology resources were seen as key to equalizing access to worldwide learning resources for all Maine schools and students. Providing this access would require technology, ongoing maintenance of the technology, and, most importantly, the personnel and ongoing training support for teachers and students in the effective use of technology. The committee believed the initial and replacement costs of the technology hardware should be considered capital investments, and like new building construction, should be funded under a separate category of funding apart from the EPS Model. The committee, on-the-other-hand, did believe on-going training costs and support personnel should be part of the EPS model.

A subcommittee of the full committee studied these resource and personnel needs, and recommended that a $175 per pupil cost factor be included in the EPS model. The full committee endorsed this recommendation and included this cost factor in the proposed model. Further, although the specific technology support needs would vary across districts and schools, the committee believed the technology funds in the Maine EPS Model should be targeted for technological support of achieving the *Learning Results*. Accordingly, the committee recommended that school districts should develop an appropriate *Learning Results* technology plan in order to receive any state funds in this component of the EPS Model.

5. Co-curricular and Extra-Curricular Student Learning

The committee believed that co-curricular and extra-curricular participation by students was important to their academic, physical and social development. Although some of the empirical evidence was inconclusive, Marsh (1992) reported that participation in extra-curricular activities had positive effects on academic performance, and Barker and Grump (1964), Otto (1975), Goodlad (1984), and Coladarci and Cobb (1997), reported more positive self-esteem and academic self-concepts on the part of participants. Additionally, Mahoney and Cauns (1997) found a positive relationship between extra-curriculum participation and reduced dropout rates. Furthermore, the committee felt that both co-curricular and extra-curricular programs might provide more equitable opportunities for ***all*** children throughout Maine to achieve the *Learning Results* standards, particularly those standards in the visual and performing arts, and health and physical education.

Data collected from the school district survey revealed the net costs for the 1996-97 school year for co-curricular and extra-curricular activities grades K-8 was approximately $25, and $60 for grades 9-12. Accordingly, the initial EPS costs for this component were set at $25 for grades K-8 and $60 for grades 9-12. The committee also recommended that a more comprehensive study be completed to identify the actual costs of co-and extra-curricular programs which support achievement of the *Learning Results* and, that once these programs and costs were identified, the cost factors recommended in this EPS Model be adjusted accordingly.

E. District Services

1. System Administration Support

Management of essential programs and services required district wide administrative resources and services. In 1997, approximately 4% of local school district expenditures were devoted to system wide administrative and management services. The Committee believed this percentage was appropriate for what was needed to support the EPS Model. Thus, the Committee recommended the existing statewide average per pupil central administrative expenditures in the proposed model. This amounted to $225 per pupil for grades K-8 and $270 per pupil for grades 9-12.

2. Maintenance of Operations

The Committee concluded that the 1997 level of expenditures statewide in this category was sufficient to support implementation of the proposed EPS Model. Therefore, the proposed model included $625 per K-8 pupil and $825 per secondary pupil for maintenance and operation of school facilities.

F. Specialized School Adjustments

The committee believed five types of school level adjustments should be included in the EPS Model. These adjustments, where applicable, were to be based on school and/or school district characteristics and would not be distributed on a per pupil basis.

1. Vocational Education

The committee believed that vocational programs were essential, because in offering a hands-on, real-world approach to learning, they offered an alternative avenue needed by some students for achievement of the *Learning Results*. In 1996, approximately 12% of students in grades 9-12 were enrolled in some form of vocational program. There were a wide variety of such programs being offered throughout the state, and there was considerable variation in the manner in which these programs were delivered. The programs ranged all the way from logging to culinary arts to health related fields. While there were no definitive data or cost analyses available, it was clear that the cost of providing the wide range of programs varied considerably. In addition, all the programs were not available to all students.

The committee saw a need for a major study of vocational education, a study which would examine such issues as the equity of vocational opportunities across the state, and the

most effective organizational structures for program delivery. Until the new study was completed, the committee recommended that vocational education continue to be funded as a program cost.

2. Teacher Educational Attainment

One of the major findings from the analysis of higher and lower performing schools on the Maine Educational Assessment was in the area of teacher education. The evidence indicated a significant difference in the education levels of teachers in the two groups of schools. A significantly higher percent of the teachers in the high performing schools had earned a masters degree as compared to their colleagues in the lower performing schools. The committee recognized that pursuing an advanced education degree is just one among many useful approaches to continuing professional development, but the committee believed the evidence supported the value of formal, advanced education in improving the abilities of teachers in helping students achieve a high learning standard. Accordingly, the committee recommended an adjustment for school districts for the educational attainment of their teachers. Analysis of 1996 data on Maine teachers indicated that, on average, master's level teachers earned approximately 16% more than bachelor level degree teachers. The committee recommended school districts receive 1.16 times the average teacher salary in the EPS Model for every teacher in the district who had earned a masters degree from an accredited higher education institution.

3. Transportation

The cost of transporting children to and from school needed to be included in any EPS Model. In fiscal year 1997, expenditures statewide for school transportation were approximately $65.5 million, with an average cost per mile of approximately $1.83, and an average per pupil cost of approximately $330. However, a review of individual district profiles revealed considerable differences in transportation costs across the state, and even within the same regions and counties. Costs per mile ranged from a low of $.64 to a high of $3.83 per mile, and per pupil costs range from $50 per pupil to over $1,200 per pupil. In some cases, one district was spending twice as much as another transporting the same number of students equal distances. The committee concluded these efficiencies need to be examined and documented before any new method of funding transportation is implemented. Thus, the committee recommended a systematic, thorough study of school transportation be conducted. This study was to include a study of Maine districts, but also an examination of transportation practices found in other states

(e.g., those using fixed mileage rates, density rates, distance eligibility rates, etc.). Until this study was completed the committee recommended continuing the current practice of funding transportation as a program cost.

4. Small Schools

The committee believed the resources described in the EPS Model were sufficient for schools to achieve the *Learning Results*, and that the conversion of these resources into a per pupil operating cost calculation was the most appropriate way to insure greater equity. But the committee also recognized that for some very small schools the per pupil allotment could be insufficient. Economies of scale theory suggest these small schools may need additional resources to achieve the *Learning Results.* However, how many additional resources were needed was unclear. Little statewide data was available for analyzing even the existing cost of these small schools. Available data suggested that not all small schools would require additional resources. Thus, while the committee recognized that some school financial adjustments may be needed in the EPS Model, it was unable to determine the amount as part of the current plan. The committee recommended a separate study of Maine's small and isolated schools and small school districts to determine what, if any, adjustments should be made in the new funding model. Further, the committee recommended this study be patterned after a similar study conducted in Wyoming, in which along with analyzing expenditures, the study examined the actual use of resources in providing quality educational programs. Both expenditures and resource allocations should be examined before creating any small school or small district adjustment to the new EPS Model.

5. Debt Service

Debt service is a necessary cost of providing education in safe, healthy physical environments, but the EPS committee concluded that it should be funded separately from the EPS model. Further, the committee recommended that debt services costs continue to be funded and administered as a program cost.

Accountability System

LD1137 also required that the essential programs and services plan include a process for ensuring…"that schools are held accountable for student *Learning Results"*. The committee supported this requirement. Once certain conditions are in place, the committee saw an accountability system as a key to ensuring that all students are receiving equitable opportunities

to achieve the *Learning Results* standards. These conditions included a clear definition of the standards, sufficient resources for achieving the standards, and a realistic and fair system for measuring progress.

