

A Proposed
Cost Based Block Grant Model
for
Wyoming School Finance

Submitted by
Management Analysis & Planning Associates, L.L.C.

Submitted to
Joint Appropriations Committee
of the
Wyoming Legislature

James W. Guthrie
Gerald C. Hayward
James R. Smith
Richard Rothstein
Ronald W. Bennett
Julia E. Koppich
Ellis Bowman
Lynn DeLapp
Barbara Brandes
Sandra Clark

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Acknowledgments

This report is submitted to the Wyoming Legislature by Management Analysis & Planning Associates, L.L.C. (MAP), a San Francisco-based management consulting company specializing in education policy, evaluation, and organizational analysis. The report is intended to assist the Legislature in its efforts to design a new school finance mechanism for Wyoming, one which will comply with the state Supreme Court's decision in *Campbell County v. Wyoming*.

In collecting information for this report, MAP researchers traveled extensively throughout Wyoming, observing classrooms and school districts, and speaking with educators, public officials, students, and citizens. From these experiences, MAP staff gained a favorable impression of the instruction and other schooling experiences presently available to Wyoming students. There is clearly much that is right regarding the state's present education practices. Consequently, what appears necessary, in addition to complying with the Court's mandates, is ensuring that these good practices are sustained and available everywhere. The proposed Cost Based Block Grant Model is intended as a policy instrument that will enable the Legislature to achieve these two goals, comply with the Court's decisions, and even further improve Wyoming education.

In undertaking these analyses, MAP benefited greatly from the cooperation of literally hundreds of Wyoming professional educators and public officials. Members of the professional expert groups who provided counsel regarding needed instructional and operational components are due a special debt for the time they committed to this endeavor.

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EXECUTIVE SUMMARY

A Proposed Cost Based Block Grant Model for Wyoming

This consulting report is submitted to the Wyoming Legislature to assist in the design of a new school finance system in compliance with the state's Supreme Court decision in *Campbell County v. Wyoming*. The report is submitted by Management Analysis & Planning Associates, L.L.C. of San Francisco, California.

What is a Cost Based Block Grant Model?

The proposed Cost Based Block Grant Model¹ is a means for determining operating revenue eligibility for each Wyoming public school district. The model is a legislative tool or policy design instrument. It can be employed by the Legislature to ensure an equal and proper educational opportunity for each Wyoming public school student, an opportunity which is suited to the anticipated expectations demands and conditions of the 21st century.

This new model specifies instructional and operating resources needed to ensure a proper education. It systematically determines the competitive market costs of such operating resources. It then aggregates the district-wide costs of these resources and facilitates provision of a total revenue amount to local school districts in the form of a "block grant." The actual dollar amount of the grant is a function of the model's various components and their

interactions with the characteristics of the school district's students and schools. These components can be relied upon to implement the "market basket of goods" that the Wyoming Legislature has discussed as desirable for Wyoming education.

The Cost Based Block Grant Model also is linked to a computer-based simulation program which will enable legislative staff officials to estimate (1) the operating revenue eligibility of a local school district, (2) revenue consequences to individual school districts of altering the quantity of any instructional component in the model, and (3) total costs to the state of varying model component quantities.

How does the model determine costs?

Instructional and operating components have been included in the model only after a screening process, which included appraising their validity against education research results, extensive and repeated consultations with literally dozens of Wyoming education experts, observations and data collection in a broad sample of Wyoming local school districts, reference to best practices in other states, and consultation with national experts and professional associations.

Dollar costs are imputed to each of the model's components. This is done by comparisons with relevant labor markets to determine that salaries paid to professional educators are adequate to attract and retain teachers and other educators to work in Wyoming schools. Statewide average expenditures were used to estimate the cost of other components, based on the assumption that competitive markets existed for books, supplies, and non-certified employees.

Wyoming legislative officials have discretion in determining amounts of particular components to be included in the Cost Based Block Grant Model. For instance, within a zone of verified effectiveness established from research results and professional judgments, the Legislature can determine class-size levels or "necessary small school" definitions upon which to base local school district revenues.

**Executive Summary Figure One
Proposed Grade Grouping and Enrollment Size Prototypes**

Grade Grouping (School Type)	Number of Students
Elementary School Grades K-5	288
Middle School Grades 6-8	300
High School Grades 9-12	600

What are the instructional and operating components of the model?

There are five principal categories of model components.

(1) Measures of Students to be Schooled

The state's principal education obligation is to students. Thus, the proposed Cost Based Block Grant Model assumes students are the fundamental building block around which the distribution formula is constructed. Average daily membership (ADM) is the proposed technical measure of students.

The special characteristics of some students may require that additional services be provided as a part of a proper education. These additional services usually imply additional costs. Thus, the model adjusts the amount of revenues based on the incidence of students who are gifted, economically disadvantaged, limited English proficient, or disabled.

(2) School Organizational Characteristics

A prototypical school size is needed as a foundation upon which to construct a finance distribution model, because decisions have to be made regarding organizational arrangements, such as number of administrators and custodians for a school. Thus, the proposed Cost Based Block Grant Model posits schools encompassing three grade level groupings (elementary, middle, and high school).² The model further posits an enrollment range for each grade grouping, and a total school size.³

(3) Instructional Components

Each prototypical school in the model is supplied with or shares three major categories of services and goods: personnel; supplies, materials, and equipment; and specialized services. Quantities and characteristics of these services and goods vary depending upon the grade level involved.

The major instructional item included is personnel. Currently, personnel costs comprise 82 percent of education dollars spent in Wyoming. This condition is unlikely to change until such time as technology proves more effective in assisting instruction.

The most expensive single personnel component of the Cost Based Block Grant Model is the class-size determination. Personnel are costly, professional personnel are the most costly, and class size determines how many professional employees are necessary.

(4) Operational Components

Operational components include administrative costs, maintenance, and transportation.

(5) District-wide Characteristics

District-wide characteristics include "necessary small schools," teacher seniority, and regional price variations.

How does the Cost Based Block Grant Model compare with current Wyoming practice?

The following chart describes how the model compares with current Wyoming practice:

Executive Summary Figure Two:

Cost Based Block Grant Model Costs Components

1. <i>Personnel</i>
a. Classroom Teachers (Certified)

b.	Substitute Teachers	(Certified)
c.	Instructional Aides	(Classified)
d.	Pupil Support Personnel	(Certified)
e.	Library/Media Personnel	(Certif/Classified)
f.	School Administrators	(Certified)
g.	Clerks and Data Entry Personnel	(Classified)
	Operations/Maintenance	
h.	Personnel	(Classified)
2. <i>Supplies, Materials, and Equipment</i>		
a.	Supplies and materials	
b.	Equipment	
3. <i>Specialized Services</i>		
a.	Food Service	
b.	Student Activities	
c.	Professional Development	
d.	Assessment	
e.	School District Operation	
	i. Maintenance and Operation	
	ii. Administration	
	iii. Transportation	
4. <i>Adjustments for Special Characteristics of Students</i>		
a.	Disabled Student Services	
b.	Economically Disadvantaged Students	
c.	Gifted Students	
d.	Limited English Proficient Students	
5. <i>Adjustments for Special Characteristics of Schools and Districts</i>		
a.	Small Schools	
b.	Seniority	
c.	Adjustment for Cost of Living	

Executive Summary Figure Three

Comparison of Current Wyoming Foundation Plan and

Proposed Cost Based Block Grant Model

Comparison Dimension	Current Wyoming Foundation Model	Proposed Block Grant
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Plenary Authority Legal/Reality	De Jure/State De Facto/ Districts	State State
Operational Definition of "Proper Education"	State Specified Revenue Per Classroom Resource Unit (CRU)	Assured Opportunity to Acquire Postsecondary Prerequisites
Unit Determining Total District Revenue	Local School District	State
Unit Determining Spending Priorities	Local School District	Local School District
Unit Determining Instructional Priorities	Local School District	Local School District
Unit Determining Education Related Taxes	State/Local District	State
Basic Distribution Device	CRU Measures of Classrooms	ADM Measures of Students
Basis for Determining Per-Pupil Dollar Level	Political/Historical	Rational/Technical
State Specified Local District Cost Adjustments	School Type (E/M/H) Small School Transportation Special Education	School Type (E/M/H) Teacher Seniority Small School Pupil Characteristics Cost Of Living Transportation
Discretion for Local District to Generate Added Per-Pupil Revenue	Yes	Legally Uncertain but Improbable
Review Authority	Wyoming Supreme Court	Wyoming Supreme Court
Administering Agency	Wyo. Dept. of Education	Wyo. Dept. of Education

How does the Cost-Based Block Grant Model compare with current Wyoming practice?

The above chart describes how the model compares with current Wyoming practice.

How can the Cost Based Block Grant Model be implemented?

The model requires legislative adoption. However, before official enactment, there are numerous decision points to be incorporated into the final version. For example, the Legislature will have to decide about class size, definitions of "necessary small schools," procedures for funding transportation, and procedures for funding the education of students with special needs.

Among the decisions that have to be made are how quickly to implement various provisions. For example, MAP recommends that a newly suggested approach for funding special education students be postponed at least a year, because its full benefit cannot take effect until more precise data are collected about the number and nature of handicapped students in Wyoming. Similarly, the existing transportation reimbursement formula, with minor modification, should be retained until a future time, one or two years downstream, but with refinements that will be possible only when more precise data can be obtained. Also, the "necessary small school" eligibility formula cannot operate effectively until a somewhat different data base is assembled.

Another decision set regards the initial amount of revenue a district might receive, or by what amount it should be reduced, as a consequence of new eligibility computations. Experience suggests that only rarely can a school district rapidly digest huge percentages of new revenue and continue to deploy all of its resources wisely. Hence, "a phase-in period" is often included as a school finance implementation component.

There is regrettably little science regarding the speed with which a district can wisely accommodate large amounts of additional revenue. However, experience in other states suggests that a ceiling, in year one, of 10 to 15 percent per pupil is appropriate. Then, in year two and each year thereafter, a district might well receive whatever additional per-pupil revenue to which it is entitled in 10 or 15 percent increases. This increase would continue until the district is fully compensated for the additional per-pupil block grant amount for which it is eligible under the new formula. (In the illustrative simulations at the end of this report, every revenue "receiving" Wyoming district could be leveled up within no more than two years, assuming a 15 percent ceiling on new additional revenues. It would take three years, if the ceiling were placed at 10 percent.)

The converse is also a legislative decision point. How much revenue can a district "lose" under a new eligibility computation and still offer programs which do not curtail educational opportunity for its students? Here, also, there is insufficient technical knowledge. However, experience with budget reductions suggests that absorbing more than a five or 10 percent decrease in a year is difficult. Thus, the Legislature will have to deliberate regarding the speed with which revenues are reduced for districts so affected. This process of stair-stepping revenue reductions by tolerable increments is often labeled colloquially as a "hold harmless" strategy. Moreover, the Legislature will have to determine whether or not to reduce districts at all. Holding a distinct district "harmless" is also sometimes accomplished by freezing its current per-pupil revenue levels and not granting annual cost-of-living adjustments until other districts in the state eligible for revenue increases gain per-pupil revenue parity.

How does the simulation program operate?

The simulation program is based upon a standard computerized spreadsheet (Excel). Data for each of Wyoming's 49 local school districts for 1995-96 are placed into the computer program. For each district the model contains total enrollments; and students' characteristics, such as grade levels, disabilities, and household income proxies.

The simulation model also contains a calculating dimension for each of the previously listed 25 Cost Based Block Grant Model instructional and operational components (e.g., teachers, aides, librarians, and textbooks). Each of these individual model components has an imputed unit cost in dollars. Thus, the interaction of a district's characteristics (e.g., number and grade levels of students) with legislatively determined quantities of a component (e.g., class size) can result in a computation for the an individual school's revenue eligibility on that specific dimension. The sum of each of these computations across all dimensions determines an entire school's revenue eligibility. Similar computations are made for operating items which are district based (e.g., transportation, maintenance, administration, whether or not the district has a "necessary small school," and numbers of disabled students). The sum of all school revenues and all district revenues, when multiplied appropriately by the regional cost-of-living adjustment, comprises a district's block grant eligibility.

The simulation model lends itself to alternative decision scenarios. For example, the Legislature can probe the statewide financial and local district distributional consequences of altering class size, subsidies for scale diseconomies (small schools), and aid for students from low-income households.

Finally, the simulation model not only can provide alternative scenarios and local district revenue eligibility comparisons, it facilitates comparisons. A local school district's present revenues, both in the aggregate and per pupil, are loaded into the model, and thus, the model can be simulate comparisons of the status quo with proposed changes.

Why and how was the Cost Based Block Grant Model developed?

The Legislature requested construction of such a model to comply with the Wyoming Supreme Court's 1995 decision in *Campbell County v. State of Wyoming*, declaring the present financing system unconstitutional.

What, if any items, are not included in the proposed Cost Based Block Grant Model?

The model relates to but does not determine or restrict state and local sources of revenue or tax rates, nor does it assume federal school funding.

The proposed Cost Based Block Grant Model does not currently address capital (construction) financial needs. However, capital funding formulae can be added to the model, if the Wyoming Legislature chooses.

The model does not specify fiscal accounting or pupil performance mechanisms. However, it can easily be linked to such accountability mechanisms, should the Legislature desire.

END NOTES

¹ The term "Block Grant" is adopted from public finance wherein the label connotes an amount of revenue made available by one level or agency of government for use by another. Block Grants are a means by which intergovernmental subventions can operate with only a minimum of restrictive regulation. The Cost Based Model described in this report determines the dollar amount of a local school district's operating revenue Block Grant. It does not dictate to a district how to spend these revenues. "Categorical" grants are used when intergovernmental subventions are intended to be used for specific or restricted purposes.

² Local school districts are not compelled to utilize the Model's grade groupings. They can rely upon whatever grade configuration is preferred locally. However, revenue eligibility will assume the prototypical grade groupings presented here (i.e. students enrolled in grade 6 will receive the middle school allocation of funds whether they are enrolled in a K-8 school or a 6-8 middle school.)

³ Local school districts are also not compelled to match the size of the schools outlined here. These sizes were selected for analytical purposes. See figures 3-5 in the body of this report regarding Wyoming school size and enrollment distribution.

I. INTRODUCTION

Unless the Wyoming Supreme Court's 1995 decision in *Campbell County v. State of Wyoming* is rescinded, a seemingly improbable event, education in Wyoming will never again be the same. The Court's decision mandates formulation of a system of school finance unlike any to be found elsewhere. *Moreover, the Supreme Court specified that a new system be enacted by July 1, 1997.*

In this report MAP proposes a new system. It, or a close variant, is capable of achieving the purposes specified by the Court. It can achieve equity and transform school financing into a rational, cost-based activity.

However, unless several other steps are taken by the Legislature, this Cost Based Block Grant Model will not by itself enhance student achievement in Wyoming or ensure that Wyoming's citizens are receiving a higher return on their financial investment in education. In other words, the Cost Based Block Grant Model, while pursuing goals

useful in its own right and mandated by the state Supreme Court, on its own neither ensures that Wyoming schools are effective nor efficient. It only ensures that they will be equal.

The steps necessary to push the current system further, more aggressively, to achieve even higher levels of student performance and system-wide productivity, are not complicated. Furthermore, they are quite complementary; they fit well with the design of the proposed Cost Based Block Grant Model. Many of these components are already under consideration in various legislative committees and need only be brought together into a comprehensive education reform package.

Meeting the Court's reform mandates will almost assuredly necessitate higher levels of education spending. The proposed MAP model, when coupled with more powerful accountability and measurement components, can offer incentives for a richer reform than the Court alone has requested.

To accomplish these multiple purposes, the education structure, including the curriculum, school districts, classrooms, teachers, students, textbooks, and buses, must be regarded as a comprehensive system. Only in this way can one see how the components currently fit and how they can be reconfigured to fit better. Only by regarding the system in its totality can important incentives be rearranged to induce higher achievement, not simply maintenance of the status quo.

The proposed MAP model provides a foundation for such a comprehensive reform of Wyoming education. MAP's proposed new system is guided by this management maxim:

*"Mission, Money, and Measurement Stem From The Top:
Methods Flow From the Bottom."*

The following describes how the parts fit together.

Mission

In the proposed MAP model, the Legislature specifies purposes the education system should serve. In Wyoming, this means that every student should be provided a proper education ensuring the ability to participate fully as a citizen and an opportunity to seek post-secondary school options, such as college, productive employment, or the military. This goal does provide some direction to local school districts, but it falls short of providing the kind of precision that is needed to motivate local schools to rethink their current practices. If the state is to hold districts accountable for results, it has to be clear about its expectations, and, to be effective, expectations should be explicit about what students should know and be able to do. If the state is unwilling to develop explicit expectations, there is little reason to predict that schools will change in any significant way, regardless of how much additional money they receive or how equitably it is allocated.