The new statewide tests, the Maine Educational Assessments (MEAs) were being designed to measure a portion of the *Learning Results* standards. They would provide a state-wide picture of student achievement across all schools and districts, and they would provide each district with information on how well their students were performing relative to an external standard held across the state. The committee believed performance on the new MEAs should be central to the accountability system. The committee recognized that the MEAs would be limited to assessing only a portion of what an individual student may know and be able to demonstrate, and that they not measure all subjects and grade levels; however, the new MEAs would be the only statewide, standardized, and equitable indicator for assessing schools and school districts. Other indicators, such as performance on local district assessments, dropout rates, etc., will be important, but the MEA should be the primary indicator for initially determining if a school was making adequate progress in helping ***all*** children achieve the *Learning Results* standards.

Development of a detailed accountability system was beyond the time, resources, and technical expertise of the EPS committee. Such a system would require substantial time for development and implementation, and it would require providing schools assistance and time for demonstrating performance on the statewide standards. However, the committee believed the system should include at least a three phase mechanism which supported local control while insuring statewide accountability. The committee recommended that if a school failed to show adequate progress in achieving the *Learning Results* over a three-year period, the following accountability plan be activated:

Phase I: The local school system be provided an opportunity to provide additional evidence from the local assessment system which, when combined with the MEA evidence, provided a more comprehensive assessment of achievement and performance of their students. If the comprehensive local assessment system had been validated, the district could use performance on these local assessments as complementary evidence of achievement of the *Learning Results*.

Phase II: If the local comprehensive assessment system had not been validated, or student performance on these local assessments was still below acceptable standards, the state would form a 3-5 member Assistance Team to conduct a thorough study of the local school. This study would include an analysis of resource allocation and recommend a plan for improving the use of these resources to support achievement of the *Learning Results*.

Phase III: School districts should be given time to implement the recommendations of the Phase II Assistance Team. However, if over time school level performance did not show adequate progress, the state should increase its level of involvement with a corresponding decrease in local control and autonomy. This state involvement could be in the areas of resource utilization, budget management, school administration, curriculum organization, etc.

The committee believed the proposed system reflected one of the committee's guiding premises; that is, that the accountability system be based on a "steering from a distance" principle. The state should insure that the statewide *Learning Results* standards were clear, are fairly measured, and that the resources were available for achieving these standards. Local communities should be free to decide how they will help all children achieve the standards, and only when it was clearly demonstrated that the standards were not being met should the state intervene and insure equity.

Timeline for Approval of the of EPS Model

The EPS committee issued its report to the State Board of Education, who reviewed it, and forwarded it to the Maine Legislature. Subsequently, the EPS models went through several phases of review and further development before passage in 2004. More specifically, the sequence of events were as follows:

1999: Essential Programs and Services Committee issued its report to the Maine State Board of Education (SBE). The SBE reviewed it and forwarded its recommendation to the Joint Standing Committee for Education and Cultural Affairs of the Maine Legislature.

2000: The Legislature endorsed the EPS concept as a model for inclusion in Maine's school funding formula, and requested additional development of the model.

2002: The Legislature endorsed the specific components of the EPS model, and requested the development of a transition plan.

2004: EPS legislation and a new funding formula was passed by the Legislature and signed into law.

2005: The school funding law was change; and increased state share requirements legislation was passed and signed into law (LD1).

2006: LD1, which included the EPS model was implemented beginning with FY2006.

Revisions to EPS Model Before FY2006

Between the release of the 1999 report and the beginning of FY2006, several components of the EPS model were updated, revised, and approved by the Legislature. These are described in this section of the report.

A School Personnel

1. Staff-to-student ratios:

No changes were made in the original recommendations prior to FY2006 implementation.

2. Staff salaries:

The SBE and the legislature concluded that the EPS personnel salary costs should take into consideration three factors: (a) education levels; (b) experience levels; and (c) regional cost differences. To account for education and experience levels, salary matrices were developed for each category of school personnel in the EPS Model. For example, all classroom teachers were classified in terms of categories of degree levels and experience. Then, the state average salary for each cell of the matrix was calculated, and the first matrix to be used for teachers, counselors, and nurses beginning FY2006 appears in Figure 2. Similar matrices were developed for all personnel groups.

Figure 2: FY2006 Teacher Salary Matrix

Experience Category (Years of Experience)	Education Category				
	BA Only	BA + 15 or +30	MA or MA + 15	MA + 30 or adv cert	Doc.
0	1.00	1.04	1.16	1.26	1.3
1-5	1.08	1.13	1.25	1.35	1.38
6-10	1.43	1.47	1.59	1.69	1.72
11-15	1.43	1.47	1.59	1.69	1.72
16-20	1.61	1.66	1.78	1.87	1.91
21-25	1.72	1.76	1.88	1.98	2.01
26-30	1.76	1.81	1.93	2.02	2.06
31+	1.80	1.84	1.96	2.06	2.09

These matrices were used in calculating each school district's EPS salary allocations. Further, it was determined that the EPS salary allocation for each school district should reflect the existing distribution of staff according to education and experience levels. For example, if in a particular school district 30% of the teachers held master's degrees and 6-10 years experience, and according to the EPS formula this school district was given an allocation of 100 teachers, then the salary allocation for 30 teachers should be 1.59 times the beginning teacher EPS salary.

Once calculated for all personnel, the salary allocations were adjusted for regional differences. Statewide average salaries were used in the salary matrix calculations for each district. However, existing salaries in the school districts across the state varied above and below the statewide average as a result of differences in the cost of living and competition in different regions of the state. Thus, a regional salary adjustment was developed and applied to each school district's salary allocation.

The EPS regional adjustment was based on actual teacher salary differences found across the state. For purposes of calculating the EPS regional adjustment, SAUs were combined into 35 Labor Market Areas (LMAs) throughout Maine. A Labor Market Area as defined by the Maine Department of Labor, represented an area where people can both live and work within a reasonable commuting distance. A single regional salary adjustment was calculated for each LMA, and that regional adjustment was applied to all SAUs in the LMA. Specifically, the calculated salary and benefits costs of EPS recommended school personnel of each SAU in the LMA were multiplied by the regional adjustment.

The regional adjustment for each LMA was calculated in three steps. First, an average teacher salary was calculated for each LMA. Some of the differences in average teacher salaries were due to differing years of experience and education level rather than true regional differences in the labor . Therefore, next, the average teacher salary in each LMA was adjusted for the level of education and experience of the teachers. This minor adjustment utilized a widely-used statistical technique known as a regression analysis to estimate what the average salary would be if the experience and education levels in the LMA were equal to the state average, but the salary scales were the same as in the actual LMA. Finally, the adjusted average salary for the LMA was divided by the state average teacher salary to get the LMA regional adjustment. The original LMA regional adjustment matrix appears in Figure 3 on the next page.

Figure 3: Regional Adjustment By Labor Market Area (2004-05 Data)

	Labor Market Area (LMA)	Regional Adjustment
1	Kittery-York	1.06
2	Sanford	1.03
3	Biddeford	1.09
4	Portland	1.08
5	Bath-Brunswick	1.02
6	Boothbay Harbor	1.03
7	Sebago Lake*	0.94
8	Lewiston-Auburn	0.98
9	Rockland	1.00
10	Norway-Paris*	0.94
11	Stonington	0.95
12	Augusta	0.95
13	Waterville	0.97
14	Belfast	1.01
15	Bucksport	0.94
16	Jonesport-Milbridge	0.84
17	Bangor	1.02
18	Machias-Eastport	0.84
19	Dexter-Pittsfield	0.94
20	Ellsworth-Bar Harbor	0.93
21	Outer Bangor	0.89
22	Rumford	0.93
23	Lincoln-Howland	0.86
24	Farmington	0.96
25	Calais	0.96
26	Patten-Island Falls*	0.88
27	Millinocket-East Millinocket*	0.88
28	Houlton*	0.88
29	Skowhegan	1.03
30	Greenville*	0.95
31	Dover-Foxcroft*	0.95
32	Presque Isle-Caribou	0.90
33	Van Buren*	0.99
34	Fort Kent*	0.99
35	Madawaska*	0.99
	Maine	**1.00**

*Due to the small number of teachers in each of these LMA, data was combined into the following groups: 7/10; 26/27/28; 30/31; 33/34/35

This matrix was implemented in FY2006 by adjusting each school district's salary allocation as determined by the application of the education and experience levels matrices described above. For example, if a school district's total salary allocation was $500,000, based on education and experience matrices described above, and the school district was located in LMA 4, then the total salary allocation was multiplied by 1.08. If, on the other-hand, the school district was located in LMA 15, then the total EPS salary allocation was multiplied by 0.94.

These salary adjustments were designed to reflect more accurately the actual salary costs found in Maine's school districts. The original EPS committee recommendation accounted only for master's degree level education. It did not account for: (1) additional education levels (e.g., BA +15 credits, MA +15 credits, etc.); (2) length of experience (e.g., 5-10 years experience, 11-15 years experience, etc.); and (3) differences in salary costs found across the state. The development of salary matrices and regional LMA were designed to recognize differences and to take them into consideration in calculating a school district's EPS salary allocation.

3. Substitute Teachers

Using more updated survey information, the per diem rate for FY 2006 was set at $62.

4. Personnel Benefits

Using more recent MDOE data, the benefits rates were increased for FY2006, and broken down in one for teachers and support staff (17%) and one for administrative staff (12%).

B. Supplies and Equipment

A Consumer Price Index (CPI) was applied to the original EPS rates resulting in the application of the amounts of $295 per pupil (K-8) ad $408 per pupil (9-12), beginning in FY2006.

C. Resources for Specialized Student Populations

1. Special Needs Students

The Legislature requested a review of the EPS special education component, and to accomplish this task, the SBE established an advisory task force and charged it to review the statewide incidence rates and costs. The advisory task force, consisting of ten members representing various stakeholder groups, reviewed state and national evidence, and special education funding models used in other states, and recommended the model appearing in Figure 4.

Figure 4: Recommended Special Education Funding Model

Special Needs Students

- 2.25 weighted pupil count, up to a maximum of 15% of a district's enrollment.
- Adjustments:
  a. Prevalence rate above 15% calculated at 1.38 additional weighted pupil count.
  b. Districts with fewer than 20 special needs pupils.
  c. High-cost in-district pupils (3x statewide special education EPS rate).
  d. High-cost out-of-district pupils (4x statewide special education EPS rate).

The model was recommended by SBE, reviewed and approved by the Legislature, and implemented beginning FY2006.

2. Limited English Proficiency (LEP) Students

The State Board of Education requested that the Maine Department of Education conduct an empirical analysis of expenditures by school districts for LEP. Based on this analysis, the SBE recommended: (1) a three level weighting system for LEP students; (2) annual LEP testing of all eligible students; and (3) a five year limit on LEP status. The legislature approved the weighting system and annual testing recommendations, beginning FY2006. The three level system appears in Figure 5.

Figure 5: Recommended LEP Allocation Weights

	Number of LEP Students		
	1-15	**16-250**	**251+**
LEP Weight	**1.5**	**1.3**	**1.6**

3. Disadvantaged Youth

As described earlier, the EPS committee recommended a weight of 1.02 for all students who qualified for free or reduced lunches. The SBE reviewed this recommendation, and evidence from other states, and forwarded to the Joint Standing Committee and Cultural Services a revised recommendation of 1.05. The Education Committee concluded, after considerable deliberations, that even though there was no clear empirical evidence on what the weight should be, the weight should be established at 1.15. This was the weight implemented in beginning FY2006.

4. Primary K-2 Grade Children

There were no changes made to the original EPS committee recommended weight of 1.10 for all K-2 grade students.

D. Specialized Services

No changes were made to the EPS committee recommendations for the professional development , instructional leadership support, and student assessment EPS components. Based on a review of school district reported expenses, and in light of the implementation of the Maine Learning Technology Initiative (MLTI) which provided laptops to all middle school students and teachers, at State expense, the EPS technology component rates were adjusted for FY2006. The K-8 rate was set at $83 per pupil and the 9-12 rate was set at $252 per pupil.

The EPS co-and extra-curricular rates were also revised for FY2006. A second school district survey provided updated school district reported expenditures for co- and extra-curricular programs. The SBE concluded that while one might reasonably argue that all co-curricular activities might be related to achieving Learning Results, it was difficult to argue that most extra-curricular activities were necessary to achieve the Learning Results. Thus, the SBE recommended, and the Legislature approved, establishing the EPS co-curricular rate at 100% of reported expenditures, and the EPS extra-curricular rate at 10% of reported expenditures. Thus, the K-8 rate was set at $28 per pupil and the 9-12 rate was set at $97 per pupil, beginning FY2006.

E. District Services

The System Administration Support and the Maintenance of Operations components were updated to reflect more current expenditure levels. For System Administration the grade K-8 cost was set at $341 and for grades 9-12 it was set at $338 for FY2006. The FY2006 rates for Maintenance and Operations were set at $907 for grades K-8 and $1078 for grades 9-12.

F. Specialized School Adjustments

1. Vocational Education

   No changes were made to the original EPS committee recommendation

2. Teacher Educational Attainment

   The original EPS committee recommendation was replaced with salary matrices and LMAs described earlier.

3. Transportation

   Prior to implementing EPS in FY 2006, the Education Committee requested that MEPRI review the empirical evidence on transportation costs and propose a EPS cost component. The resulting proposal was approved by the Legislature, and was as follows:

Beginning in 2005-06, SAU transportation cost allocations were determined based on these factors:

- A pupil density index (i.e., number of resident pupils and number of class 1-5 road miles within SAU).
- Per-pupil transportation cost allocation based on lower or reported transportation expenditures + 10% or predicted per-pupil costs + 10%.
- Per-pupil transportation cost allocation could not be lower than 75% of established costs of most recent fiscal year (or less than 90% in the case of SADs and CSDs with 1,250 or more pupils).
- Adjustments for:
    1. Out-of-district special education transportation
    2. Vocation education transportation
    3. Transportation of homeless pupils
    4. Ferry costs
    5. Island SAU costs

In approving the transportation component of EPS, the Joint Committee on Education and Cultural Affairs of the Maine State Legislature formally requested an additional review in 2007. Based on this request, MEPRI implemented a four phase review process. These four phases were:

1. The collection of additional transportation related information from SAUs.
2. An analysis of additional cost calculation models.
3. A review of the 10% adjustment to predicted and actual per- pupil expenditures.
4. The identification of recommendations for any needed legislation.

Modifications based on this review were reviewed and approved by the Legislature for FY2007, and these modifications appear in the Updates section of this report.

4. Small Schools

The SBE requested the Maine Education Policy Research Institute (MEPRI) conduct an empirical analysis of per pupil expenditures for small isolated schools. This analysis resulted in a series of recommendations regarding definitions for qualifying as a small isolated school and EPS allocations. These appear in Figure 6 on the next page.