Money

The proposed Cost Based Block Grant rationally determines the amount of revenue per pupil necessary to provide a "proper" education. This per-pupil amount differs depending upon (1) circumstances of the student, e.g., grade level, physical disability, or English proficiency, and (2) circumstances of the district, e.g., population sparsity, seniority of teachers, and regional costs of living.

Measurement

MAP was not asked to design an accountability system, and it has not done so. However, such a system is essential if the Legislature is to optimize its capacity for ensuring local districts and professional educators are achieving the purposes established for Wyoming's schools. Schools should be held accountable only for those things deemed most important, and the measures should be sufficiently broad to avoid unintended behavior on the part of school districts.

Certainly, student achievement is the centerpiece of any accountability system, and the proposed model provides funding for that purpose. However, a faulty assessment system is worse than no assessment system. Average scores rarely tell a whole story, and it is also important to be able to track the performance of students in special education and those who are low performing. In addition, it is important to track other outcomes, such as graduation rates, employer satisfaction, and student performance in post-secondary institutions to determine if schools are adequately performing their mission for all students.

While student performance is a *sine qua non* for the education system, the Legislature should consider the need for enhanced fiscal accountability as well. Specifically, under any likely funding procedure that complies with the Court's decision, school districts' abilities to increase revenues will be severely attenuated, if not prohibited. When local decision makers enter into long-term agreements that are based upon uncertain projections of revenues, there is potential for budget deficits. Thus, the accountability system should encompass financial reporting that is sufficiently reliable to permit an early warning if a school district might be at risk of failing to meet future obligations.

Methods

The proposed MAP model does not prescribe detailed instructional or operational methods. These decisions are left to local officials and professional educators. However, the Cost Based Block Grant Model is based upon factors, such as those listed below, that are intended to provide equitable and sufficient resources, facilitate high performance, and expand local discretion. These components are cohesively connected and are based on the belief that an adequately trained teacher, working with a manageable number of students and having access to school-level and district-level resources for special problems, is the most effective model for coping with the educational needs of virtually all students. Research has shown where these conditions obtain, the justification for special programs and special funding is largely attenuated.

Small Schools

Prototypical school sizes around which the model operates assume elementary schools of 288 students, middle schools of 300 students, and high schools of 600 students. Further, there are multiple provisions for computing school district revenue eligibility in those instances in which it is necessary to operate smaller schools.

Small Classes

The model provides a professional-to-pupil ratio that should enable a local school district, if it chooses, to operate relatively small classes.

Added Professionals and Paraprofessionals

The block grant provides resources for added numbers of professional specialists and teacher aides to assist students in special circumstances, provide for specialized instruction in areas such as art or drama, and relieve regular classroom teachers for added professional development.

Professional Development Funding

The block grant provides, should a district decide to allocate its resources in such a manner, for professional development of teachers to enable them to instruct all students more effectively as well as cope with students from disadvantaged circumstances, such as those coming from low-income or English-deficient backgrounds.

Specialized Student Funding

The block grant includes added revenues for districts with concentrations of handicapped, gifted, and low-income students. In time, revenues for those students whose incidence in the population is predictable, i.e. handicapped and

gifted, should be provided in a block grant manner, using what is known technically as a "Census" approach, so that districts can themselves identify such students and decide the most effective manner for educating them.

Local districts are granted the freedom to weave their revenues into a spending pattern best suited to their particular circumstances and mix of students. However, the above-listed and related formula components have a synergy and integrity to them. Small schools and small classes, particularly when coupled with teacher professional development, should enable a district to provide a better education to all students, especially those needing more help, such as the disabled or those suffering from some other known disadvantage.

If the Legislature should decide to dilute the block grant approach, it should further realize that the synergy of the model is jeopardized. For example, to specify a portion of the block grant to be spent mandatorily for teachers' salaries is not simply to usurp local control. It will also likely throw out of balance whatever class-size decisions or whatever arrangements for using teaching specialists a district has made. Similarly, by mandating class sizes, the Legislature may undercut previously made salary agreements. Mandating spending levels for vocational education may jeopardize the budget for a district-designed gifted student program. In sum, the block grant possesses an integrity which places operating decisions locally for good reason. To interrupt this integrity at the state level is likely to have unanticipated, unfavorable consequences for local districts.

The manner in which the Legislature can continue to exercise appropriate "control" is through intense attention to specifying outcomes and measuring the degree to which districts achieve them. In effect, the Legislature's control is through appraising "products" —not specifying procedures.

A reader should not be misled into believing that enacting and sustaining a block grant system is easy. It will not be. Additionally, establishing means for measuring student learning and using such measures in an accountability system will necessitate added planning.

Also, continually appraising outcomes will necessitate enhancing the capacity of the Wyoming Department of Education. Its capacity to design measurement systems, collect data, oversee a more detailed financial accounting system, and provide advice to local school districts will almost assuredly call for added personnel and resources. Similarly, additional resources will be necessary to improve Wyoming's executive-branch capacity to conduct cost-of-living studies.

The Major Challenge

Under the proposed model, it no longer is productive to inform local school-district officials how to spend money. For the Legislature to specify spending purposes, e.g., to set class size minima or maxima, establish teacher salaries, or specify teaching methods, is to eviscerate its ability to hold local school systems accountable for results. Should the Legislature specify how to spend money, it then is specifying methods and, consequently, cannot fairly praise or blame local officials and professional educators for succeeding in or failing to achieve results.

The reason this proposed plan is labeled a "Cost Based Block Grant" is to convey the idea that the Legislature has rationally determined the amount of revenue to be made available and has, thereafter, provided these financial resources to local authorities for their use in fulfilling state-specified education objectives. A "block grant" implies an intergovernmental flow of funds, specific use of which is at the discretion of the receiving agency. (Conversely, a "categorical grant" connotes legislative mandates;

the revenue must be used for the activities specified.)

Meeting this "hands off" challenge will prove difficult for at least two reasons. On one hand, the Legislature will soon find itself responsible for generating virtually all of Wyoming's education revenues. Thus, why should it not take the initiative in specifying how such revenues should be spent? Whereas this rhetorical question is reasonable, the answer, as provided above, is that to do so erodes the ability to foster effective schools and to hold local officials accountable.

This challenge is made doubly difficult because special interest groups will seek endlessly to have their particular programs protected, excluded from the block grant, and mandated by the Legislature. These groups will regularly appear before the Legislature and claim that whereas local control through a block grant is important and fine for most activities, their particularly precious activity is too important to be left to the discretion of local officials. Thus, *(insert whatever favorite program you wish)* should be converted to a categorical aid measure, which local school district officials are mandated or induced to offer without a choice.

This is a slippery slope from which there is little recovery. The end product will be a highly complicated school finance statute, specifying virtually every local district spending action. Under such a scenario, the Wyoming Department of Education is likely to be transformed into a huge monitoring and compliance agency, and the Legislature will have a mounting number of special sessions to deal with problems which formerly were solved at the local district level.

The solution to such a situation is to resist the temptation to mandate and to maintain the integrity of the block grant approach.

The integrity and comprehensive nature of the proposed Cost Based Block Grant Model extends to matters of future change and annual adjustments. Each year, or each biennium, the Wyoming Legislature need only determine by what amount, if any, education should receive a cost-of-living adjustment (COLA). The entire formula can then be multiplied by whatever COLA factor results from legislative deliberations. No single factor within the formula need be altered, except under conditions specified in the following paragraph.

If evidence arises in support of some instructional or operational component not now included in the model, or if new, more accurate information becomes available, then the Legislature can add or alter what exists. For example, if a remarkably more productive, technologically based instructional strategy presents itself so that all Wyoming students undoubtedly would benefit from it, then it could be included as a formula component. Short of such a resounding innovation or research finding, the formula's components are better left intact, because they currently possess a self-reinforcing synergistic character.

Accommodating a Legislatively Determined "Basket" of Goods and Services

The Campbell County decision does not interfere with the Legislature's ability to determine the purposes and content of Wyoming's public education system. Hence, there are curricular and service components about which the Legislature has deliberated and may wish to include in the state's schools. How would the proposed Cost Based Block Grant Model accommodate such a "basket" of preferred provisions? The general answer is "quite easily."

The Cost Based Block Grant Model is intended to be a policy vehicle, enabling Wyoming simultaneously to comply with the Supreme Court's decision regarding equity and rationality and enhance the quality of schooling throughout the state. The model is simply a means for delivering whatever instructional purposes and content objectives the Legislature designs. There should be no conflict.

II. WHAT THE COURT DECREED AND HOW THE LEGISLATURE RESPONDED

Since 1890, when Wyoming joined the Union as the 44th state, locally elected Wyoming school board members have annually exercised their judgment about taxes and spending. Like their counterparts throughout most of the United States, some decisions were stingy, others were generous, and most fell in between. Once every two years, statewide elected officials engaged in similar deliberations and made judgments regarding the state's share of the financial bill for supporting schools. This two-tiered decision process has historically resulted in most of the money available to support a Wyoming student's schooling.

Prominent features of the above-described system are about to disappear. The Court has decreed that a new system must replace it, and that this system must meet certain standards. In effect, the Court has required that the balance of decision making for Wyoming education financing be shifted from a political to a rational framework.

Taken together, the recent Campbell County and earlier Washakie¹ decisions have the following principal implications for education's operating revenues:²

- Education has been ruled to be a fundamental right accruing to all state residents under the Wyoming Constitution.
- Because of education's fundamental standing, the state must assume plenary responsibility for ensuring an equal and proper education for each Wyoming student.
- Consequently, for school financing purposes, Wyoming's education system must now be regarded as a state system, not as a loosely coupled collection of independent, local school districts.
- The quality of a Wyoming child's schooling should not be a function of wealth, other than the wealth of the state as a whole.
- Local school district education revenue eligibility should be a function of rationally discerned costs related to schooling.³

Implications for Wyoming School Finance.

Few other states have been subjected to the same wrenching level of school finance reform as now required by Wyoming's Supreme Court decisions.⁴ What is necessary to comply with the Court is the complete redesign of a system which heretofore has depended principally upon revenue determining decisions rendered by local school boards and state distribution formula arrangements, which are only loosely related to actual school district operating costs. The new system, to reduce revenue disparities to those rooted solely in "costs," will have to be based upon state-level decisions and will have to take into account complicating conditions such as:

- Differences in characteristics of students, including their level of schooling (elementary, middle, and secondary), physical disabilities, English-language deficiencies, and social and economic circumstances which might place them educationally at risk.
- A rationally determined set of educationally related goods and services, including the number and remuneration of teachers and other education professionals, supplies, computers, books, and school administrators.
- Day-to-day school operating costs, including utilities; maintenance; and the salaries of essential workers, such as custodians, clerks, bus drivers, and cafeteria employees.
- Cost-related differences in the characteristics of schools and school districts, over which they have little influence, including population density, regional cost-of-living differentials, and proportion of their teacher work force that is senior (and thus more costly).

Designing a new school finance system will necessitate a different outlook on the part of Wyoming's citizens; elected officials, including local school board members; and professional educators. Henceforth, every one of the state's 49 school districts will be under even more intense pressure to ensure that its quality of instruction is sufficient to meet the goal of a post-secondary option for each student. Each district will have to meet this objective within the revenue boundaries made available by the state. Continued reliance upon additional, locally generated revenues is an uncertain and unlikely prospect.

Inevitably, under a completely redesigned school finance distribution model, some Wyoming districts will receive more revenue than they do now. Just as inevitably, other districts will receive less revenue. Technical mechanisms exist both for rationally leveling up low-spending districts, and holding high-spending districts harmless until the

overall state-level distribution catches up with the present level of spending. Whether or not such arrangements will be acceptable to the Legislature and, perhaps ultimately, the state Supreme Court is not now known.

The Wyoming Legislature's Response

The Legislature proceeded on two fronts to address the Court's decision. Six joint committees, drawing upon the expertise of both houses of the Legislature, were assigned component tasks related to developing a school finance system calculated to meet the Court's requirements. A Select Committee was formed to oversee and coordinate the work of the other five committees and to consolidate committee recommendations into a single bill. The Education Committee; the Corporations, Elections and Political Subdivisions Committee; the Capital Construction Committee; the Revenue Committee; and the Appropriations Committee were all assigned responsibility for facets of school finance system design. The work of these committees began early in 1996 and proceeded into 1997.

Simultaneously, under the direction of legislative leadership, legislative staff sought and received expert advice and assistance from the National Council of State Legislatures, Education Commission of the States, and Mid-Continent Regional Educational Laboratory. Additional expertise was sought from an independent contractor. In March 1996, legislative staff were directed to develop a process to procure the services of an independent consultant to conduct a "Cost of Education" study. On April 16, 1996 a request for qualifications (RFQ) was sent to potential bidders. The number of prospective bidder responses to that RFQ was judged inadequate, and a modified RFQ was distributed to potential consultants on May 21, 1996. On July 16, 1996 Management Analysis & Planning Associates, L.L.C. (MAP) was selected as the contractor to conduct the study. Work proceeded immediately, and this report is a product of that effort.⁵

END NOTES

¹ The Wyoming Supreme Court's 1995 decision, *Campbell County v. State of Wyoming*, stands on the shoulders of a prior state supreme court decision, *Washakie County School District Number One v. Herschler*. In this latter case, decided in 1980, the Wyoming school finance system was also declared unconstitutional. In the 1995 Campbell decision, the Court ruled that legislative compliance with Washakie had been insufficient and, thus, specified that a more restricted time schedule be imposed for constitutional compliance. Hence, the Court's imposition of the above mentioned 1997 schedule deadline by which the legislature is expected to enact a new statewide K-12 school finance system. (See *Campbell County School District; et al., vs. State of Wyoming: et al.*, 94-136 and 606 P. 2d 310 (Wyo., 1980)).

² These effects also apply to capital funding. However, this report and set of proposals, by agreement with the Legislature, does not address capital funding matters.

³ A question remains about whether a local school district can raise revenue in excess of whatever a new state distribution formula determines to be its eligible level. The Wyoming Supreme Court opinion in Campbell may have left the door slightly ajar regarding local school district discretionary spending in excess of some state determined base dollar amount. However, if so, the practical taxing arrangements by which such discretionary local level revenue generation would be judicially tolerated appear unusually constrained.

⁴ California in its various equal protection decisions stemming from the first decision in *Serrano v. Priest*, (557 P. 2d 929 Cal 1976) has been required to comply with a rigorous per pupil spending equalization provision. However, in California, the Court has permitted an approximate \$400 per pupil expenditure band within which district's are expected to fall. Additionally, the California Court has permitted approximately five percent of the state's enrollments to fall outside of that band. For now, Wyoming appears to have nowhere near such judicially tolerable per pupil spending discretion, other than spending differences attributable to identifiable operating costs. Moreover, California's compliance with Serrano has never been conditioned upon the development of a rationally based cost of education formula.

⁵ The Wyoming Legislative Service Office publishes a periodic newsletter detailing the progress of the overall effort to meet the dictates of the Court's decision. See "Education Reform Newsletter," various editions. The LSO also maintains a web site on which reports appear electronically. The web site address is <http://legisweb.state.wy.us>

III. THE MODEL'S PURPOSES

The alternative school finance arrangements contained in this proposed model are intended to:

Encourage high quality instruction for Wyoming students.

The model has been specifically designed to ensure a "proper education," one tailored for today's circumstances and for what can be reasonably anticipated in the future. What this means is that the resources distribution formula is geared to provide sufficient opportunity for each Wyoming student to acquire the knowledge and skills required for a post-secondary school option. This opportunity includes having access to the prerequisites for admission to the University of Wyoming and similar post-secondary activities, for acquiring additional technical skills, or for entering the work force.¹

Provision of resources, of course, does not itself guarantee high quality instruction. Resources are necessary, but by themselves they are insufficient for a good education. However, the Cost Based Block Grant Model is deliberately designed to be consistent with other components of a high-performing education system, e.g., decision discretion by local communities and education professionals, appropriate assessment of student performance, means for productive staff development for teachers and administrators, and the possibility for remedial action in the event of persistent school failure.

Treat students equitably.

If this or a similar model is adopted, the educational opportunity of Wyoming's students will no longer be conditioned by local property wealth or local school district taxation preferences. All students will be guaranteed access to resources sufficient to acquire an education consistent with what is anticipated as the needs and conditions of the 21st century. Moreover, the proposed model takes notice of and deliberately allocates higher resource levels in instances where students suffer from conditions such as recognized disabilities, economic disadvantage, or rural isolation.²

Maximize local control, consistent with the Court's mandates.