Figure 6: Isolated Small Schools Adjustment

Isolated Small Elementary Schools	
QUALIFICATIONS:	a. Fewer than 15 students per grade level. b. Number of school options available fewer than 5. c. Nearest school is more than 10 miles away.
ADJUSTMENT:	a. 10% transition adjustment to K-8 EPS rate.
Isolated Small Secondary Schools	
QUALIFICATIONS:	a. Fewer than 200 students per school. b. Distance from furthest point in the district to nearest high school is at least 18.5 miles. c. Distance between the high school and nearest high school is more than 10 miles.
ADJUSTMENT:	a. Student – teacher ratios reduced to 11:1 for schools with fewer than 100 students, and 13:1 for schools with 100-199 students.
Island Schools	
QUALIFICATIONS:	a. Islands operating schools or transporting students to mainland schools.
ADJUSTMENT:	a. Isolated small secondary schools student – teacher adjustment for high schools with fewer than 200 students. b. 10% transition adjustment in K-8 EPS rate for elementary schools. c. 13% - 26% adjustment to EPS operating and maintenance costs, depending upon school level and size, for islands operating schools. d. Transportation adjustment equal to approved transportation expenditures.

5. Debt Service

No change was made to the original EPS committee recommendation.

Review of EPS Components

LD1, which included the EPS model, also established in law a three year cycle for the continuous review of all the EPS components. This review schedule was as follows:

Essential Programs and Services – Three Year Review Cycle

2006-07	2009-10	2012-13
1. Student to staff ratios		4. Transportation
2. Salary and benefit matrices		5. Small school adjustments
3. Labor market regional adjustment		6. Gifted and talented
2007-08	**2010-11**	**2013-14**
1. CTE- career & tech. education		4. System administration
2. Special education		5. Operations & maintenance of plants
3. Specialized student populations		
2008-09	**2011-12**	**2014-15**
1. Professional development		4. Leadership support
2. Student Assessment		5. Co-curricular & extra-curricular activities
3. Technology		6. Supplies & equipment

Updates

The charts which follow summarize the original EPS components, and any modifications made beginning FY2006. Additionally, the charts summarize the results of required reviews, and provide a description of the current method of calculating each EPS component.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Classroom Teachers** Grades K-5 = 1 to 17 Grades 6-8 = 1 to 16 Grades 9-12 = 1 to 15 ➢ Ratios were based on a review of existing evidence. No significant differences in ratios were found between higher and lower performing schools. ➢ EPS committee lowered the existing ratios found in schools.	**2007 Review** A review of empirical evidence in higher performing schools indicated average ratios and ranges in ratios as follows: Grades K-5 = 14.6 (10-21) Grades 6-8 = 13.8 (11-16) Grades 9-12 = 14.4 (9-19) Similar ranges in ratios were found for both higher and lower performing schools. No legislative changes were made in the original ratios. **2010 Review** A similar review in 2010 yielded the following average ratios and ranges of ratios: Grades K-5 = 13.3 (6-19) Grades 6-8 = 13.4 (10-16) Grades 9-12 = 13.5 (11-16) Similar ranges in ratios found for both higher and lower performing schools. No legislative changes were made in the original ratios.	Grades K-8 = 1 to 17 Grades 6-8 = 1 to 16 Grades 9-12 = 1 to 15	Attending enrollments broken into three grade configurations, and divided by EPS ratio definition.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Education Technician** Grades K-8 = 1 to 100 Grades 9-12 = 1 to 250 ➢ Ratios were based on task force and commission recommendations and evidence from EPS survey.	**2007 Review** A review of empirical evidence in higher performing schools indicated average ratios and ranges of ratios as follows: Grades K-8 = 79.6 (51-514) Grades 9-12 = 128.7 (77-396) Similar ranges in ratios were found for both higher and lower performing schools. No legislative changes were made in the original ratios. **2010 Review** A similar review in 2010 yielded the following average ratios and ranges of ratios: Grades K-8 = 138.0 (5-924) Grades 9-12 = 180.7 (5-2260) Similar ranges in ratios found for both higher and lower performing schools. No legislative changes were made in the original ratios.	Grades K-8 = 1 to 100 Grades 9-12 = 1 to 250	Attending enrollments broken into two grade configurations, and divided by EPS ratio definition.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Guidance** Grades K-8 = 1 to 100 Grades 9-12 = 1 to 250 Ratios were based on task force and commission recommendations and evidence from EPS survey.	**2007 Review** A review of empirical evidence in higher performing schools indicated average ratios and ranges of ratios as follows: Grades K-8 = 448.9 (159-759) Grades 9-12 = 204.7 (118-334) Similar ranges in ratios were found for both higher and lower performing schools. No legislative changes were made in the original ratios. **2010 Review** A similar review in 2010 yielded the following average ratios and ranges of ratios: Grades K-8 = 267.6 (156-401) Grades 9-12 = 182.7 (111-360) Similar ranges in ratios found for both higher and lower performing schools. No legislative changes were made in the original ratios.	Grades K-8 = 1 to 350 Grades 9-12 = 1 to 250	Attending enrollments broken into two grade configurations, and divided by EPS ratio definition.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Library Personnel** A. Librarian Grades K-12 = 1 to 800 B. Media Technician Grades K-12 = 1 to 500 ➢ Ratios were based on evidence and task force recommendations.	**2007 Review** A review of empirical evidence in higher performing schools indicated average ratios and ranges of ratios as follows: A. Librarian Grades K-12 = 523 (98-1467) B. Media Technicians Grades K-12 = 459 (64-1085) Similar ranges were found for both higher and lower performing schools. No legislative changes were made in the original ratios. **2010 Review** A review of empirical evidence in higher performing schools indicated average ratios and ranges of ratios as follows: A. Librarian Grades K-12 = 587 (161-1930) B. Media Technician Grades K-12 = 488 (70-1021) Similar ranges were found for both higher and lower performing schools. No legislative changes were made in the original ratios.	A. Librarian Grades K-12 = 1 to 800 B. Media Technician Grades K-12 = 1 to 500	K-12 attending enrollment, divided by the EPS ratio definition.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **School Administrative Staff** Grades K-8 = 1 to 305 Grades 9-12 = 1 to 315 ➢ Ratios were based on task force and commission recommendations and MDOE evidence.	**2007 Review** A review of empirical evidence in higher performing school indicated average ratios and ranges of ratios as follows: Grades K-8 = 182.9 (159-408) Grades 9-12 = 277.4 (80-489) Similar ranges in ratios were found for both higher and lower performing schools. No legislative changes were made in the original ratios. **2010 Review** A similar review in 2010 yielded the following average ratios and ranges of ratios: Grades K-8 = 249.5 (40-592) Grades 9-12 = 271.8 (133-817) Similar ranges in ratios found for both higher and lower performing schools. No legislative changes were made in the original ratios.	Grades K-8 = 1 to 305 Grades 9-12 = 1 to 315	Attending enrollments broken into two grade configurations, and divided by EPS ratio definition.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Health Personnel** Grades K-12 = 1 to 800 ➢ Ratio was based on evidence and task force recommendation	**2007 Review** A review of empirical evidence in higher performing school indicated average ratios and ranges of ratios as follows: Grade K-12 = 534 (160-1467) Similar ranges in ratios found for both higher and lower performing schools. No legislative changes were made in the original ratios. **2010 Review** A review of empirical evidence in higher performing school indicated average ratios and ranges in ratios as follows: Grades K-12 = 573 (126-1394) Similar ranges in ratios found for both higher and lower performing schools. No legislative changes were made in the original ratios.	Grades K-12 = 1 to 800	K-12 attending enrollment, divided by EPS ratio definition.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Clerical Staff** Grades K-12 = 200 ➢ Ratio was based on task force and commission recommendation	**2007 Review** A review of empirical evidence in higher performing schools indicated average ratios and ranges of ratios as follows: Grade K-12 = 169 (53-387) Similar ranges in ratios found for both higher and lower performing schools. No legislative changes were made in the original ratios. **2010 Review** A similar review in 2010 yielded the following average ratios and ranges of ratios: Grades K-12 = 163 (20-363) Similar ranges in ratios found for both higher and lower performing schools. No legislative changes were made in the original ratios.	Grades K-12 = 1 to 200	K-12 attending enrollment, divided by EPS ratio definition.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Substitute Teachers** Results from the EPS school district survey were used to update the original definition to: 0.5 days per pupil @ $62 per day.	No formal review has been made of substitute teacher rates. The FY2006 rate has been updated by CPI each year.	0.5 days per pupil @$72 per day.	K-12 attending enrollment, multiplied by $36.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Teacher Education Attainment** Beginning with FY2006 the original EPS recommended component was replaced with the salary matrices described on page 24 & 25.	**2007 Review** New matrices were calculated using the original methodology. The new matrices were implemented for FY2008 **2010 Review** New matrices were calculated using the original methodology. The new matrices were implemented for FY2011	Copies of the current matrices appear in the next 2 pages.	Salaries for EPS staff component allocations are calculated using the FY2011 matrices.

Teacher & Counselor Salary Matrix

	Education Category				
Years of experience	**BA only**	**BA+15 BA +30**	**MA or MA+15**	**MA+30 or CAS**	**Doctorate**
<1	1.00	1.04	1.16	1.24	1.25
1-5	1.07	1.11	1.23	1.31	1.32
6-10	1.22	1.27	1.38	1.47	1.47
11-15	1.39	1.44	1.55	1.63	1.64
16-20	1.56	1.60	1.72	1.80	1.81
21-25	1.68	1.73	1.84	1.93	1.93
26-30	1.74	1.79	1.90	1.98	1.99
31+	1.76	1.80	1.92	2.00	2.01

Education Technician Salary Matrix

Years of Experience	**Tech I**	**Tech II**	**Tech III**	**Media Tech I**	**Media Tech II**	**Media Tech III**
<1	0.84	1.00	1.13	0.90	1.02	1.16
1-5	0.88	1.04	1.18	0.94	1.06	1.21
6-10	0.95	1.12	1.25	1.02	1.14	1.28
11-15	10.4	1.21	1.34	1.11	1.22	1.37
16+	1.06	1.22	1.35	1.12	1.24	1.38

School Administrator Salary Matrix

	School Enrollment							
School Enrollment	**1 to 124**	**125 to 174**	**175 to 249**	**250 to 349**	**350 to 499**	**500 to 699**	**700 to 999**	**1000+**
1. A. Principals School Enrollment Ratio	.88	.92	.96	1.01	1.05	1.11	1.18	1.24
1. B. Assistant Principals School Enrollment Ratio	.70	.73	.78	.83	.87	.93	.99	1.06

Health Salary Matrix

Years of Experience	Health Salary Factor
<1	**0.85**
1-5	0.93
6-10	0.94
11-15	1.06
16+	1.11

Clerical Staff Salary Matrix

Years of Experience	Secretaries Salary Factor
<1	1.00
1-5	1.08
6-10	1.18
11-15	1.27
16+	1.30

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Personnel Benefits** Benefits percentages beginning in FY 2006 were: 17% = teacher and support staff 12% = administrative staff	**2007 Review** A review of benefits expenditures resulted in approval of the following beginning in: FY2008 19% = teacher and some support staff 36% = ed. technicians 14% = school administrators 29% = clerical staff **2010 Review** A review of benefits expenditures resulted in approval of the following beginning in FY2011. 22% = teacher and some support staff 33% = ed. technicians 18% = school administrators 32% = clerical staff	22% = teacher and some support staff 33% = ed. technicians 18% = school administrators 32% = clerical staff	EPS staff salary allocations are multiplied by the appropriate benefits rate.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Labor Market Area Salary Adjustment** Beginning in FY2006 each school district's salary allocation was adjusted for labor differences according to the matrix which appears on page 27	**2007 Review** The Labor Market analysis was updated and the results appear in the table on the next page. The Education Committee also reviewed information about the federal government changes to 31 labor market regions for Maine. No legislative changes were made in the original LMAs. **2009 Review** The Labor Market analysis was updated and the results appear in the table on the next page. No legislative changes were made in the original LMAs.	LMAs approved beginning in FY2006	EPS salaries, benefits and substitutes are multiplied by the appropriate LMA factor.

Calculated Regional Adjustment Change
By Labor Market Area 2004-05 to 2008-09

Labor Market Area (LMA)	Regional Adjustment 2008-09 Data	Regional Adjustment 2006-07 Data	Regional Adjustment 2004-05 Data	Change 2004-05 to 2008-09
1. Kittery - York	1.06	1.07	1.06	~
2. Sanford	1.02	1.04	1.03	-.01
3. Biddeford	1.09	1.09	1.09	~
4. Greater Portland	1.09	1.08	1.08	+.01
5. Bath - Brunswick	1.03	1.04	1.02	+.01
6. Boothbay Harbor	1.05	1.02	1.03	+.02
7. Sebago Lake*	0.93	0.94	0.94	-.01
8. Lewiston - Auburn	0.96	0.97	0.98	-.02
9. Rockland	1.00	1.01	1.00	~
10. Norway - Paris*	0.93	0.94	0.94	-.01
11. Stonington	0.94	0.98	0.95	-.01
12. Augusta	0.94	0.96	0.95	-.01
13. Waterville	0.96	0.97	0.97	-.01
14. Belfast	0.99	1.01	1.01	-.02
15. Bucksport	0.90	0.92	0.94	-.04
16. Jonesport - Milbridge	0.83	0.84	0.84	-.01
17. Bangor	1.02	0.99	1.02	~
18. Machias - Eastport	0.83	0.81	0.84	-.01
19. Dexter - Pittsfield	0.96	0.96	0.94	+.02
20. Ellsworth - Bar Harbor	0.91	0.93	0.93	-.02
21. Outer Bangor	0.89	0.89	0.89	~
22. Rumford	0.92	0.92	0.93	-.01
23. Lincoln - Howland	0.84	0.85	0.86	-.02
24. Farmington	0.96	0.95	0.96	~
25. Calais	0.98	0.97	0.96	+.02
26. Patten - Island Falls*	0.87	0.90	0.88	-.01
27. Millinocket - East Millinocket*	0.87	0.90	0.88	-.01
28. Houlton*	0.87	0.90	0.88	-.01
29. Skowhegan	1.05	1.02	1.03	+.02
30. Greenville*	0.94	0.95	0.95	-.01
31. Dover - Foxcroft*	0.94	0.95	0.95	-.01
32. Presque Isle - Caribou	0.89	0.90	0.90	-.01
33. Van Buren*	0.98	1.00	0.99	-.01
34. Fort Kent*	0.98	1.00	0.99	-.01
35. Madawaska*	0.98	1.00	0.99	-.01
Maine	1.00	1.00	1.00	~