The proposed new model does not ensure each local school district the same kind and quantity of revenue-related, decision-making discretion it now possesses. Under the proposed model, school districts would no longer control their overall spending levels and taxation rates. Such local district discretion appears to be precluded by the Wyoming Supreme Court decision in the Campbell County case. The proposed Cost Based Block Grant Model attempts to preserve every other local school district prerogative, particularly the ability for local officials and professional educators to determine the manner in which state-generated revenues are spent. The proposed model makes assumptions regarding myriad operational components, such as school size, class size, kinds of needed education professionals, teacher salaries, textbooks, computers, and utilities. However, these assumptions are made to ensure that a complete educational delivery system has been fully and rationally costed. These assumptions are not intended to bind local officials to the same model elements when they exercise their judgment in operating local schools and classrooms. Rather, the components are intended to have a synergistic effect. By paying careful attention to the deployment of its resources, a local Wyoming district should be able to enhance its students' performance.

Preserve professional prerogatives of Wyoming's educators.

The Cost Based Block Grant Model assumes that the Legislature will specify the goals of the Wyoming education system and then specify resource levels to enable local districts to achieve such goals. However, from that point forward, the finance model is pedagogically agnostic. It retains for educators the decisions they have traditionally been entrusted to make regarding the best manner in which to instruct students and the materials to be used in the process.

Prove understandable to laypersons and education professionals.

Making the model understandable is a heroic challenge. The current Wyoming school finance system, like its counterpart in most states, is extremely difficult to understand. The proposed Cost Based Block Grant Model assuredly will have many technical features. However, its basic components are relatively easy to understand. There are only five necessary steps: (1) Each school district in the state keeps records by grade level of its student enrollments (Average Daily Membership). (2) These data are then used to determine the numbers of teachers, counselors, administrators, supplies, texts, computers, and other instructional and operational items needed to provide a proper education. (3) If students have special characteristics, such as physical disabilities, an adjustment is made to ensure added resources. (4) Thereafter, adjustments are made for teacher seniority, "necessary small schools," and regional cost-of-living differences. (5) "Costs" are imputed to all appropriate factors in each of these steps. Finally, the sum of these factors taken together determines a school district's state-guaranteed revenues.

Possess flexibility to encompass needs of 49 local school districts.

Many states do not possess the extremes of geographic diversity and population distribution that characterize Wyoming. These and other complicated features manifest themselves in a spectrum of grade-level configurations, school sizes, staff deployment patterns, transportation routes, and other school operating features. The proposed Cost Based Block Grant Model acknowledges this complexity and contains features that permit multiple adjustments to accommodate these unique school and school district situations.

Accommodate appropriate changes in future years.

The Cost Based Block Grant Model is easy to amend or adapt. In the simplest of worlds, the Wyoming Legislature need only decide each session if it believes a cost-of-living adjustment (COLA) is in order and determine the amount. Such a multiplier could then be applied as the final step in the Cost Based Block Grant Model computations. Other relatively uncomplicated technical and administrative steps need be taken annually by the Wyoming Department of Education or other administering agency.

Additionally, however, if the Legislature believes that some fundamental new knowledge regarding education has been discerned, and the legislators wish to incorporate this feature into the model itself, they can easily do so without eviscerating the other parts of the model in the process.

Similarly, if school or school district conditions now addressed in the model, such as "necessary small schools," are altered by virtue of population growth or shifts or changes in school district boundary configurations, then a component of the model can be altered without disturbing the equilibrium of other model components.

Prove defensible in a court of law.

Whether or not the proposed Cost Based Block Grant Model or some other new finance model is adopted by the Legislature, almost assuredly some kind of school finance system change appears necessary in light of the Campbell County Court decision.

Of course, almost all districts receive less funding than their advocates believe they need. More troublesome yet, school finance changes inevitably have a redistributive effect; some districts either get more or less than they did previously, or some districts get more than others. Modern America often depends upon the judicial system to

resolve some of the accompanying conflicts. Thus, litigation over a new school finance plan of the magnitude required in Wyoming seems almost a foregone conclusion.

The Cost Based Block Grant Model has been constructed in anticipation of a legal challenge. It attempts to comply with reasoned interpretations of the Court's decision in Campbell. Also, it has been constructed so that components can be mixed, matched, or added, still permitting the model to retain its essential integrity. Thus, should a Court find one or more components unsatisfactory, there is a chance that the overall strategy might still be left intact, avoiding costly and time-consuming redesign efforts.

END NOTES

¹ This and similar outcomes to be expected of the state's education system are currently undergoing formal consideration by the Wyoming Legislature.

² The unique circumstances of small rural high schools and their inability to offer the same spectrum of courses as urban high schools was brought forcefully to MAP's attention. Scale enables large schools and schools operated by large enrollment districts, to offer subject-matter electives that may elude small and remote schools and districts.

The Cost Based Block Grant Model addresses the problem. However, advocates for "necessary small schools," may never be totally satisfied. A high school of 2,000 to 3,000 students will have sufficient enrollment to offer a wider range of courses, such as Japanese language and Advanced Placement history. Whatever the nature of preferred electives, the model attempts to balance the scales by providing "necessary small schools" and districts with added resources that may be used for specialist teachers, or for technological linkages and distance learning opportunities. Even with substantial new resources, very small schools will be unable to offer a wide array of courses. MAP makes no case that distance learning is as fulfilling as a good instructor in an actual classroom. However, MAP does contend that distance learning alternatives are better than no learning alternatives at all. Finally, the sense of community integrity, personal intimacy, and social cohesion that frequently characterizes small high schools is in itself a valuable asset, which many students in large high schools do not experience. Furthermore, while not having been charged to explore the matter intensely, MAP discerns no significant diminution in the capacity of graduates of Wyoming's small high schools to gain entry to post-secondary institutions.

IV. CAVEATS: WHAT THIS REPORT DOES NOT COVER

There are components of Wyoming education and school finance which deliberately are not addressed in this report. By explicit agreement with the Wyoming Legislature, this report:

- Does not dictate operating decisions and actions to local school district officials and professional educators.
- Does not address means for generating education revenues.
- Has implications for—but does not directly address—tax rates, impact, or incidence.
- Does not address capital (construction) resources.
- Does not directly address school district organization or governance.
- Does not address specific instructional strategies, curricular programs, or performance procedures.
- Does not alter directly federal government school aid distribution.
- Only obliquely, and through recommendations for future changes needed in support of the proposed new financing system, addresses state-level administrative procedures, such as accounting mechanisms.
- Does not provide the details of an accountability system.

The Cost Based Block Grant Model cannot guarantee that a student will learn, only that he or she will have an opportunity to learn, an opportunity no longer conditioned by variations in local property wealth or levels of

taxation. However, when it comes to individual levels of student performance, as with most human endeavors, matters of motivation, tastes, and ability will continue to play a large role.

V. THE REPORT'S ANALYTIC PROCEDURES

To prepare this report and to construct the proposed Cost Based Block Grant Model, MAP consultants engaged in the following activities and processes.

Review of Research Regarding Effective Schooling

MAP reviewed education research findings with school finance implications. This research is, obviously, a subset of all research. For example, there is a coherent body of literature about improving education outcomes, such as setting high standards for students, engaging students directly in their learning, involving parents in their children's schooling, and achieving consensus among school personnel regarding the goals of an education program. Research about such matters is important. However, it has little direct bearing on school finance.

Conversely, research about matters such as school and class size, teacher training and experience levels, and use of instructional technology both influences instruction and has school finance implications. Thus, it is this latter category into which MAP delved more deeply.

Education research results do not tightly dictate instructional practices or education policy. Regrettably, education, while consistently becoming a more technically understood endeavor, is still far from a science. Thus, MAP's research findings serve to establish best practice boundaries within which one can assure the policy community that students will be advantaged. However, these boundary areas or zones do not lend themselves to equations, such as "class sizes of one student less will lead to an additional month of reading progress for pupils." There simply are too many intervening variables to arrive at such conclusions.

MAP's research review enables this report to assure policy makers, at a minimum, that they will do no harm if they operate within a sphere of best practice in areas such as school and class size. More positively yet, these research findings can be used by state policy makers to be confident that the more they weigh their decisions toward the positive side of a zone of best practice, the more likely they will further the educational opportunity of Wyoming students.

Convening Wyoming Education Experts

Relying upon the good offices of state officials and local school district educators, MAP convened several groups of Wyoming education experts representing major categories of professional practice and experience. These all-day meetings (held over a week-long period of time) involved teachers, counselors, principals, business managers, and superintendents from elementary, middle, and high schools; from large and small districts; and from rural and urban areas of the state. Participation required that the individual invitees possess a master's degree and have five years of employment in a comparable position.

No claim is made that these groups represented a scientifically selected sample of Wyoming educators. Rather, what was sought was a broad cross section of professional opinion and experience regarding crucial components of instruction and school operation. To the extent possible, these educators reflected the regional and size diversity of Wyoming's schools and school districts. The principal question posed to participants was, "What in your judgment are key components required to provide effective instruction, to enable students to acquire the prerequisites to enter the University of Wyoming, or to have access to other attractive post-secondary endeavors?"

Participants' initial responses differed depending upon their professional perspectives. No effort was made to reach perfect accord. Deliberately, no votes were taken. Nevertheless, general agreement was reached that proposed

components in the models were appropriate. These components are also consistent with research findings and notions of best practice.

Consultation with Wyoming educators continued throughout this report's development. MAP representatives met with school district superintendents who reviewed and critiqued the study's methodology. School district business managers and representatives of the Wyoming Department of Education confirmed the validity of MAP data. Revisions to models were proposed and carefully considered. Appropriate changes were incorporated. These exchanges enhanced understanding of many of the unique features of Wyoming's public schools, and the resultant product was significantly improved by this process.

If other expert groups, similarly representative, were assembled, would they reach identical conclusions? Possibly, or possibly not. There is no reason to believe that a panel of education professionals will be any more or less in agreement than experts in other technical fields, such as medicine or engineering. What can be said with confidence is that any similar panels would likely concur that specific components now included in the proposed Cost Based Block Grant Model are appropriate. If such experts disagreed, it might be over quantities within any component category. Such disagreement would be found among physicians debating angioplasty versus chemical or surgical treatments of cardiovascular disease. Technical disagreement is not by itself grounds for dismissal of results or an assertion of unscientific behavior.

Consultation with National Professional Associations

MAP consulted many of the national associations and professional organizations regarding matters of best practice and professional standards. These conversations were aimed at refining instructional components emerging from the deliberations of Wyoming's expert educators, as described above, and from MAP's distillation of research results.

Among the organizations with which MAP conferred were the American Library Association, National Board of Professional Teaching Standards, National Council for Accrediting Teacher Education, American Association of College and Teacher Education, National Council of Teachers of English, National Council of Teachers of Mathematics, American Association of School Administrators, the Council of Chief State School Officers, National Education Association, the American Federation of Teachers, and National Staff Development Council.

Compilation and Syntheses of Best Practices from Other States

MAP sought information from other states which have had experience in attempting to construct a resource-based education finance model. MAP also conferred with officials from other states regarding reimbursement formulae for matters such as "necessary small schools" and pupil transportation. The states with which MAP has compared Wyoming or sought additional information which might apply in Wyoming are: Arizona, California, Colorado, Kentucky, Nevada, Oregon, Washington, Rhode Island, and Tennessee.

Visits to a Representative Sample of Wyoming's School Districts

MAP sent teams of trained observers and data collectors to 29 of Wyoming's 49 local school districts. A sampling matrix was constructed by which all 49 districts were arrayed in strata according to the size of their enrollment. Within each enrollment band, districts were randomly selected to ensure that every district of an approximately equal size had an equal chance of being visited. To obtain a view of education in Wyoming, MAP over-sampled the number of visited districts. (National public opinion polling results are usually, and accurately, based on a sample of 900 to 1100 citizens, a minuscule percentage of the total U.S. population of 267 million.) MAP might have been able to generalize to the state from a substantially smaller sample than 29 districts. Still, given the complexity of the state, erring on the side of inclusion seemed a sensible way to proceed. The 29-district sample included 83 percent of the school children in Wyoming.

Each of the 29 sample districts was visited by a MAP researcher. The purpose of the visits was threefold. First, it was important to determine firsthand the extent to which the expert-generated list of instructional components might actually fit an operating school district. Second, MAP was interested in learning about local conditions that might

need to be taken into account when designing components of the model. A third reason for the site visits was to collect quantitative information to be used in determining statewide costs for a variety of instructional components.

Collection of Education-Related Data from Wyoming Districts

MAP sought information from all of Wyoming's districts on selected dimensions, such as teachers' salaries, class sizes, and an assortment of budget categories. MAP also reviewed the data and findings previously collected in connection with trials in the Campbell County case.

Consultations with Wyoming State Officials and Other Experts

Throughout the six months during which MAP engaged in this analytic process, there has been a constant dialogue with Wyoming administrative officials regarding data matters and the operation of current school finance and cost-of-living measurement provisions.

Sources of Data for Imputing Revenue Values to the Cost Based Block Grant Model

Revenue values were derived principally from current Wyoming cost experiences with components of the proposed model. These current costs were obtained from school district expenditure reports, from Wyoming Department of Education data, and from data about Wyoming collected by national organizations, such as the National Center for Education Statistics and the National Education Association. (The relationship of such expenditures to true costs is discussed in a subsequent section of this report.)

Procedures for Gathering Information Regarding Wyoming's Consumer Price Index

Fortunately, Wyoming already prepares a semi-annual index of consumer prices for each county of the state. It is published by the Department of Administration and Information, and it is designed for use by the Department of Revenue to calculate county poverty levels to administer exemptions from property tax liability for homeowners whose income is below the poverty line in that county. The Department of Administration and Information utilizes the relative importance (weights) in a consumer market basket that are developed by the Bureau of Labor Statistics in its construction of the nationally assembled Consumer Price Index.

The Wyoming index is revised on an continuing basis, utilizing purchasing patterns of consumers in Cheyenne, based on systematic observations by Department of Administration and Information officials. The Department employs (on a contract basis) price checkers in 15 communities throughout the state, and these price checkers report price changes to the Department on 140 market basket items every six months. It then calculates a statewide index, based on these 15 communities. The index numbers for 15 counties are based on the price levels of the community surveyed in that county. Index numbers for the other eight counties are in an arithmetic relationship to the first 15, based on demographic and economic similarities between the surveyed and unsurveyed communities.

It is these cost-of-living (COL) data that MAP has relied upon to adjust revenues for which Wyoming school districts will be eligible. As explained in greater detail later in this report, the COL technology is new and, as of now, used only in a few states for school finance purposes. Almost assuredly, it will need to be fine tuned over time.

VI. STRUCTURE OF WYOMING'S CURRENT EDUCATION SYSTEM

Wyoming relies upon local school districts as the operational government unit responsible for the delivery of education to students. The 49 local school districts in Wyoming are located in the state's 23 counties. This is a vastly smaller number of districts, spread over a vastly larger land area, than is typical for other states in the nation. Having such a slender number of districts, covering such large geographic areas, gives an advantage to Wyoming in striving

for an equitable school finance system. States with many geographically small districts exhibit wider local property wealth disparities than Wyoming, often making their pursuit of finance equality even more difficult.

Districts and Schools

In terms of student enrollments, most of Wyoming's local school districts are small. Twenty-five districts enroll fewer than 1,000 students. While the median-size school district in the United States is approximately 2,000 students, the median-size district in Wyoming enrolls 998 students.

However, most of Wyoming's students are in larger districts; approximately 20 percent of the state's districts enroll 50 percent of the state's students (see Figure One).

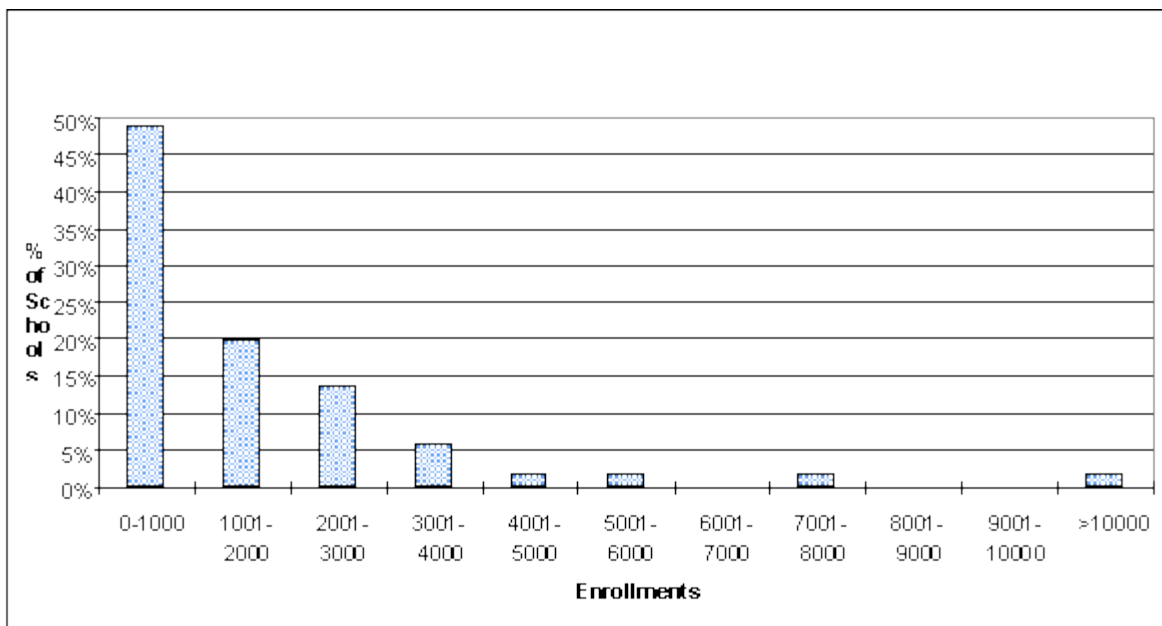
A similar dichotomy emerges for Wyoming's schools. Most schools are small. However, most students attend larger schools. For example, Figures Two through Four display the distribution of schools and enrollments, by size of school, for elementary, middle, and high schools. Thirty-one percent of the state's elementary schools contain 100 or fewer students. Conversely, only five percent of the state's students are enrolled in these small schools. More than 80 percent of Wyoming's elementary students attend schools that have 200 students or more. Indeed, more than 20 percent of students attend elementary schools that are larger than 400 students.

Similar patterns emerge for both middle and high schools. Almost 60 percent of Wyoming's high schools enroll 200 or fewer students. However, these schools, in the aggregate, accommodate less than 15 percent of the state's total high school enrollment.

Many of Wyoming's small (low enrollment) schools are a function of population sparsity, where students have to travel unusually long distances and for long amounts of time each day to reach their schools. These "necessary small schools" are taken into account as an added cost feature in the proposed Cost Based Block Grant Model.

Figure One

School District Size and Enrollment Distribution



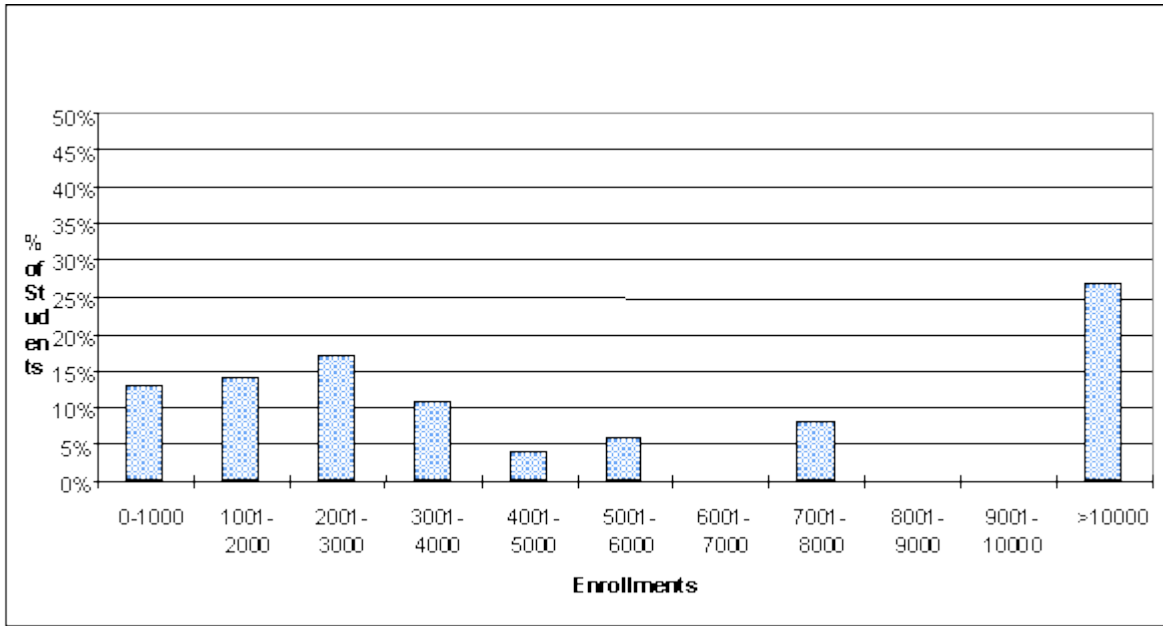
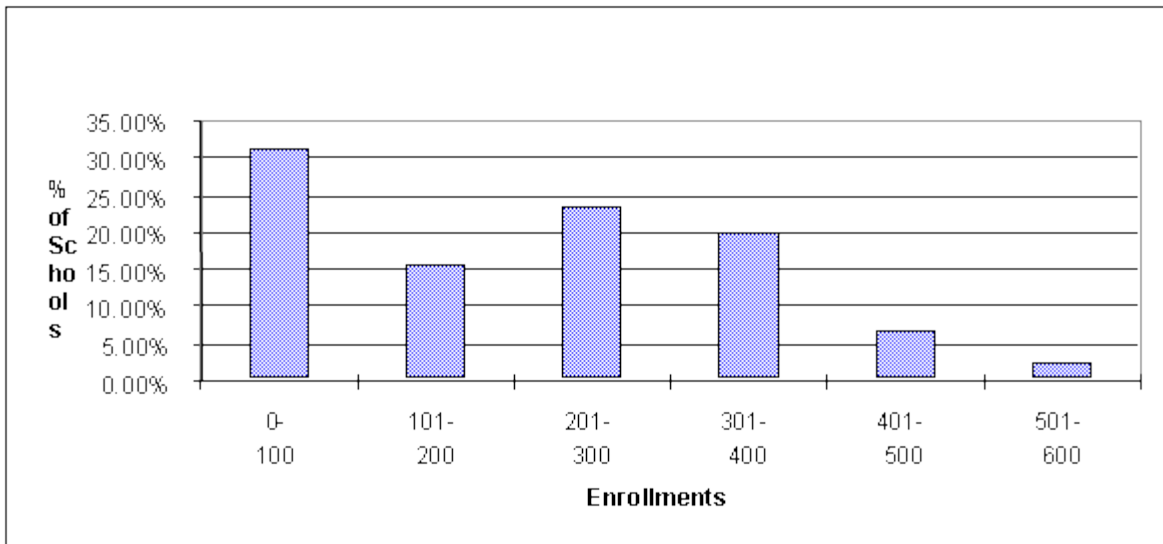


Figure Two

Elementary School Size and Enrollment Distribution



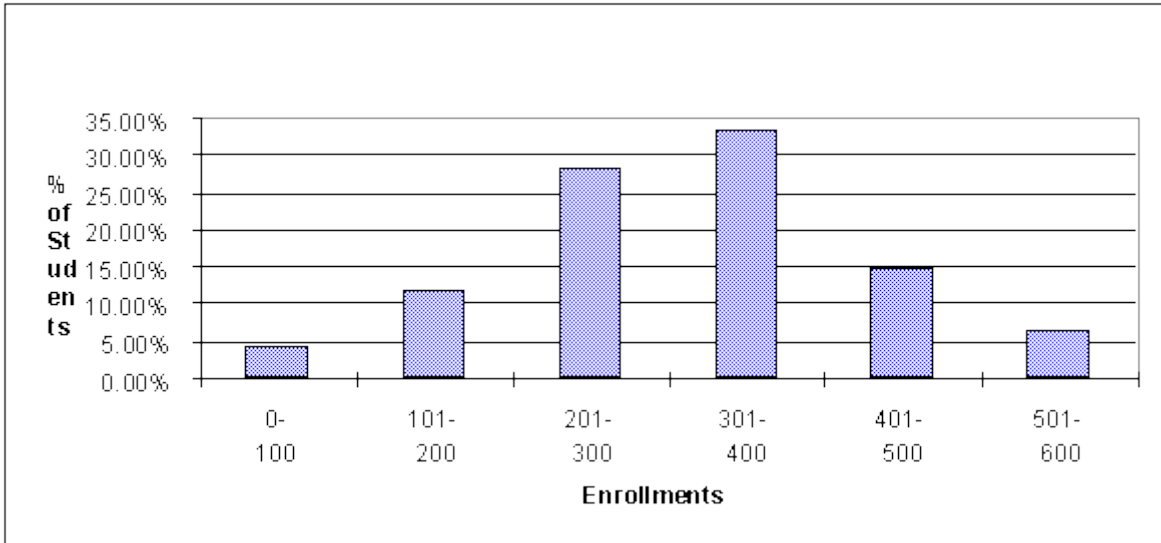
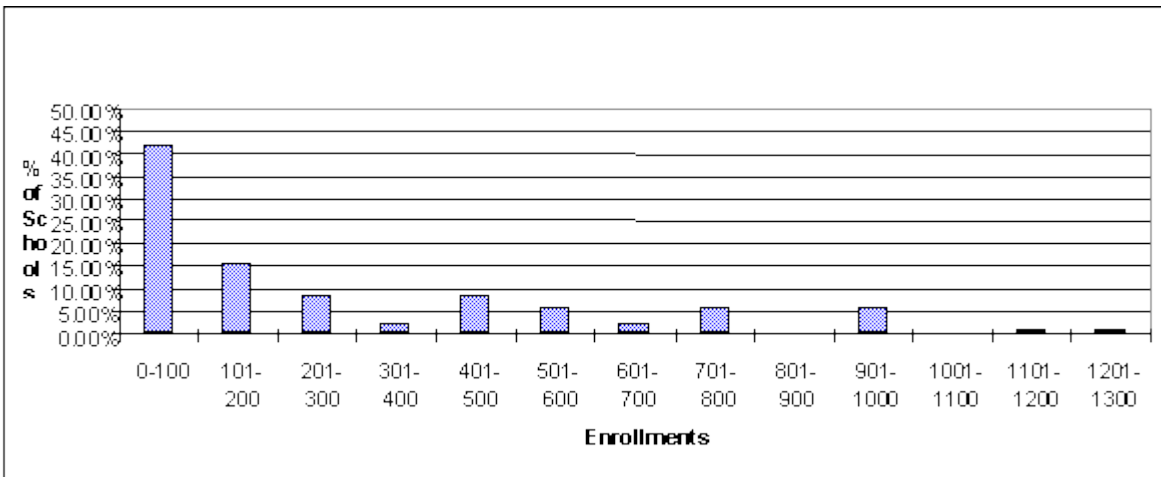


Figure Three

Middle School Size and Enrollment Distribution



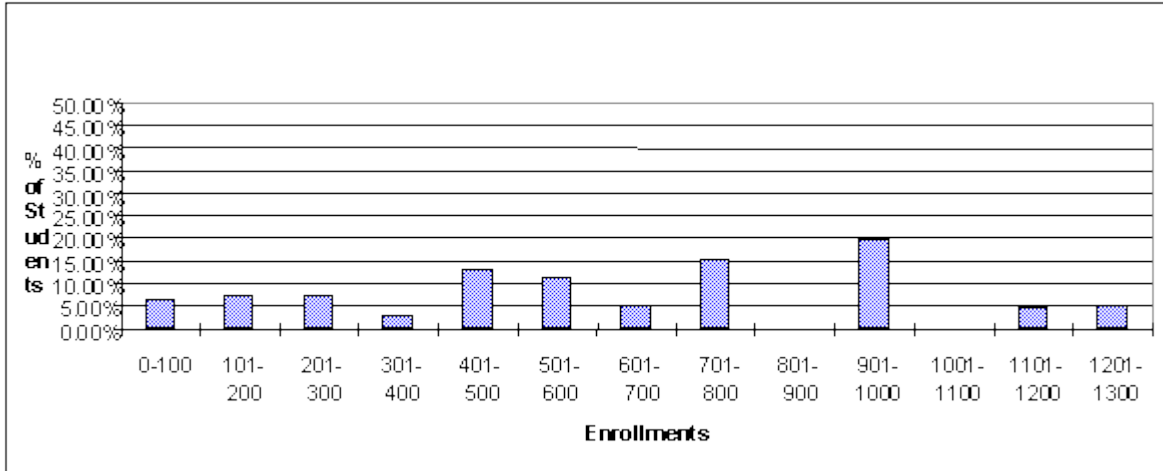
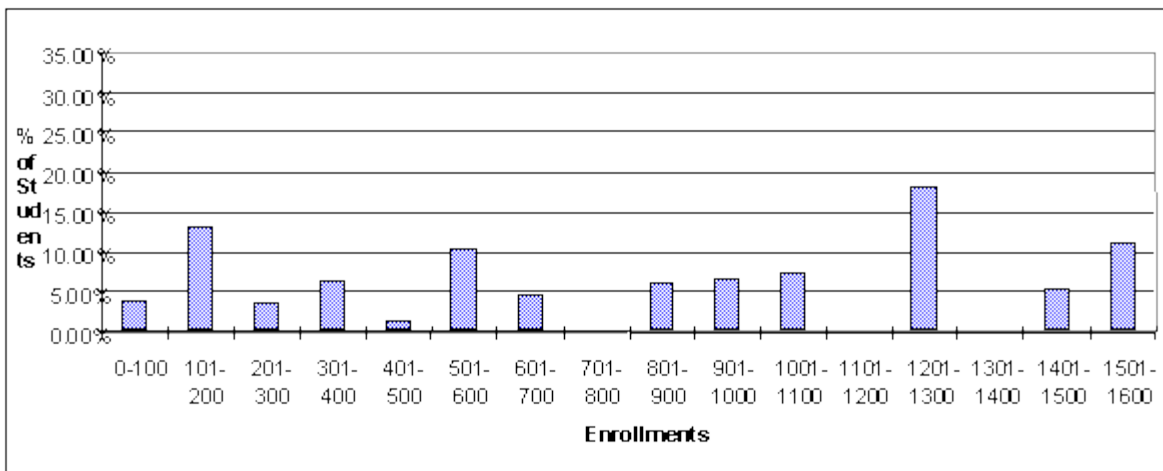
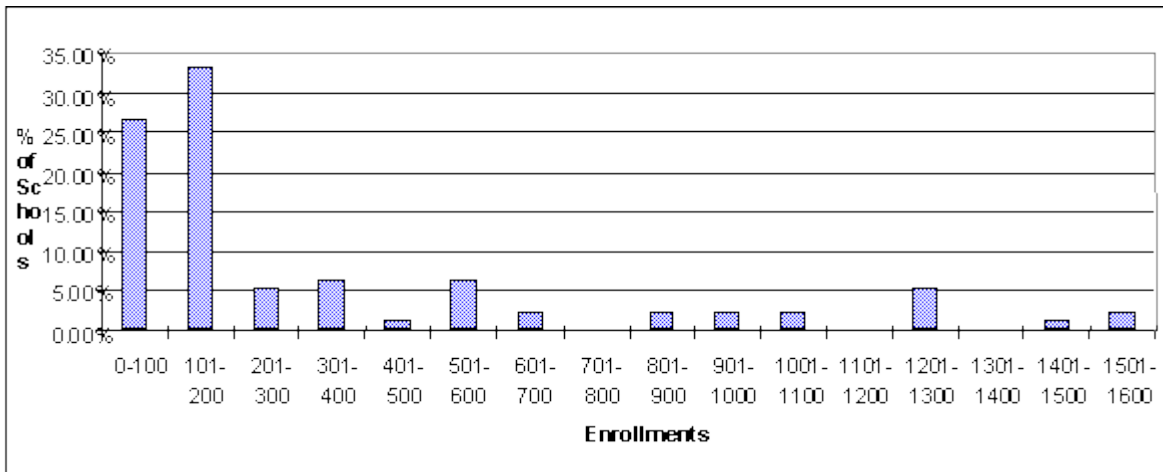


Figure Four

High School Size and Enrollment Distribution



VII. WYOMING'S PRESENT SCHOOL FINANCE ARRANGEMENTS

Technically speaking, Wyoming's current school finance distribution system, which has been found to be unconstitutional, is known as a "Foundation Plan." This type of plan is the most widespread school finance arrangement in the nation. A "Foundation Plan" defines "adequate" or "proper" in terms of per-pupil or classroom spending levels. If a school district spends at least the state-specified minimum amount per pupil or per classroom, it is said to have provided students with a "foundation" which, presumptively, ensures equality of educational opportunity. "Foundation Plan" minimum spending levels are seldom derived from a rational cost analysis of what an individual pupil actually needs by way of an instructional package. Rather, the state-specified foundation amount almost always is politically expedient, constructed upon last year's statewide spending averages and what the state treasury can afford in the forthcoming year.