* Due to the small number of teachers in each of these LMA, data was combined into the following groups: 7/10; 26/27/28; 30/31; and 33/34/35.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Supplies and Equipment** The amounts were inflated by CPI for FY2006. The cost rates were: Grades K-8 = $295 Grades 9-12 = $408	**2009 Review** A review of the expenditures indicated EPS cost component rates were approximately 30-40% higher than actual expenditures. No legislative changes were made in the EPS allocations.	Grades K-8 = $337 per pupil. Grades 9-12 = $466 per pupil.	Attending enrollment multiplied by EPS allocation rate.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Special Needs Children** • 2.25 weighted pupil count, up to a maximum of 15% of a district's enrollment. • Adjustments: a. Prevalence rate above 15% calculated at 0.38 additional weighted pupil count. b. Districts with fewer than 20 special needs pupils. c. High-cost in-district pupils (3x statewide special education EPS rate). d. High-cost out-of-district pupils (4xstatewide special education EPS rate).	**2008 Review** A review of special education expenditures by school districts resulted in a recommended new weighted pupil count of 2.21. Additionally it was recommended that the Maintenance of Effort adjustment be determined using per pupil expenditures. The recommendations were adopted by the Maine commissioner of education and implemented beginning in FY2009.	2.21 additional weighed pupil count, up to a maximum of 15% of a district's enrollment. • Adjustments a. Prevalence rate above 15% calculated at 0.38 additional weighted pupil count. b. Districts with fewer than 20 special needs pupils. c. High-cost in-district pupils (3x statewide special education EPS rate). d. High-cost out-of-district pupils (4xstatewide special education EPS rate). Maintenance Effort adjustment calculated on basis of per pupil expenditures.	FY2011 definition applied to school district's resident pupil enrollment count.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Limited English Proficiency (LEP) Students** Beginning in FY2006 the LEP weights were as follows: 1.5 for 1-15 LEP pupils 1.3 for 16-250 LEP pupils 1.6 for 251 or more LEP pupils.	**2008 Review** A review of LEP expenditure resulted in the calculation of new weights as follows: 1.7 for 1-15 LEP pupils 1.5 for 16-250 LEP pupils 1.3 for 251 or more LEP pupils Legislative actions resulted in the following weights being implemented in FY2009: 1.7 for 1-15 LEP pupils 1.5 for 16-249 LEP pupils 1.525 for 250 or more LEP pupils	Weights as follows: 1.7 for 1-15 LEP pupils 1.5 for 16-250 LEP pupils 1.525 for 251 or more LEP pupils	LEP resident pupils multiplied by weights

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Disadvantaged Youth** Weights per pupil allocation of 1.15 for all pupils eligible for free or reduced lunches in school district.	**2008 Review** A review of school district expenditures and academic performance indicated higher poverty schools were spending, on average, only 6% more to achieve same proficiency level as lower poverty schools. No legislative changes were made in original weight.	Weighted per pupil allocation of 1.15 for all free or reduced lunch eligible pupils in the school district.	Previous year Title I expenditures removed from base EPS per pupil allocation, and this allocation is used to add 15% to the per pupil allocation for every qualified resident pupil in school district.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Grades K-2 Children** Weighted per pupil allocation of 1.10 for all K-2 grade students in school district.	**2007-08 Review** No Change	Original per pupil allocation of 1.10 for all K-2 grade students.	1.10 weighted per pupil allocation for all K-12 grade resident students.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Gifted and Talented Pupils** Beginning FY2006 gifted and talented pupils are funded as a program cost of allowable costs.	**2008 Program Review** A gifted and talented EPS advisory committee recommended adoption of a weighted pupil count for students identified as academically and/or artistically gifted and talented. Further it recommended that this EPS component be designated as targeted funds. No legislative action was taken on these recommendations.	Defined as a program cost of allowable costs.	Continues to be calculated as a program of allowable costs.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Professional Development** $50 per K-12 pupil	**2009 Review** A review of expenditures indicated EPS cost component rate was approximately 25% higher than actual expenditures. No legislative changes were made in the EPS allocation.	CPI applied annually to update amount. For FY2011: Grades K-12 = $57 per pupil	Attending enrollment multiplied by EPS allocation rate.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Instructional Leadership Support** $20 per K-12 pupil	**2009 Review** A review of expenditures indicated EPs cost component rate was approximately equal to actual expenditures. No legislative changes were made in the EPS allocation.	CPI applied annually to update amount. For FY11: Grades K-12 $24 per pupil	Attending enrollment multiplied by EPS allocation rate.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Student Assessment** $100 per K-12 pupil	For FY2007 the EPS component was re-named Standards Based Implementation component and based on school district reported expenditures the rates were adjusted to: Grades K-12 = $79 per pupil. For FY2008 the rate was adjusted as follows: Grades K-12 = $40 per pupil. **2009 Review** A review of expenditures indicated the EPS cost component rate was approximately 40% higher than actual expenditures. No legislative changes were made in the EPS allocation.	CPI applied annually to update amount for FY2011: Grades K-12 = $42 per pupil.	Resident enrollment multiplied by EPS allocation rate.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Technology** The original EPS rate of $175 per K-12 pupil was modified for FY2006 as follows: Grades K-8 = $83 per pupil Grades 9-12 = $252 per pupil	**2009 Review** A review of expenditures indicated the EPS cost component rates were for: Grades K-8: Expenditures approximately double the EPS allocation rate. Grades 9-12: Allocation approximately 36% higher than actual expenditures. No legislative changes were made in the EPS allocation.	CPI applied annually to update amounts. For FY2011: Grades K-8 = $95 per pupil. Grades 9-12 = $288 per pupil.	Resident enrollment multiplied by EPS allocation rate.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Co-and Extra-curricular** Revised for FY2006 to partially reflect expenditures. Rates were: Grades K-8 = $28 Grades 9-12 = $97 These rates were established beginning in FY2006 to recognize 100% of co-curricular costs and 10% of extra-curricular costs.	**2009 Review** A review of expenditures indicated the EPS cost component rates were for: Grades K-8: Similar expenditure and allocation rate Grade 9-12: Expenditures approximately 50% higher than the allocation rate. No legislative changes were made in the EPS allocation.	CPI applied annually to update amounts. For FY2011: Grades K-8 = $33 per pupil Grades 9-12 = $111 per pupil.	Resident enrollments multiplied by EPS allocation rates

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **System Administrative Support** Updated for FY2006 for actual expenditures. Cost rates were set at: Grades K-8 = $341 Grades 9-12 = $338	**2008 Review** A review of expenditures indicated they were as follows: Grades K-8 = $372 per pupil expenditure Grades 9-12 = $333 per pupil expenditures. Passage of the school district reorganization law re-established the EPS cost component rate as follows: Grade K-12 = $204 per pupil	CPI applied annually to update amounts for FY2011: Grades K-12 = $215 per pupil.	Attending enrollments multiplied by EPS allocation rates.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Maintenance and Operations** Updated for FY2006 for actual expenditures. Cost rates were set at: Grades K-8 = $907 Grades 9-12 = $1078	**2008 Review** A review of expenditures indicated they were as follows: Grades K-8 = $1150 per pupil Grades 9-12 = $1312 per pupil Passage of the school district reorganization law reduced the EPS cost component rates as follows for FY2009: Grades K-8 = $935 per pupil Grades 9-12 = $1111 per pupil	CPI applied annually to update amounts for FY2011: Grades K-8 = $986 per pupil Grades 9-12 = $1172 per pupil	Attending enrollments multiplied by EPS allocation rates