In most states, Wyoming presently included, school districts are permitted to spend more than the state-defined "foundation" by generating additional local revenues from discretionary property taxation. It is the interaction of two school financing conditions that results in Court-disapproved interdistrict spending disparities. One factor is the ability of some school districts to spend more than the foundation amount by taxing local property wealth. Also, Wyoming's existing formulaic reliance upon "Classroom Resource Units" (CRUs), and their somewhat arbitrary "Divisors," results in distributional inequities which have been found by the Wyoming Supreme Court to be insufficiently related to the actual costs of providing schooling.

Such inequalities have triggered a quarter of a century of litigation and legislative action throughout the United States. The Washakie decision and the 1995 Wyoming Supreme Court decision in Campbell County are part of this trend. Throughout the nation, state courts have been evenly divided in their decisions to overturn or sustain foundation plans. A 1973 United States Supreme Court case, *Rodriguez v. San Antonio*,¹ determined that education is not a fundamental right, and interdistrict spending differences are acceptable under the federal Constitution.

Current Wyoming mechanisms for financing school district operation were enacted initially in 1983. Each subsequent legislative session has resulted in minor amendments; however, the fundamental framework has remained intact. The following lists the principal components of Wyoming's current "Foundation Plan." Components of the plan which the trial court found unconstitutional are noted with asterisks. The Wyoming Supreme Court found the entire plan unconstitutional.

- ADM--A measure of the number of pupils served by the district. This is known as Average Daily Membership.
- CRU--A computation by which a district's ADM is converted to "Classroom Resource Units."
- Divisors*--A school district's total number of CRUs is determined, principally, by dividing district enrollment (ADM) using legislatively specified "Divisors." Divisors are different for elementary, middle, and high school levels. The Legislature can alter this ratio depending upon its judgment and the availability of state revenues.
- Isolation--CRU computations also take into account size of schools and distances from population centers. These factors can increase the number of CRUs, absent strict consideration of a district's ADM counts. In effect, Wyoming now has a small school factor. However, it is not a "necessary" small school factor. It is missing a definition of "necessary."
- Entitlements--Specific application of the above-listed factors results in a determination of a local school district's operating budget for state-aid eligibility. In effect, these computations determine eligibility for an entitlement of state funding.
- Dollar Value--The Wyoming Legislature annually determines the dollar value of a CRU. For 1995-96, that amount is \$92,331.
- Mandatory Tax Rate--If the local application of a legislatively determined minimum property tax rate fails to generate sufficient revenues to cover the "Foundation," a local district is eligible for a state entitlement subsidy.²
- Local Option Tax Rates*--Local school boards, sometimes requiring permission of the local electorate, can impose added property taxes, the use of which is directed by the Legislature to be allocated to operation and capital outlay.

- Recapture*--Districts in which the application of the legislatively determined local property tax rate generates revenues in excess of 109 percent of the computed "foundation" amount are subject to "recapture." Payment of the excess revenue, amounts in excess of 109 percent of the "foundation," is made to the state for redistribution to other, subsidy-entitled school districts.
- Categorical Aid -- Both Wyoming state government and the federal government award added revenues to local school districts for specific kinds of programs (e.g., school breakfasts and lunches, vocational education) and for specific kinds of students judged to be in need of higher-cost services (e.g., disabled students).

Several of these various formula components contributed, in the eyes of the Court, to revenue inequalities and irrationalities. Principally, the CRU's "Divisors" were discovered to bear an insufficient relationship to actual numbers of students to be schooled and the costs of schooling them.³ Also, the interaction of features, such as mandatory taxes, local option levies, and the recapture provision, permitted some districts to have access to greater revenue than others simply by virtue of their local property wealth advantage.

MAP has not been called upon to undertake a systematic examination of the distributional and tax burden consequences of the existing formula. However, in the course of analytic efforts undertaken in connection with the design of the Cost Based Block Grant Model, Campbell trial court findings regarding the inequality of revenue distribution became strikingly apparent. The existing finance formula provides a disproportionate advantage to small school districts with small schools to the detriment of large enrollment school districts with larger schools.

Wyoming's current "Foundation Plan" and the Cost Based Block Grant Model differ on significant dimensions. Most of the differences spring from two fundamental decisions contained in the state's Supreme Court Campbell County opinion. First, the Court specifies that, under the Wyoming Constitution, education is a fundamental right and, at least for school finance purposes, Wyoming is a "Unitary System." As a result, state government must now take plenary responsibility for ensuring that each schoolchild has equal access to an adequate system of education. Second, whereas local school districts retain an important, indeed a crucial role, in the delivery of instruction, they no longer are principally responsible for determining spending levels.

These two conditions necessitate a new school finance distribution system. The new system relies more heavily upon the state to ensure equality and resources sufficient to ensure a proper education. The system also relies more heavily upon a set of rational and technical processes for discerning the level of available revenue. It should be noted particularly, however, that there is nothing in the Campbell County decision which needs to be construed as limiting the ability of local school districts to make fundamental decisions regarding how to deliver instruction and how to spend their resources to do so. In other words, fundamental forms of local control can remain intact.

It is also worth noting that nothing in the Supreme Court's decision prevents the Legislature from taking several important additional steps and addressing existing impediments to effectiveness and efficiency, e.g., the absence of a full accountability system.

Impact Aid

As described elsewhere in this report, MAP has been charged only with analysis and recommendations relating to state general fund expenditures. School districts would continue to receive federal and perhaps state special funds, in addition to the general funds generated by the model. Federal Impact Aid is a unique case which will require special consideration in the context of changing the school finance system.

Public Laws 81-815 and 81-874 authorize federal funds for local school districts "impacted" by unusually concentrated federal government activities, such as military bases; defense manufacturing; oil reserves; forests; or federally subsidized, low-income housing.⁴ This aid is labeled "in lieu of tax" subsidy because local jurisdictions cannot legally levy a tax on the federal government, but they, nevertheless, often have to provide services to residents and employees of activities which are heavily related to such a federal presence.

When a state is a "Unitary" system of education, such as Hawaii, with no local school districts, the Impact Aid flows directly to state coffers to be melded with general fund revenues. However, where states rely heavily upon local school district financing and locally levied property taxes, the Impact Aid usually flows directly to the school district.

Under the proposed Cost Based Block Grant Model, there is a case to be made that Wyoming will be a "Unitary" state system. For example, in keeping with the Wyoming Supreme Court decision in Campbell County, local districts will have little or no discretion in spending levels, and property-tax rates may be state determined. All similarly situated students will be recipients of the same

Figure Five
Comparison of Current Wyoming Foundation Plan and
Proposed Cost Based Block Grant Model

Comparison Dimension	Current Wyoming Foundation Model	Proposed Block Grant
Plenary Authority Legal/Reality	De Jure/State De Facto/ Districts	State State
Operational Definition of "Proper Education"	State Specified Revenue Per Classroom Resource Unit (CRU)	Assured Opportunity to Acquire Postsecondary Prerequisites
Unit Determining Total District Revenue	Local School District	State
Unit Determining Spending Priorities	Local School District	Local School District
Unit Determining Instructional Priorities	Local School District	Local School District
Unit Determining Education Related Taxes	State/Local District	State
Basic Distribution Device	CRU Measure of Classrooms	ADM Measure of Students
Basis for Determining Per-Pupil Dollar Level	Political/Historical	Rational/Technical

State Specified Local District Cost Adjustments	School Type (E/M/H) Small School Transportation Special Education	School Type (E/M/H) Teacher Seniority Small School* Pupil Characteristics Cost Of Living Transportation
Discretion for Local District to Generate Added Per Pupil Revenue	Yes	Legally Uncertain but Improbable
Review Authority	Wyoming Supreme Court	Wyoming Supreme Court
Administering Agency	Wyo. Dept. of Education	Wyo. Dept. of Education

level of revenue. These features may well qualify Wyoming for unique federal recognition by which Impact Aid would henceforth flow to the state and be available to the Legislature to distribute. An initial determination would have to be made by the Wyoming Legislature. Final determination on such matters will rest with the U.S. Department of Education, and the complexity of the matter will almost assuredly necessitate intercession by the Wyoming congressional delegation.

END NOTES

¹36L Ed. 2d16 93S. Ct. 1278 (1973).

² A local school district's actual tax rate may exceed the "mandatory" rate employed to determine state subsidy eligibility. Districts have local option levies.

³ It is for this reason that MAP proposes to use ADM as the principal allocation unit and to abandon the CRU concept.

⁴ These laws were initially enacted by Congress in 1940, and known then as the Lanham Act. These statutes were intended then to compensate local school districts for the impact of military preparations for World War II, such as the construction of military bases. The notion of "federal impact" has subsequently been expanded substantially. The PL 81-815 provision authorizes federal funds for school construction. The PL 81-774 statute authorizes federal funds for operation. These statutes are unique in that these funds need not flow through states to benefit local school districts. Each year a local school district completes a federally authorized census of student to determine eligibility for these funds, and then directly receives revenues from the federal government for those students who are determined to arrive at the school house door because of a federal presence.

VIII. A Strategy for Inferring "Costs" from Spending

Constructing a Cost Based Block Grant Model is conceptually simple and practically difficult. The problem is the absence of an active "market" for education goods and services. In the absence of a pure competitive market, MAP has relied upon a cost-determination strategy which, at its fundamental roots, links items purchased by school districts to comparable non- education items and activities which are purchasable in the market.

In concept, one should be able to disaggregate components of instruction and then simply determine the competitively shaped, market price for each. What does a quart of milk cost? What does a new pickup truck cost? What does a life-insurance policy cost? All these and millions more items in daily use can be purchased on the market, and their prices are relatively easy to determine. A consumer, either well informed or relatively ignorant, can purchase items having weighed the asking price against perceived benefits. If dissatisfied, the consumer can then buy no more or buy another brand. If satisfied, the consumer can return for a second. Under such arrangements, millions of independent and uncoordinated consumer choices act in the aggregate to influence the availability and price of millions of items and services. This is the "Invisible Hand" to which Adam Smith referred.

Schooling is a different creature. One cannot proceed to the corner market and ask the clerk for a "...box of fourth grade education please." If dissatisfied, the consumer cannot return it and buy another brand. There is not an unfettered market for education services. Because of the intimate connection between instruction and the policy system's perception of the public's well-being, supply and demand do not freely come into play to establish education prices. The "Invisible Hand" is replaced by government's hand. "Prices" and availability are constrained by a set of governmentally imposed policies and restrictions.

The policy system consciously interferes in the provision and "pricing" of education. Here is the justification. Education's benefits, at least at the primary and secondary level, are not easily restricted to its immediate recipients. Conversely, the consequences flowing from an absence of instruction are difficult to restrict to the negligent individual. If left to their own devices, some citizens might choose to under invest in the purchase of schooling, and those around them and the larger society would accordingly be at risk. Thus, to protect itself against under investment and ignorance, almost every society compels schooling.

The United States, through a long stream of historically based policy decisions, has chosen to compel schooling, publicly pay the cost of the endeavor (through taxation), and provide instruction through public institutions.¹ Also, perhaps as a complement of compulsion and the use of public resources, the United States (principally through state government and the judicial system) strongly regulates public schools. They are not entirely free to operate as their employees and parents might choose. Rather, they are constrained on dimensions such as the quality of teachers they may employ, kinds of courses they may offer, students they must accept, design of school buses they may purchase, and the safety of the facilities they acquire or construct.

The combination of public provision, personal compulsion, and operational regulation constrains the market for education goods and services. There are only a few purveyors who come to the marketplace to provide education services. Under current circumstances, public providers have a tremendous advantage over private purveyors, because the former can draw upon tax subsidies to offer their instruction at a vastly lower price than private schools. Through lower prices, coupled with compulsion and high regulation, public providers have a near monopoly. "Demand" is compelled and "supply" is subsidized. There is no free market which helps to establish price.

One might say, "Well, clearly there are private schools. Cannot we see what their costs are and will not that information assist in establishing the true cost of instruction?" In some small ways, it does. Private schools have to use many of the same instructional components as public schools. However, comparisons are not sufficiently valid because of regulatory constraints on public schools. Private schools are not compelled to employ government certified teachers. They are not compelled to offer a legislatively specified curriculum. They are not compelled to serve disabled students or other difficult-to-educate students, or students from families who cannot afford the services. Their facilities are often less subject to stringent building-code safety requirements, and the schools are less likely to be subject to class size maxima or to engage in collective bargaining with employees. These and numerous other differences render it difficult to compare an apple with an apple when attempting to discern education costs from private school activities.

What can be done in the face of such uncertainty? If costs are not easily determined, where can one turn in constructing a cost-based resource model? There are at least two answers to this question. One answer that MAP explored and discarded is employment of a "Hedonic Wage Model." This technique, which involves constructing massive data bases and computing complicated regression equations, seems at best premature to apply in this setting and, perhaps more realistically, simply not appropriate at all. The research on this mode of modeling costs has not been undertaken to a point where it can either specify costs with precision or be understood by laypersons with

confidence. Thus, to rely upon such a procedure in attempting to comply with the Campbell County decision would seem ill-considered. It is too experimental, potentially too costly, too imprecise, and too impervious to public understanding.

MAP pursued an alternative cost imputation strategy. This strategy, "Component Market Comparison," relies upon current school district spending figures and, where appropriate, infers real costs. For example, if school districts purchase the services of professional librarians, then do not the salaries paid them approximate the true "cost" of librarians?

Critics of this "expenditures equate to costs" approach respond:

Not necessarily. School districts may simply be spending whatever revenues they have available to them. These revenues may be insufficient to provide a proper education, or may result in more funds than are needed to provide a proper education. By capturing current spending and inferring that it represents costs, one may be massively and systematically underestimating or overestimating the true costs of a proper education.

This response oversimplifies or overlooks a few facts. For example, statewide average expenditures encompass both high-spending and low-spending school districts, and "true costs" may emerge from the mix. Second, some districts in Wyoming have amassed substantial financial reserves. This condition suggests that the revenue these districts receive must be sufficient to meet their true costs. If districts with surpluses spend the same amount for instructional items as do districts without surpluses, it suggests that expenditures match costs.

However, MAP analysts were reluctant to rely entirely upon such extrapolative arguments. First, by consulting with a wide range of education experts in Wyoming and nationally, as well as reviewing all relevant research, MAP determined a quantity and quality of resources required to provide an adequate (as specified by the Legislature) education to the children of Wyoming. Having done this, MAP's task was to assure that this quantity and quality of resources could actually be purchased by school districts. MAP did so by determining that these resources were currently being purchased by Wyoming school districts at prices allowed for in the model. Thus, because of the partial reliance on actual Wyoming district expenditure experience, it is possible that the model allows districts to continue to pay more than a theoretically "true" cost for these resources, but it is not possible that the model expects districts to provide an adequate education for less than this cost.

MAP thus examined beginning teacher salaries in Wyoming's most competitive labor markets (Laramie and Albany counties), where it can be assumed that, if beginning teacher salaries were too low, school districts would not be able to hire and retain qualified teachers, but would instead lose teacher candidates to other professional pursuits.

MAP used the statewide mean entry salary on which to build a base teacher salary, rather than the entry salary in the most competitive district(s) because it is easier to explain the statewide mean entry salary. However, MAP then compared the statewide mean teacher entry salary to the entry-level teacher salary in Wyoming's most labor market competitive district(s) (Laramie 1, Laramie 2, Albany 1) and found that the statewide average teacher entry salary was close to, but slightly higher, than both (1) the weighted entry-level teacher salary and (2) entry-level nonteaching professional salaries in the most competitive districts.

MAP then increased the above-described base entry salary by folding in academic credits and establishing a seniority step schedule. The dollars used for credits and seniority steps were both established by calculating current actual expenditures. However, MAP appraised the validity of this process by comparing the resulting statewide mean teacher salary with the salaries paid to teachers in neighboring states. Almost without exception, MAP's model resulted in higher teacher compensation than is paid in the states that border on Wyoming.

This logical linking does not respond to all complaints regarding a cost model. Critics of relying upon current expenditures as a proxy for cost also assert that it is class size which drives revenue consumption almost as much as teacher salaries. They inquire: "How do we know that school districts are not simply purchasing the number of teachers they can afford with the revenues they have, rather than obtaining the number they truly need to provide a proper education?"

MAP attempts to answer this question in two ways. First, by convening and conferring with dozens of Wyoming education experts, MAP determined what was consensually agreed to be a range of acceptable class sizes.

Second, MAP explored relevant education research findings to verify that these class size figures were consistent with empirical findings regarding optimal class size effects. They are.

It is easier to assume that salaries for nonprofessional, classified staff are competitive. Also, health insurance costs are generally competitive across occupational categories. Thus, when considering all school district remuneration, salaries and fringe benefits, professional and nonprofessional, approximately 80 percent of education spending is covered. The remaining 20 percent of school district spending is distributed over a wide variety of goods and services. For many of these nonpersonnel items, such as computers, paper, petroleum, transport, food, insurance, athletic equipment, and textbooks, there is a market.

Despite there being a market in some non-salary categories, such as supplies, MAP employed an average of actual expenditures. Supplies, especially when compared with salaries and benefits, have very small relative importance in the model. Although it would have been more precise actually to price each pencil and eraser purchased, the cost of such precision would outstrip the benefit. Further, Wyoming school officials did not cite supplies as priority items for expanded funding. The Wyoming experts were much more concerned about such provisions as small class sizes and additional student support personnel.

The Appendix displays the manner in which costs were imputed for each Cost Based Block Grant Model component.

END NOTES

¹Private schooling has long existed in the United States, and for over 70 years it has had the imprimatur of U.S. Supreme Court approval. However, relatively few students (11 percent of the school age eligible population nationally and a far smaller percent in Wyoming) choose private schools.

IX. Model Components and Their Imputed Costs

The proposed distribution formula is based upon five major categories, each of which is explained in detail later. The individual elements of the formula are cumulative and interactive. In determining revenues for which each Wyoming district will be eligible, consideration will have to be given separately to the district's characteristics on each major distribution dimension. Following that operation, all elements are fused into a final computation, which determines district total operating revenue eligibility. (Capital considerations and sources of revenue and taxation are not presently components of the proposed Cost Based Block Grant Model and are to be given separate consideration by the Legislature.)

The Cost Based Block Grant Model is premised on two assumptions. First, the principal basis of distribution will be a measure of students, average daily membership (ADM). The second premise is comprised of three prototypical models of schools —elementary, middle, and high school.

Assumption One: Measures of Students to be Schooled

The proposed Cost Based Block Grant Model assumes students as the fundamental building block around which the distribution formula is constructed.¹ This action is taken because it is consistent with the legal responsibility of the state. The state is responsible for providing schooling to students. Thus, taking the unit for which the state is legally responsible as the unit upon which to distribute resources appears as the most rational mode of operation. It is also the conventional mode throughout the United States and the industrial world.

Once this assumption is made, then it is necessary to determine the means for measuring students and their characteristics which are important to take into account for education purposes.

This report proposes to utilize ADM as the technical measure of students.² These are presumed to be students registered to attend schools. In that Wyoming presently requires school districts to record ADM, the same definitions and pupil accounting procedures can be used under the Cost Based Block Grant Model as are currently in place. Wyoming Department of Education and local school district officials are familiar with these procedures, and no troublesome transition should result.

In addition, for purposes of determining a district's revenue eligibility, it will be necessary to aggregate ADM by elementary, middle, and high school. The distribution formula, as described in the section immediately below, includes different assumptions regarding resources necessary for instructional effectiveness for each of these three grade configurations.

Other student characteristics, such as their economic status or whether or not they are disabled or gifted, are also important formula components. However, these matters and their measurement are explained later under adjustments to the formula.

Assumption Two: School Organizational Characteristics

The proposed Cost Based Block Grant Model posits schools covering three grade-level groupings (elementary, middle, and high school). This is a pattern widely utilized in Wyoming currently. However this proposed financing mechanism only computes district revenue eligibility; it does not dictate practice. If a local district decides that a different grade configuration better serves its communities (for example, bypassing middle schools and utilizing only elementary and high schools), that is its prerogative. There is nothing in the funding formula which preempts such a local judgment.

The model is constructed around the following prototypical grade groupings: K– 5, 6– 8, and 9– 12. If a local Wyoming school district now, or prospectively, relies upon alternative grade groupings, then the finance model simply treats (imputes costs and discerns revenue eligibility) whatever grades are actually involved as though the district's grade levels were grouped into the tripartite groupings listed above. In other words, students, regardless of a local district grade configuration, will be assigned for revenue determination purposes to their prototypical grade groupings.

The model further posits an idealized enrollment and class-size zone for each grade grouping.³ By national standards, these assumed enrollment zones are small. This is deliberate; the weight of emerging research regarding schooling suggests that, although the operational dynamics are not clear, smaller schools encourage higher academic performance, particularly in the early grades and for students from low-income and minority backgrounds.⁴

The prototypical models for each of the three proposed grade groups are depicted in Figure Six. When compared to school size currently in Wyoming, these prototypes are larger than most schools, but most students are enrolled in schools which are as large or larger. However, the distribution of school size in Wyoming is sufficiently wide currently that there are many existing schools the size of or even smaller than what is proposed as a prototype.⁵

Similarly, to the extent that large schools are problematic, these prototypes could be used as models for schools within a school or other organizational strategies.

Figure Six Proposed Grade Grouping and Enrollment Size Prototypes

Grade Grouping (School Type)	Number of Students
Elementary School Grades K-5	288
Middle School Grades 6-8	300
High School Grades 9-12	600

Determining Revenues

The next step in constructing the proposed Cost Based Block Grant Model is to derive dollar (revenue) values representing the costs of formula components. These cost elements (dollar amounts), when accepted by the Legislature, become values in an equation by which:

- Overall education operating costs to the state are determined, and
- Operating revenue eligibility of each individual school district is computed.

The principal source of information for determining the costs of formula components is the price that now is paid for the specific services and goods involved. Because most components of the proposed distribution formula are now utilized by at least one Wyoming district, and in most instances by all districts, the costs of components can be generally estimated from existing expenditure accounting data for Wyoming school districts.⁶ Only in a few instances, such as the added costs of instructing at-risk students, have data been derived from research reports and other out-of-state sources.

Five Major Components

The Cost Based Block Grant Model contains approximately 25 principal formula components (see Figure Seven). However, this complexity can be simplified somewhat by considering these components within five overarching categories:

- Personnel
- Supplies, Materials, and Equipment
- Special Services
- Special Student Characteristics
- Special School, District, and Regional Conditions

Each prototypical school model is supplied with categories of services and goods deemed by Wyoming experts, research findings, professional standards, and conventional practice to be crucial for the conduct of instruction. However, the quantities and characteristics of these services and goods are not uniform across all three prototypical school models. There are deliberate variations depending upon the grade grouping involved.

Each of the five major component categories is described here.

A. Personnel⁷

Of these categories, personnel will account for the overwhelming costs of a school district. Of all Wyoming school district revenues, 84 percent will be allocated to pay personnel costs. Thus, this is the category to which this report first turns and the one to which the most space will be devoted. Also, the primary determinant of the number of personnel positions needed by a school district is the assumed level of class size. Hence, the biggest driver of overall education costs is the class-size decision.

School district personnel are conventionally separated into two categories denoting levels of professional and occupational preparation and required licensure by the state. Those employee categories requiring state certification are generally the highest paid. (There are exceptions to such a rule when an occupational category is in short supply and a school district has to elevate salaries, such as for a computer technician, to meet labor market competition.) Those personnel for whom the state does not require professional licensing as a condition of school district employment are labeled "classified" employees. The distinction between the two categories is important in these circumstances, because means for calculating the costs, and thus imputing revenues for each kind of personnel are different.

Figure Seven
Cost Based Block Grant Model Costs Components

<i>1. Personnel</i>	
a.	Classroom Teachers (Certified)
b.	Substitute Teachers (Certified)
c.	Instructional Aides (Classified)
d.	Pupil Support Personnel (Certified)
e.	Library/Media Personnel (Certif/Classified)
f.	School Administrators (Certified)
	Clerks and Data Entry
g.	Personnel (Classified)
	Operations/Maintenance
h.	Personnel (Classified)
<i>2. Supplies, Materials, and Equipment</i>	
a.	Supplies and materials
b.	Equipment
<i>3. Specialized Services</i>	
a.	Food Service
b.	Student Activities
c.	Professional Development
d.	Assessment
e.	School District Operation

- i. Maintenance and Operation
 - ii. Administration
 - iii. Transportation
4. *Adjustments for Special Characteristics of Students*
- a. Disabled Student Services
 - b. Economically Disadvantaged Students
 - c. Gifted Students
 - d. Limited English Proficient Students
5. *Adjustments for Special Characteristics of Schools and Districts*
- a. Small Schools
 - b. Seniority
 - c. Adjustment for Cost of Living

i. Certified Personnel Costs

The proposed Cost Based Block Grant Model envisions several certified categories, including teachers, substitute teachers, pupil-personnel professionals (counselors, psychologists, etc.), librarians, and administrators. The costs for these categories have been computed in the manner described below, drawing upon salary and fringe benefit information collected by MAP from local Wyoming school districts; the Wyoming Department of Education; and national data collection agencies, such as the National Center for Education Statistics, the National Education Association, and the Wyoming Education Association

The Cost Based Block Grant Model operates using a "Total Compensation Package." This aggregate amount includes salaries, mandatory fringe benefits (e.g., retirement), and health benefits. MAP proposes that the Wyoming Legislature adopt an aggregate dollar cost for all of these activities in determining local school district revenue eligibility. The actual and final determination of salaries and fringe benefits, and the degree to which health plans are paid on a matching basis between employers and employees, should be made by local districts as they translate state revenue resources into actual district operations.

Most teaching vacancies are filled by beginning teachers. For that reason, MAP's analysis has emphasized beginning teachers' salaries. As explained elsewhere in this report, it has been determined that these beginning teachers' salaries in Wyoming are competitive with those paid to similarly trained professionals in other, nonteaching occupations and competitive with salaries paid teachers in surrounding states. Thus, current Wyoming teachers' salaries appear to be adequate to attract well-qualified teachers who are willing to teach for prevailing salaries.

The total compensation package was constructed through a five-step process:

Figure Eight

Calculating A Classroom Teacher Total Compensation Package

Here is an illustration of the manner in which personnel unit costs can be determined for Classroom Teachers.

$$\begin{aligned}
 &\text{Wyoming Statewide Mean Beginning Teacher Salary} = \$20,573 \\
 &\quad + \\
 &\text{Wyoming Statewide Mean Salary Payment For Academic Credits} = \$1,796 \\
 &\quad + \\
 &\text{Wyoming Statewide Mean Salary Payment for Years of Service} = \$9,389* \\
 &\quad +
 \end{aligned}$$

$$\begin{aligned}
&\text{Wyoming Statewide Mean Mandated Fringe benefits} = \\
&\quad \$6,034 \\
&\quad + \\
&\quad \text{Wyoming Statewide Mean health benefit payment} = \\
&\quad \quad \$3,641 \\
&\quad = \\
&\text{Wyoming Statewide Classroom Teacher Total Compensation} = \\
&\quad \$41,433
\end{aligned}$$

* annually adjusted for each district depending upon its distribution of teacher seniority across five teacher experience ranges.

(1) Calculating a statewide average salary for beginning teachers.

(2) Adding to it an amount equal to the statewide mean payment for academic units (units of academic credit in excess of a bachelor's degree).

(3) Adding the statewide mean amount currently paid for salary schedule steps (years of service). This schedule step amount is adjusted, however, for the actual deployment of a district's teachers across a seniority grid which groups a district's teachers into the following five experience categories: 1– 5 years, 6– 10 years, 11– 15 years, 16– 20 years, and greater than 20 years. A district's revenue allocation will reflect the proportion of its teacher work force falling into each of these five categories. The justification for such a computation is that districts have little control over teacher seniority. This is a factor which is more a function of local demographic patterns than school district policy. Each district's position on this grid will be determined administratively by state officials each year.

(4) Adding mandated fringe benefits, such as retirement and Social Security.

(5) Adding a health insurance benefit.

Are these remuneration amounts sufficient? Fundamental to a determination of the adequacy of the resources included in the model is whether salary levels are sufficiently competitive to attract the needed numbers of teachers of an acceptable quality level to deliver a proper instructional program.

Figure Nine

Computation of Teacher Salary Adjustments for Units and Steps

All data for these calculations are taken from the Wyoming Education Association Department of Research 1996-97 Wyoming School District Salaries and Benefits.

Step or Seniority Adjustment

The **statewide cost of step increases** is equal to the sum of the products of the weighted average step increase paid for each full-time-equivalent (FTE) teacher in each district.

While most school districts pay a uniform amount for each additional year of service, some salary schedules pay a larger amount to more senior teachers, others pay more for more recent hires, and a few salary schedules feature idiosyncratic rates for years of service. In each case the step increase paid to the teachers with the greatest number of units (far right column) was used to calculate the average for each increment of service (row or step).

The **statewide cost of pay for units** is equal to the statewide total teacher salary costs minus the statewide cost of step increases.

The **statewide average step increase** is equal to the statewide cost of step increases divided by the statewide FTE of teachers.

The **statewide average pay for units** is equal to the statewide pay for units divided by the statewide FTE of teachers.

The **district adjustments for seniority** are equal to the statewide weighted average of step increases for teachers with 1-5 years, 6-10 years, 11-15 years, 16-20 years, and greater than 20 years multiplied by each district's teacher FTE in each of those categories.

Wyoming's districts generally experience little difficulty attracting applicants. In visits to the 29 scientifically selected districts located throughout Wyoming, MAP found districts experiencing little difficulty recruiting elementary teachers. Secondary teachers were reported to be somewhat less abundant, and nearly all sampled districts reported some difficulty recruiting special education and other teachers with specialized skills. This latter condition is echoed nationally and is almost certainly a result of paying all teachers on the same salary schedule rather than offering a differential for scarce expertise.

Another important measure of the adequacy of salaries is the quality of persons hired. MAP determined from research in the above-mentioned sample of local districts that 85 percent of Wyoming's new teachers possess a grade-point average of "B" or better.⁸

Finally, comparisons of teacher salaries from neighboring states suggest that Wyoming is currently competitive as Figure Ten shows.

State	Average Beginning Salary	Average Salary Rank
Wyoming	\$21,900	\$31,571 (2)
Colorado	\$21,472	\$36,364 (1)
Nebraska	\$21,299	\$31,496 (3)
Utah	\$20,544	\$30,390 (5)
Montana	\$19,992	\$29,364 (6)
Idaho	\$19,667	\$30,894 (4)

Source: American Federation of Teachers Research Department

ii. Salaries for Specialized Certified Personnel

Substitute Teachers. The Cost Based Block Grant Model proposes to provide school districts with revenues for substitute teachers at the rate of \$60.00 per day, multiplied by a 175-day school year. This amount provides districts with an option of either (a) deploying regular, "extra" teaching positions at a school, to instruct when teachers are absent or (b) employing substitutes on an as-needed basis.

Librarians and Pupil Services Personnel. The proposal is that these personnel are costed at the same levels as classroom teachers. If districts choose, they can pay these individuals larger amounts, as some now do. Districts can also provide these personnel with annual contracts that reward a longer work year, assuming that their work year is indeed longer than the number of instructional days for which a district offers instruction. However, to cost pupil personnel positions or school librarians at higher levels than classroom teachers runs the risk of conveying a message that the former perform a more important function than the latter, and such practices are not recommended in the absence of other significant justifications for higher salaries.

School Administrators and Other Specialized Professional Personnel. This category includes principals, subordinate administrators at schools, and specialized professionals, such as psychologists. MAP analyses reveal that, relying upon statewide salaries for the positions in this category, the mean administrator and specialists' salary is 1.6 times higher than salaries of classroom teachers, with added academic credits and years of service included.

The resulting total compensation package for this personnel category ranges from approximately \$64,000 to \$67,000.

iii. Salaries for Classified Personnel

The Cost Based Block Grant Model proposes three classified personnel categories for which statewide mean salary costs have been determined. These costs have been calculated from accounting data reflecting existing Wyoming school district payment practice.

The suggested classified categories are

- Instructional Aides
- Clerks and Data Entry Personnel
- Operations/Maintenance Personnel

The costs per FTE position are displayed in Figure Eleven.