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Vocational Education** Beginning FY2006, CTE programs were funded as a program cost of allowable costs.	**2006 Review** Beginning in FY2006 an EPS advisory committee reviewed CTE programs and expenditures, and recommended a per pupil rate in FY2008. No legislative action was taken on this recommendation.	Defined as a program cost of allowable costs.	Continues to be calculated as a program cost of allowable costs.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Transportation** A pupil density index cost allocation based on lower or reported transportation expenditures + 10% or predicted per-pupil costs + 10%. Cost allocation not to be lower than 75% of established costs of most recent fiscal year (or less than 90% in the case of SADs and CSDs with 1,250 or more pupils). Adjustments for: 1. Out-of-district special education transportation 2. Vocation education transportation 3. Transportation of homeless pupils 4. Ferry costs 5. Island SAU costs	**2006 Review** Further analysis by MEPRI resulted in the following adjustments: 1. The Density model or Combined Density and Odometer Model is applied to each SAU, depending on whichever model is more beneficial to the SAU relative to the most recent transportation expenditures. 2. An SAU's transportation allocation is adjusted for unique circumstances. These are: a. Out-of-district special education transportation b. Vocation education transportation c. Transportation of homeless pupils d. Ferry costs e. Island SAU costs 3. Beginning in FY2007 the 90% minimum rule, and a 5% maximum rule was applied to all school districts.	1. The Density model or Combined Density and Odometer Model is applied to each SAU, depending on whichever model is more beneficial to the SAU relative to the most recent transportation expenditures. 2. An SAU's transportation allocation is adjusted for unique circumstances. These are: f. Out-of-district special education transportation g. Vocation education transportation h. Transportation of homeless pupils i. Ferry costs j. Island SAU costs 3. Beginning in FY2007 the 90% minimum rule, and a 5% maximum rule was applied to all school districts.	Calculated according to FY2011 definition given in immediate left column.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Small Schools** As described on page 30, beginning FY2006.	**2007 Review** At the request of the Education Committee, MEPRI analyzed expenditures in small schools, and found that per pupil expenditures for higher performing elementary schools were higher. Accordingly, for FY2008 the cost rates were changed. Additionally, small school special education adjustments were established, based on empirical evidence. These FY2008 appear on pages 62-63. **2010 Review** Empirical evidence indicated new cost rates, and an average distance of 6.6 miles between elementary schools statewide. No legislative changes were made in the EPS allocation.	Same as shown on pages 63-64.	Current EPS definitions used to identify isolated small schools, and the current cost adjustments are applied for these schools.

Isolated Small School Adjustments to EPS Allocations

1. Isolated Small School Adjustments

A. Isolated Small Elementary Schools

K-8 Schools:

QUALIFICATIONS:

a. Fewer than 15 students per grade level.
b. Nearest school is more than 8 miles away.

ADJUSTMENT:

a. 12.2% of the weighted per pupil amount.

Non K-8 Schools:

QUALIFICATIONS:

a. Fewer than 29 students per grade level.
b. Nearest school is more than 8 miles away.

ADJUSTMENT:

a. Less than 15 students – 13.4% of the weighted per pupil amount.
b. 15 to 29 students – 8.8% of the weighted per pupil amount.

B. Isolated Small Secondary Schools

QUALIFICATIONS:

a. Fewer than 200 students per school.
b. Distance from furthest point in the district to nearest high school is at least 18.5 miles.
c. Distance between the high school and nearest high school is more than 10 miles.

ADJUSTMENT:

a. Student – teacher ratios reduced to 11:1 for schools with fewer than 100 students and 13:1 for schools with 100 – 199 students.

2. Island School Adjustments

QUALIFICATIONS:

a. Islands operating schools.

ADJUSTMENT:

a. Isolated small secondary schools student – teacher adjustment for high schools with fewer than 200 students.

b. 13% - 26% adjustment to EPS operating and maintenance costs, depending upon school level and size, for islands operating schools. (Less than 20 students 13%, 21 to 75 students 26%).

c. Transportation adjustment equal to approved transportation expenditures.

3. Special Education Adjustments

QUALIFICATIONS:

a. Each district with fewer than 20 students with disabilities receives additional funds to account for operating with fewer students per staff and higher per-pupil expenditures for related services.

ADJUSTMENT:

a. Districts with fewer than 10 students with disabilities receive and adjustment that reflects five fewer students per teacher, 178 fewer students per director, and an additional $1,857 per-pupil cost for related services.

b. Districts with 10 – 19 students with disabilities receive an adjustment that reflects one fewer student per teacher, 136 fewer students per director, and an additional $245 per-pupil cost for related services.

Original EPS Definition	Review Year and Evidence	FY2011 EPS Definition	Current Calculation
➢ **Debt Service** Debt service was funded as a program cost.	Has not been reviewed	Debt service is funded as a program cost.	Program cost

Summary

In summary, for the past six years Maine's essential programs and services model has been the basis for funding K-12 education. Prior to the implementation of LD1 in FY2006, Maine used a type of expenditure driven formula for funding education. But with passage of Maine's Learning Results, the Legislature recognized the need for a new funding formula, one that would ensure that all Maine's schools had the necessary programs and services to all children could achieve the Learning Results.

Nine years in development, Maine's Essential Programs and Services (EPS) model, formed the basis for determining school resources, and the cost of these resources. And with passage of LD1, Maine policy makers put into place a formula for not only identifying public school costs (i.e., EPS), but one for increasing the state share of funding K-12 education, and sharing the costs between the state and local communities.

EPS and LD1 were designed to improve student equity and taxpayer equity, respectfully. There is some evidence that both forms of equity have improved, albeit less than intended. A variety of reasons may explain why the goals have not been achieved to date, some inherent in the premises and structure of the formula, and some the result of changing economic and demographic conditions. In either case, it may be timely to reassess the formula…to reaffirm or affirm new fundamental purposes, structures, and processes to ensure equitable education opportunities across the state.

Appendix A

Members of Essential Programs and Services Committee

Weston Bonney, Committee Chair
State Board of Education

Duke Albanese, Commissioner
Department of Education

Alice Cates, Teacher
Eastport, ME

Terry Daigle, Principal
Stearns High School, Millinocket, ME

Denison Gallaudet
Consultant
Millbrook Advisors

Connie Goldman
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Cape Elizabeth, ME

Jean K. Gulliver, Member
Maine State Board of Education

Harvey Hayden, Former Asst. Superintendent MSAD 9
Farmington, ME

Betty Jordan, Superintendent
Union 102, Machias, ME

Prof. Josephine LaPlante
University of Southern Maine

Terry McCabe, Director
Member Services
Maine School Management

Blythe McGarvie, SVP & CFO
Hannaford Brothers

William J. McKee, Member
MSAD 58 Board of Education

Joyce McPhetres, Member
State Board of Education

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William Nave, Research Associate
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Deborah Stuart, Superintendent, MSAD 70
Houlton, ME

Staff:

Gary Leighton, Maine Department of Education

Consultant:

David L. Silvernail, Co-director, Maine Educational Policy Research Institute
University of Southern Maine Office

Appendix B

New Operating Allocations Based on Essential Programs & Services (Program and Debt Service Allocations are unaffected by these changes).