Figure Eleven

Personnel Costs (Annual Salary and Fringe Benefits) Per FTE Position

Personnel Category	FTE Salary Cost	FTE Mandatory Fringe	FTE Health Cost	FTE Total Cost
Classroom Teachers	\$31,758	\$6,034	\$3,641	\$41,433
Pupil Personnel	\$31,758	\$6,034	\$3,641	\$41,433
Administrators	\$50,877-\$53,071	\$9,667-\$10,083	\$3,641	\$64,185-\$66,795
Aides	\$10,080	\$1,915		\$11,995

Clerical/ Data Entry	\$16,000	\$3,040	\$3,641	\$22,681
Operations	\$20,000	\$3,800	\$3,641	\$27,441

B. Supplies, Materials, and Equipment

The following categories of supplies have been included in the proposed Cost Based Block Grant Model distribution formula. Costs per pupil imputed to each category have been deduced from accounting data reflecting existing Wyoming school district practice. However, the per-pupil amounts differ by grade grouping, reflecting instructional program differences.

i. Supplies and Instructional Materials

This category contains the items (e.g., chalk, paper, pencils, and erasers) regularly used by teachers and others in a school to provide instruction and engage in the day-to-day clerical and custodial operation of the school. The per-pupil costs to be imputed range from \$215 in elementary schools, \$190 in middle schools, and \$275 in high schools.

ii. Equipment

This category includes instructional computers, calculators, globes, scientific displays, and specialty items, such as gymnastic equipment, used for instructional purposes. Computers are taken to be unusually important because of their potential for enhancing student achievement.⁹ The per pupil costs to be imputed in this category range from \$131 per pupil in elementary schools, through \$146 in middle schools, to \$162 in high schools.

Figure Twelve

Supply, Material, and Equipment Costs

Component	Elementary \$/ADM	Middle \$/ADM	High School \$/ADM
Supplies & Materials	\$215	\$190	\$275
Equipment	\$131	\$146	\$162

C. Specialized Services

i. Food Service

This activity is complicated by the subsidies made available by the U.S. Department of Agriculture. Nevertheless, there are costs incurred both by the state, in administering the federal program, and by local school districts in the preparation and distribution of meals to students. The category is mentioned here in order to provide a reader with information. However, an assumption is made in the proposed financing model that food service will be a self-sustaining effort in each school district and will not draw upon state revenue subsidies.

ii Student Activities

Student activities include athletic events, debating teams, and student government. There is a substantial difference in spending in this category between high- and low-revenue districts.

The proposed mechanism for costing this component is to provide each district with a per-pupil cost amount averaging \$8 per elementary student, \$54 per middle school student, and \$167 for each high school student. The ratios of five percent, 20 percent, and 70 percent were proposed by Wyoming school business officers and are based on their estimates of current practice.

iii. Professional Development

The revenue allocated in this category is intended to enable school districts to ensure that instructional personnel have regular access to training in modern pedagogical techniques.¹⁰ This is an important category for several reasons. Wyoming is considering important changes in student assessment and recently has made significant changes in its accreditation procedures. Teachers, administrators, and others will need to be informed about these changes and the manner in which they can be used to enhance instruction. Also, better staff development opportunities for classroom teachers will assist them in instructing and including handicapped students in regular classroom experiences.

The per-pupil costs to be imputed to professional development vary slightly by grade groupings and are based on a figure calculated to be 1.5 percent of the foundation amount in the following range: \$92 for elementary personnel, \$96 for middle school, and \$102 for high school.

iv. School District Operation

- Maintenance and Operation
- Administration
- Transportation
- Assessment

The above-listed items are costed on a per-pupil basis, relying upon existing Wyoming accounting data for expenditures. The per-pupil amounts vary by grade grouping. These costs are assumed to be borne by an entire district, to serve schools within its boundaries. For example, "Administration" refers to central district administration, business administration, expenses for the board of education, etc. In addition, there are other costs which are appropriately attributed to the district, i.e. highly specialized support services, like psychological services and speech pathology, which are more often a district than a site function. MAP has assigned "other transportation" to the district, as well as other categories of funds which are more likely to be district than school-site expenditures.

A group of Wyoming educators contends that the costs associated with maintenance and operations are more a function of the size and condition of buildings than student enrollment. They recommend that these costs be based on the number of square feet of building space the district maintains. Clearly, there is merit to this argument; however here, as elsewhere, there is too little current information to evaluate the proposal fully. The most recent data on school facilities in Wyoming necessary to impute these costs were gathered three or more years ago and almost certainly do not accurately reflect current conditions.

Just as MAP's proposal features some disadvantages, allocation on the basis of square feet may motivate school districts to behave in ways not intended by the Legislature. For example, it would provide little incentive to replace obsolete buildings or to consolidate schools when enrollment declines. Some of the undesirable characteristics of a space-based formula can be overcome if the state were to adopt standards for the maximum number of square feet per ADM that would be reimbursed.

MAP recommends that maintenance and operations be calculated as a function of ADM until such time as the state is able to conduct a comprehensive inventory of school facilities and to gather reliable information on these costs. Clearly, there are some aspects of maintenance and operations which are more closely related to ADM. Just as clearly, there are others more closely related to other factors, such as square footage and age of buildings. The most appropriate formula is one which takes into account both ADM and square footage. The development of such a formula should await additional information gathered from a new school facilities study. There is a high correlation between maintenance and operations and the number of students, and these costs are a relatively small portion of a school district's overall budget. For these reasons it is unlikely that the proposed formula will work an undue hardship on school districts for the period of time required to gather the necessary information.

Figure Thirteen

School District Operations Costs

Item	Elementary \$/ADM	Middle \$/ADM	High School \$/ADM
Maintenance & Operation	\$561	\$649	\$800
Administration and Miscellaneous Expenses	\$553	\$553	\$553
Transportation	\$268	\$268	\$268

Transportation

School district transportation costs are primarily a function of population density and geography, but they are also a function of school district preferences and choices. It is consistent with the state Supreme Court's decision and entirely appropriate for the school finance formula to account for the former. It is within the province of the Legislature to decide the degree to which it will support the latter.

Among Wyoming school districts, factors of density and geography are highly variable, and it is difficult to construct a standard formula that will equitably serve all districts. For that reason, MAP proposes that the Legislature only slightly modify the current practice of reimbursing prior year's expenses.

Home to School. Policies on which students are eligible for free home-to-school transportation vary significantly from district to district. Some school districts transport virtually all students, regardless of distances between home and school. Others transport only students living a mile or more from their school. Still others will bus only those students living outside of the city limits. Therefore, consistent with the Court's decision and the basic premise of the overall model, the Legislature should decide the maximum distance a student would be required to travel before district transportation would be made available. This distance could be one, two, three, or more miles, and it would merely set the limit on state reimbursement. Local districts could set different limits, consistent with local preferences, but the state would reimburse only for students being transported beyond the distance adopted by the Legislature.

One potential problem with any reimbursement system is that it provides little incentive for local administrators to control costs. A number of computer simulation packages can be used to model cost-effective transportation

systems. MAP recommends that the Wyoming Department of Education regularly use one or more of these packages to analyze district costs and to propose further refinement of the reimbursement formula.

Home to school accounts for a little over four of every five dollars spent on transportation. The balance is spent on travel related to student activities and a third category described as "other;" neither of these categories of transportation are currently reimbursed by the state. Provision for state reimbursement of travel for student activities is included in the model. Both student activities and other categories largely, if not entirely, reflect local preferences for the nature and level of expenditures on each. Some districts spend little or nothing in either or both categories, and some spend relatively large amounts.

Student Activities. Wyoming's educators have made a strong case for funding student-activity-related travel. MAP concurs that student activities are an integral part of education for all students, and that travel, especially in the more remote school districts, is an essential element of such a program. As elsewhere, differences in district expenditure patterns appear to reflect differences caused by conditions over which districts have little control and by local preferences and choices. The conditions over which the districts have little control are similar to those affecting home-to-school transportation. For that reason, it seems reasonable that costs in these two categories bear a relationship to each other. While patterns vary among districts, statewide student activity travel costs are approximately 10 percent of home-to-school travel costs. MAP offers one option that student activity travel costs be reimbursed at a standard rate of 10 percent of home-to-school travel for all districts. Initial budget changes would be modest and should be even less as the policy on reimbursement of home to school becomes more standardized.

Other options available to the Legislature range from full reimbursement of actual expenditures to not allowing expenditures for this purpose. Full reimbursement would discourage any efforts to control costs. Disallowing any expenditure for student travel for activities would all but eliminate sports and other extracurricular programs for most students, especially those in remote schools.

Other Transportation. Expenditures for other travel are primarily the travel costs incurred by district employees and officials. In most school districts expenditures in this category are quite small. At least two school districts shift a portion of the cost of food services to this account. As described above, food services should be self sustaining and therefore not reimbursed by the state. The model aggregates other transportation costs into overall administration costs.

D. Special Characteristics of Students

Some number of students in every school district present extraordinary educational challenges that frequently require services of a nature or quantity that imply extra costs. Within the student population, there is a continuum of needs and related costs of meeting those needs; however, these can be grouped into generally recognized categories and subcategories. In some cases a student identified as falling within a specified category acquires legal rights to supplementary services. Students with specific disabilities may be classified as special education eligible, or the family income or the home language of others will be used to determine their eligibility for special services. In some cases a student's unique talents will qualify him or her for special services.

The proposed Cost Based Block Grant Model has embedded within it a strategy for meeting the challenges presented by students with special characteristics. The model assumes small schools, small classes, teaching specialists, and professional development resources for teachers. The aggregate consequence of such resources is intended to enable a classroom teacher better to cope with the characteristics of the students in her or his class. The block grant approach attempts to sidestep the classroom "pull out" programs that originated in the 1960s for the education of students with special characteristics, which proved to be dysfunctional and ineffective.

The Cost Based Block Grant Model proposes four categories of special students.

i. Special Education

Individuals identified with one or more of the following disabilities have a legal right to appropriate services: autistic, brain injury, deaf and blind, emotionally disturbed, deaf, health impaired, learning disabled, mentally retarded, orthopedically handicapped, speech and language impaired, and visually impaired. In 1995-96, 11.34 percent of Wyoming's student population was identified as disabled and qualified for special education services. Approximately 77 percent of those students were identified as learning disabled or speech and language impaired. These data are similar to national averages.

Services provided for these categories of disabled students range from modest pullout programs for speech therapy to 24-hour residential care. Costs per student vary accordingly. The state currently reimburses 85 percent of special education costs. Even so, one unusually high-cost student can create serious financial problems in small districts. Also, state reimbursement of most of the cost tends to remove incentives for district administrators to minimize costs, especially if they are confronted by an adversarial parent insistent upon a particular special and costly placement.

Several states and the federal government are reexamining cost-based reimbursement formulae with an eye to addressing various associated perverse incentives. Foremost among these states are Vermont, Pennsylvania, Massachusetts, and Montana. All have moved from a cost reimbursement formula to what is labeled a "Census Based" system. Research in these states reveals favorable student-placement and cost-containment outcomes.

In their simplest form, "Census Based" systems provide a block grant to each district based proportionally on the number of students they enroll. Districts are required to serve all special education students and comply with state and federal laws regarding students with handicaps. However, the funding is not tracked to the special education program, thus maximizing local flexibility. For example, two districts, each with 2,000 students, would receive an identical amount of special education funding. In this case, using Wyoming data, each of these districts would receive funding based on a predicted incidence of 227 (11.34 percent) special education students. The amount of funding should be based upon statewide average real costs for providing appropriate services.

MAP has identified two potential impediments to Wyoming immediately adopting a census-based special education formula. The first is that district expenditure data are not currently reported in sufficient detail to precisely determine the costs of providing services. Second, a census model is predicated on the assumption that districts of similar size will enroll about the same number of disabled students and that the portion will remain similar over time. This would almost certainly be the case in medium to large districts, but for districts with fewer than 1,000 ADM, changes of a few students could appreciably alter the ratio from year to year. This change is particularly problematic when even one or two of those students are characterized by unusually high-cost needs.

MAP, therefore, recommends that the Legislature continue the current practice of reimbursing 85 percent of actual cost for one to two years. During that time, the state should implement procedures that allow tracking special education specific costs to each handicapping condition. When these data are available, MAP recommends adoption of a modified, census-based formula.

Of particular concern is the effect of high-cost students on very small districts. A number of options are offered to address this problem. The state could assume the full cost for some students under specific conditions. For example, when reliable cost data are available, it would be relatively easy to determine in advance those conditions that, on average, cost more than some multiple, e.g. four times the foundation amount which would be fully reimbursed by the state (less the foundation amount plus the standard special education adjustment).

An alternative would be to provide an appeal procedure for districts, especially those with fewer than 1,000 ADM, to seek relief from extraordinary costs associated with one or more unusually high-cost students. School districts with fewer than 500 ADM should be afforded an appeal procedure for not only high-cost students, but for special education students of all disabilities, because changes of just a few students may have a significant effect on the portion of their student bodies that is eligible for special education. This option would be unnecessary for larger districts.

Professional development opportunities for regular classroom teachers will assist them in instructing handicapped students more effectively. Also, if sufficiently specialized, regular classroom teachers can participate in ways that will reduce the costs of serving disabled students. In other words, here is another example of instances in which staff development is a good investment.

ii. Gifted Students

Generally, "gifted" students are found to comprise about two percent of the population, based on some recognized measure of intelligence. Some states have expanded the definition to include special talents or multiple measures of intelligence. The portion of the population eligible depends upon the chosen definition. MAP recommends three percent to allow inclusion of a somewhat broader definition. Wyoming now collects sufficient data on this category to permit a census-based formula component to operate immediately. Each school district should be assumed to have three percent of its students as "identifiably" gifted and should receive \$150 per such student.

iii. Limited English Proficient

For the most part, the extra services required to educate students whose first language is other than English can be accommodated by extra attention from their regular teacher(s). However, when large concentrations of such students attend a school, extra resources, such as bilingual aides and teachers, should be provided. MAP recommends a categorical program which provides extra funding for districts with any school where the number of students documented with limited English proficiency exceeds 20 students per grade level or 25 percent of schoolwide ADM.

Little useful research on the costs of programs for these students exists. The best that MAP can identify was conducted in Connecticut, where costs were determined to be 15 percent greater than the base program. In absence of more compelling data, MAP recommends that the proposed program be funded at 1.15 times the number of identified limited-English-proficient students in those schools meeting the concentration criteria described above.

It is not recommended, however, that a particular teaching methodology be required or that expenditure of funds thus provided be tracked to specific spending on these students. One caveat—it is important for the state to develop objective procedures for identifying eligible students that would be employed consistently across all districts.

iv. Economically Disadvantaged

It is well documented that students from economically disadvantaged backgrounds tend to require extra services if they are to achieve at a level comparable to their more advantaged peers. Fortunately, Wyoming enjoys relatively small pupil-teacher ratios, thus enabling teachers to provide the necessary services and attention to students who need extra help. However, as with limited-English-proficient students, a school that enrolls large concentrations of these students is likely to find regular classroom arrangements inadequate without extra help. MAP recommends that the state provide additional support for school districts where the number of students who qualify for the federal free lunch program exceeds 150 percent of the state average.¹¹ The model assumes an expenditure of \$500 per identified student.

The actual cost of providing programs for disadvantaged students has not been well documented. Kentucky provides funding at a rate of 15 percent greater than its foundation program for students who qualify for the free lunch program. In absence of more compelling data and considering that this ratio would generate an additional nearly \$800 to \$900 per disadvantaged Wyoming student, MAP recommends that in the longer term the state consider phasing in such an approach and base eligibility on the incidence of children from poor families in specific schools, rather than district wide.

Existing Categorical Programs

Wyoming currently funds three categorical programs for students who, because of their unique characteristics, may require additional resources in their instructional program. These include the Gifted and Talented, Compensatory

Education, and Behavioral Disordered Programs. These programs are not now funded from the general fund and are excluded from current expenditure levels. MAP proposes that, in the future, these programs be funded from general levels.

MAP recommends that the Legislature carefully reconsider these programs. While all three address real needs, each has serious flaws that may invite abuse. The federal government and many states have come to understand that conditioning receipt of additional funding on the identification of students with specific characteristics, especially when those characteristics relate to academic failure, introduces perverse incentives. Not only does it tend to stigmatize and stereotype identified students, it skews the behavior of education decision makers. For example, when the level of funding a school district receives is dependent on the count of students who score below a certain level on a standardized test, there can be little incentive to decrease the number of such children. When additional funding is made available for students with an ill-defined condition, rational school leaders will be motivated to maximize the number of students thus labeled. Moreover, the very existence of these programs at a school tends to remove any incentive for regular classroom teachers to address the special needs of harder to teach students.