PART I: Staffing Ratios

			Professional Support Services				
	#Classroom Teachers	**#Special Subject Teachers***	**Guidance Staff**	**Library Services Staff**	**Health Services Staff**	**Principals Asst. Prin. Staff**	**Technicians I, II & III Staff**
Statewide Average Salaries	$30,986	$30,986	$34,843	$20,247	$27,780	$47,208	$10,473
Kindergarten	1 per 36 pupils	0	0	0	0	0	0
ELEM. (1-8)	1 per 20 pupils	1 per 100 pupils	1 per 400 pupils	1 per 400 pupils	1 per 500 pupils	1 per 300 pupils	1 per 100 pupils
SEC. (9-12)	1 per 15 pupils	0	1 per 250 pupils	1 per 400 pupils	1 per 500 pupils	1 per 250 pupils	0

	School Unit Adminis. Staff**	**Clerical**		**English as a Second Language Teachers**	**Low Income Pupils Teachers**
		School Based Staff	**Supt.'s Office Staff**		
Statewide Average Salaries	$41,343	$16,432	$16,432	$30,986	$30,986
ESL Pupils				1 per 15 pupils	
Low Income Pupils					3 per 100 pupils
Total Pupils	1 per 400 pupils	1 per 200 pupils	Min. 2.5 and an additional 1 staff for every 400 pupils in excess of 1000 pupils		

*Special Subject Teachers are not assigned to a single class and whose responsibilities may include but are not limited to Art, Music, Computer, Phys. Ed. and Reading.

**School Unit Administration includes Supt., Asst. Supt., Bus. Mgr./Adm., Curr. Coord., Supv./Dir. of Instr., Dir. of ESL, Dir. of Food Servs., Dir. of Data Servs., for School Unit Administration and Supt.'s Office clerical, Unions will be considered one unit; member unit's allocation will be prorated based on % of pupils.

NOTE: Ratios are for attending pupils.

Part II. Costs to Maintain Staffing Ratios

For each school administrative unit:

1. Each ratio in Part I is multiplied by the appropriate number of attending pupils to determine a staffing level. (The level is calculated to the nearest 10^{th}, except for the small units (with less than 100 attending pupils)). For small units, the level is rounded up to the nearest whole number.
2. Each level is multiplied by the state-wide average salary, as displayed in Part I. The SUM of these calculations is the unadjusted total salary requirement.
3. The total salary requirement is now adjusted by a regional wage factor (based on average wages in the labor market area where the unit is located).
4. Benefits costs are added to this regionally-adjusted total salary amount as follows:

Clerical	22% additional
All Other	14% additional

Part III. Other Costs Per Pupil

Equipment and Supplies, Etc.***	Elementary	Secondary
Instructional	$123.80	$178.98
Student & Staff Support	$23.95	$37.71
System Administration	$34.34	$37.31
School Administration	$19.52	$37.69

Includes costs such as insurance, utilities, equip. rentals, etc.

Other Instr./Co-Curricular	Elementary	Secondary
% of all other (non employee Related Costs) of Education	$2.40	$3.38

Contracted Services	Elementary	Secondary
Instructional	$7.41	$10.75
Student & Staff Supp.	$7.05	$10.52
System Administration	$23.24	$24.39
School Administration	$0.30	$1.06

Operation & Maintenance of Plant	Total
Regular	$500.00
Extraordinary (targeted) ****	$100.00

Staff Development****	Per Employee
	$400.00

****Targeted funding must be expended on targeted categories such as "extraordinary maintenance" and staff development. Extraordinary maintenance costs include roof repairs, boiler replacement, etc.

Part IV. Putting it All Together

1. For each school administrative unit, the Total Allocation for Operating costs is calculated as:

- Region-adjusted salary and benefit costs (as determined in Part II) that are sufficient to maintain the staffing ratios described in Part I.
  plus
- Other per-pupil and per-employee costs (determined in Part III).
  plus
- Actual tuition costs for pupils who do NOT attend school in their resident unit. (this adjustment is necessary because the amounts calculated in Parts I through III are based on ATTENDING pupils, not resident pupils)
  less
- Actual tuition revenue FROM other units who tuition their pupils to this unit. (this adjustment is necessary because otherwise this unit would have approximately twice the per pupil revenues for these tuitioned pupils).

2. Local share's amount is calculated as operating cost mill rate TIMES fiscal capacity (State Valuation).

			Professional Support Services				
	#Classroom Teachers Per Pupil	# Special Teachers* Per Pupil	Guidance Staff Per Pupil	Library Services Staff Per Pupil	Health Services Staff Per Pupil	Principals Asst. Prin. Staff Per Pupil	Technicians I, II, III Staff Per Pupil
Statewide Average Salaries	$30,986	$30,986	$34,843	$20,247	$27,780	$47,208	$10,473
Position Codes	101	101	1501 1502	0301 0306 0307 0350	0707 2001	0801 0901	0201 0206 0207

	School Unit Adminis.** Staff Per Pupil	Clerical		English as a Second Language Staff Per Pupil	Low Income Pupils Staff Per Pupil	Operation & Maintenance of Plant Staff Per Pupil
		School Based Staff Per Pupil	Supt.'s Staff Per Pupil			
Statewide Average Salaries	$41,343	$16,432	$30,986	$30,986		
Position Codes	0501 0603 0906 0409 0454 0401 0403 0459	1001	1001	0101	0101	0704 1106

*****Special Subject Teachers are not assigned to a single class and whose responsibilities may include but are not limited to Art, Music, Computer, Phys. Ed. and Reading

******School Unit Administration includes Supt., Bus. Mgr./Adm., Curr. Coord.,Supv./Dir. of Instr., Dir. of ESL, Dir. of Food Servs., Dir of Data Servs. for School

SIZE	**Group 1**	**Group 2**
Elementary . (K-8)	0 to 99.99	100 and Up
Secondary (9-12)	0 to 99.99	100 and Up

Group 1 Ratios will be rounded up to the nearest whole numbers

Group 2 Ratios will be rounded up to the tenth

Appendix C

Consultants to EPS Committee

Tina Baker, Representative, Maine State Legislature.

Christine Bartlett, Division of Special Services, Maine Department of Education.

Barney Berube, ESL/Bilingual Education Specialist, Maine Department of Education.

Robert Boose, Executive Director, New Jersey School Boards Association.

Suzan Cameron, School Finance and Statistics, Maine Department of Education.

Theodore Coladarci, Associate Professor of Education, University of Maine.

Leon Duff, Superintendent, School Union 52.

Mark Eastman, Superintendent, Maine School Administrative District #17.

Jean Gulliver, Maine State Board of Education.

Rodney Hatch, Business Manager, Maine School Administrative District #7.

Richard Hinkley, Bureau of Information Services, Administrative and Financial Services.

Joanne C. Holmes, Maine Department of Education.

Rayette Hudson, Executive Director, Maine Association of Pupil Transportation.

Robert T. Kennedy, The Spurwink Institute.

John Kierstead, Division of Special Services, Maine Department of Education.

Dennis Kunces, Maine Department of Education.

Jean Lavigne, Associate Professor of Public Administration, University of Maine.

Gary Leighton, School Finance and Statistics, Maine Department of Education.

Linda Lord, Maine Department of Education.

John Lunt, Freeport Middle School.

Frank McDermott, Superintendent, Maine School Administrative District #6.

Carol Jo Morse, President, Maine Parent and Teachers Association.

Edward Moscowitz, Consultant, Massachusetts Business Alliance for Education.

John Pierce, Maine Science Technology Foundation.

John Rosser, Chairman, Spurwink Institute.

Susan Savell, Executive Director, Communities for Children.

Valarie Seaberg, Regional Education Services, Maine Department of Education.

James Smith, Chief Executive Officer, management Analysis and Planning, Inc.

David Stockford, Director, Division of Special Services, Maine Department of Education.

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James Watkins, Director of Division of Management Information, Maine Department of Education.

Wayne Warner, President, Maine Association of Pupil Transportation.

Susan Weatherbie, Director of Community Services, Cape Elizabeth School District.

Jeff Wulfson, Chief Finance Officer, Massachusetts.