There is a large and growing consensus that the most effective methodology for teaching children who have special needs is in the regular classroom and through school-wide intervention. While this notion is based on sound pedagogical theory, it is not merely speculation that it may work. There are numerous practical demonstrations in nearly every state. It is primarily for these reasons that MAP has focused attention on lowering pupil-teacher ratios and increasing professional development. Having adequately trained teachers responsible for a reasonable number of students with some level of support from specialists is not only a defensible program for all but the most profoundly handicapped students, it is quite likely the most effective. With this rationale in mind in the Cost Based Block Grant Model, MAP recommends that the three existing programs be replaced by those described.

The current categorical programs are described below:

Gifted and Talented--Eligibility for the existing program includes nearly any student who is high achieving or may appear to be potentially high achieving in general intellectual ability; creative or productive thinking; visual, literacy or performing arts; specific academic aptitude; or leadership ability. Districts may establish their own criteria for identifying eligible students. The state sets a cap of three percent of a district's enrollment for eligibility. Local district participation in the program is optional, and the total state grant is \$350,000. Districts receive up to \$150 per identified pupil or a prorated amount if statewide demand exceeds \$350,000.¹²

Under the current program, virtually any student could conceivably qualify as being gifted or talented on some dimension. MAP's strong recommendation is that the state adopt and uniformly apply a definition of gifted or talented that would identify those few students with a gift or talent that required additional nurturing beyond that which normally would be provided by a well-trained, caring classroom teacher. Keeping in mind that the preferred program for gifted students would be delivered in a regular classroom and that the elementary and middle school prototypes contain non-classroom specialists, the proposed \$150 per eligible student should be adequate to cover the cost of program development, unique enrichment activities, and administration.

Compensatory Education--Students eligible for this program are those who score below the 20th percentile on a standardized achievement test and who are suspected to be slow learners but do not qualify for special education, or those formerly identified as learning disabled and who no longer qualify for special education. Current funding for the program is \$1 million. Districts receive approximately \$55 per identified student.¹³

As discussed elsewhere in this report, at some point a concentration of low-achieving students places a burden on the instructional system and additional resources are appropriate. This program, however, does not seem to establish any such priority. Moreover, there does not appear to be any inherent incentive in this program, as currently conceived, to enhance the achievement of eligible students. MAP does not mean to imply that any Wyoming educators would be motivated to do less than their best for low-achieving students, but it is just this problem that has caused other states and the federal government to reassess programs which tend to reward failure.

Another fundamental problem with this program is that it fails to discriminate among the underlying causes of low achievement. Some students will fail to achieve because of disadvantages accruing from their personal circumstances, including limited English proficiency or disadvantages associated with poverty. Others may fail to achieve because of inadequate instruction in the school district. Currently, this program easily could subsidize the latter. Certainly, some students from advantaged homes may experience academic difficulties, but the strong correlation between poverty and low achievement is well documented. Therefore, MAP recommends that the educationally disadvantaged program, proposed elsewhere in this report, which is based on an objective measure of poverty, replace the existing compensatory education program.

Behavioral Disordered--This program provides grants to districts to serve students who exhibit behavioral disorders which interfere with classroom instruction. Behavioral disorders are not further defined. Program funding may be used for general program development or for direct services to eligible students. Eligibility is capped at three percent of enrollment and total statewide funding is \$1 million.¹⁴

Clearly, the behavior of a one or more students can disrupt a class, and it is in the best interest of other students that teachers be provided adequate tools for dealing with these students. The models proposed by MAP do just that. Reasonable pupil-teacher ratios and adequate funding for professional development obviate the need for this program.

*E. Special Characteristics of Schools*¹⁵

The proposed Cost Based Block Grant Model includes two categories of special conditions: (a) "necessary small schools" and (b) regional cost-of-living adjustments. The first of these conditions, small schools, is a current formula component. However, Wyoming's present formula does not contain a definition of "necessary." MAP proposes to alter the manner in which such small schools are subsidized; however, their need for added resources is clearly evident.

i. "Necessary Small Schools"

Either population sparsity or unusual geographic features may necessitate a district operating a small school, a school with, for example, fewer than 200 students. Schools of this size are more costly to operate because there is a fixed base of costs (e.g., the principal's salary) which cannot be spread over a sufficiently large number of pupils to justify including the school in the statewide funding formula. These small schools suffer from significant diseconomies of scale, and the only means for ensuring that the educational opportunity of their students is not unduly harmed is by disproportionately subsidizing them.

However, "necessary small schools" are to be distinguished from simple small schools, which operate because a district has a preference for small schools. Perhaps, if permitted the choice, many or every Wyoming community might like to have small schools. At least at the elementary level, and perhaps at other grades as well, these schools appear to have advantages in terms of promoting student achievement and parent convenience. However, the cost of an "unnecessary" small school is perhaps more than the state can or need bear. Hence, the following "necessary small school" definition attempts to separate such institutions for which the local school district has no choice from instances in which a small school is a clear discretionary preference.

MAP proposes the following definitions of "necessary small schools."

An elementary or middle school with 200 or fewer ADM enrolled in kindergarten through grade eight, such that a majority of its enrolled students would otherwise have to be transported for more than one hour daily for elementary students, and 90 minutes for middle school students. A "school" is further defined as all of grades kindergarten through eight within the same building or multiple buildings located within a quarter-mile radius.

A high school with 400 or fewer ADM enrolled in grades nine through twelve, such that a majority of its enrolled students would have to be transported more than two hours daily. A school is further defined as all grades existing within the same building or multiple buildings located within a quarter-mile radius.¹⁶

The formula for disbursing additional dollars for small schools is described in the Appendix.

ii. Cost-of-Living Adjustments¹⁷

Also, MAP proposes that all of a school district's eligible personnel costs be multiplied by a regional cost-of-living index. However, the notion of a cost-of-living multiplier is relatively rare in school finance formulae, and it does not currently exist in Wyoming's existing formula. Hence, this report devotes a substantial amount of space to explaining the concept and the manner in which it would operate practically.

The goal of developing an index for the "cost" of education in different regions rests on the distinction between "cost" and "expenditure."

To understand how much more (or less) it might cost to provide comparable education services in one district as opposed to another, it would clearly be inappropriate simply to calculate how much one district actually spends, as opposed to the other. A district may pay more for education services than another district, either because those services actually "cost" more than they do elsewhere, or because the district chooses to spend more. It may choose to spend more than the service actually costs for political reasons, because of the role of collective bargaining, or because of other non-economic considerations. (Note that a district may also choose to spend less than the actual cost of education services. For example, to the extent female college graduates have historically been denied access to the full range of occupations available to equally qualified male college graduates, school districts have been able to take advantage of an artificially created surplus supply of female teacher applicants, and thus pay less for these teachers than might be their true economic cost.)

If the market for education services were fully competitive (if, in other words, it were a pure market), "cost" and "expenditure" would generally be identical. If there were many school districts in any region competing for the labor of many college graduates, a school district that paid salaries that were less than the economic cost of teachers would find that its teachers were being bid away by other school districts that paid the full cost. Teachers who demanded compensation in excess of the full economic cost of providing their labor would find themselves unable to find employment, because equally qualified teachers would take the available jobs at a lower price.

Education, however, is not a fully competitive market. In many, if not in most communities, school districts have monopsonistic power; i.e., districts are the dominant purchaser of college-educated labor in their communities. (The districts need not be the sole purchaser to have a market-distorting effect; rather, they need only be a major purchaser to prevent the market from functioning with perfect competition.) And because teachers tend to be more highly unionized than other college-educated workers, teacher unions have a similar monopolistic control over the supply of teacher labor. That boards of education are publicly elected may also prevent the market from operating in its pure competitive form.

These characteristics of education markets are not necessarily bad, and this explanation is not included in order to be critical. Rather the description simply explains why education is not a pure competitive market in an economic sense.

The task of cost-of-education theory, therefore, is in effect to imagine what the cost of education in a community would be if the education market were fully competitive. In other words, what would education really cost, as opposed to what districts actually spend? And the goal of a regional cost adjustment within any state is to define the relationship between these costs in different communities, as opposed to actual expenditure levels in different communities.¹⁸

Fortunately, Wyoming already prepares a semi-annual index of consumer prices for each county of the state. It is published by the Department of Administration and Information, and is designed for use by the Department of

Revenue in calculations of county poverty lines to administer exemptions from property tax liability for homeowners whose income is below the poverty line in that county. The Department of Administration and Information utilizes the relative importance (weights) in a consumer market basket developed by the Bureau of Labor Statistics in its construction of the national Consumer Price Index.

The Wyoming index is revised on an continuing basis, utilizing purchasing patterns of consumers in Cheyenne, based on systematic observations by Department officials. (For example, when consumers in Cheyenne shift their purchases from cassette players to CD players, the Department makes the appropriate substitution in its market basket.) The Department of Administration and Information employs (on a contract basis) price checkers in each of 15 communities throughout the state, and these price checkers report price changes to the Department on 140 market basket items every six months. The Department then calculates a statewide index, based on these 15 communities. The index numbers for 15 counties are based on the price levels of the community surveyed in that county. Index numbers for the other eight counties are in an arithmetic relationship to the first 15, based on demographic and economic similarities between the surveyed and the unsurveyed communities.

Because this index has been developed for the purpose of administering the state's property tax system, it cannot be subject to any suspicion that its use for purposes of education equalization is biased. While the Legislature could, if it wished, attempt to improve the accuracy of the index by increasing the Department of Administration and Information's budget for this purpose, the index cannot ever have perfect accuracy, and there is no reason to believe that greater accuracy would affect the relationship of index numbers presently obtained. Any consumer price index in the Wyoming, because of the state's unique demographic and geographic characteristics, must always be something of an approximation. For example, Wyoming consumers may not always shop in the communities in which they reside, and so a consumer price index for residential communities may not perfectly reflect the true differences in cost of living.

These 140 separately priced items in the Wyoming cost-of-living index are aggregated into the following broad categories: housing (representing 40.9 percent of the total weight of the index); transportation (17 percent); food (15.8 percent); recreation and personal care (13.2 percent); medical (7.1 percent); and apparel (5.9 percent).

MAP proposes utilizing an index which eliminates housing and medical components, and re-weights the balance of the items accordingly.

The medical component should be eliminated because the model on which the statewide education costs are based anticipates that Wyoming's school districts will provide health insurance coverage for all employees (and, in fact, most school employees in Wyoming are presently provided with health insurance by their districts). The Wyoming cost-of-living index, on the other hand, which gives medical costs a relative importance of 7.1 percent, assumes that consumers pay for their own medical care, such as the cost of a semi-private hospital room and the cost of a doctor's office visit. Although Wyoming school district insurance plans generally provide for co-payments, deductibles, and out-of-pocket maximums whose value would vary from region to region, it is MAP's judgment that including medical care in the index would lead to more inaccuracy than excluding it. There was insufficient time and resources to explore re-weighting the index so that medical care for insured employees would still be included, but with a relative weight of less than 7.1 percent.¹⁹

Eliminating the housing component from the cost-of-education index is also recommended because, as noted in an earlier section of this report, some regions of the state may be more desirable places to live than others. In economic terms, the relative desirability of different places to live should be represented by the price of residential land. Thus, if residential land is more expensive in one region than another, this should be because the first region is a more desirable place to live, and the demand for residential land, relative to supply, is greater.

Because the supply of land in any community is not expandable in response to price, residential land is different from other products and services that are priced in the Wyoming cost-of-living index. If the demand for food increases relative to supply in a given community, and thus the price of food is high in that community, it is possible to expand the number of food retailers until the price is reduced to its true economic cost. In the case of land,

however, no expansion is possible, and so differences in residential land prices in different communities can be said to represent the relative desirability of living in these communities.

If this is the case, it would be inappropriate to adjust the funds available to school districts to fully compensate for differences in residential land prices. Were this to happen, districts in communities in which teachers considered it more desirable to live would, in principle, be able to hire a better quality of teacher than districts in less desirable communities. Each district could theoretically fully reimburse teachers, through salaries, for the cost of residential land, while teachers in some communities would also receive a compensation bonus in the form of greater community amenities. In other words, prices for housing cannot easily be compared between districts, because they are not prices for the same thing. Higher prices in some districts represent the price of more desirable housing, while lower prices in other districts represent the price of less desirable housing. This is different, therefore, from the price of apples, where apples may cost more in one community than another without necessarily being of higher quality. The payment of higher residential land prices by teachers in some communities represents not a higher cost of living for these teachers, but a choice to spend their incomes for a different good (community amenities) than teachers elsewhere choose.

Thus, to avoid giving higher quality teachers incentives to move to communities with more desirable living conditions, MAP recommends removing the housing component from the index by which salary costs are adjusted. MAP recognizes, however, that while removing housing costs removes the distorting effect of more desirable community land prices, it also removes costs of components, such as construction labor and utilities, where regional variations do reflect different costs. Because the Department of Administration's regional price index does not separate land values from other costs of housing, one distortion or the other is inevitable. Therefore, should the Legislature choose to include the housing component in the cost-of-education index, this report contains the data necessary to do so.

END NOTES

¹CRUs are no longer a distribution formula component under the proposed Cost Based Block Grant Model.

² Why not use Average Daily Attendance (ADA) instead of ADM? Assuming that the amount of money the state intends to distribute remains the same, the only consideration between these two measures is whether one distributes revenues differently among school districts when compared to the other measure. Attendance rates in Wyoming as reported to MAP are sufficiently similar that these two measures would not result in differing interdistrict distributional consequences. In effect, there would be little incentive for keeping students in school by using ADA. Hence, MAP recommends relying upon the measure ADM.

³ Small classes are, all things being equal, more effective in producing student achievement. The most powerful finding in this regard, indeed one of the most powerful findings in all of instructional research, stems from the late 1980s experiments by which Tennessee systematically varied class size. Experimental classes were held at 15 students. Control classes were 22 students in size. One control group had 22 students and included a teacher aide. Students in the small classes not only had a substantially higher achievement level several years after experiencing the small elementary classes, they were still exhibiting achievement gains. See Frederick Mosteller, "The Tennessee Study of Class Size in the Early School Grades," *The Future of Children*, Volume 5, Number 2, Summer/Fall 1995, Packard Foundation, Las Gatos, California. On this topic, see also, Finn, Jeremy D. and Charles M. Achilles, "Answers and Questions About Class Size: A Statement Experiment," *American Education Research Journal*, 27, No. 3, February 1990, 557-577, and Glass, Gene and Mary Lee Smith, *Meta-Analysis of the Relationship of Class Size and Student Achievement*, San Francisco: Far West Laboratory for Educational Research, 1978.

⁴ Fowler, William J., Jr. and Herbert J. Walberg, "Schools Size, Characteristics, and Outcomes," *Education Evaluation and Policy Analysis*, 3 No. 2, Summer 1991, 189-202.

⁵ See Figures 2-4 in the front of this report regarding Wyoming school size and enrollment distribution.

⁶ The fact that all components of the proposed formula are currently in place in one or more Wyoming districts does not mean they are present in the same amounts or patterns. Indeed, if they were, the Campbell County suit may never have been successful.

⁷ Unless otherwise noted, personnel components are provided in terms of Full Time Equivalent (FTE) positions.

⁸ Moreover, there is no evidence to suggest that school districts deliberately skew salary schedules toward the lower end in order to attract beginning teachers and then pay artificially lower salaries to more experienced teachers. Assuming that beginning teachers do not consider future earning potential when they take a job (a dubious assumption), it is only reasonable that they would seek employment in another state or even another profession when they discovered that they could enjoy more lucrative compensation elsewhere. If this were the case in Wyoming, one would expect to see high turnover among experienced teachers and that most of the teaching force clustered would be at the lower ranges of experience.

The evidence does not support a conclusion that salaries paid experienced teachers in Wyoming are sufficiently lower than alternative employment to encourage an exodus from the state or the profession. The average teacher tenure in Wyoming is just over eleven years. Sixty percent of the teachers have over 10 years experience and one third have been teaching 20 or more years. The largest cohort of teachers in the state have been hired 14 years ago.

⁹ The best available evidence supporting the utility of computer assisted instruction stems from Kulic, J.A., Kulic, C., and Cohen, P. A., "Effectiveness of Computer Based College Teaching: A Meta Analysis of Findings," Review of Educational Research, 1980 Number 50, pp. 525 to 544.

¹⁰ Corcoran, Thomas B. "Transforming Professional Development for Teachers: A Guide for State Policymakers," Paper prepared for the National Governors' Association (under contract to CPRE), October 1994. Mullens, John E., et. al., "Student Learning, Teacher Quality, and Professional Development: Theoretical Linkages and Current Measurement," Paper prepared for the National Center for Education Statistics (under contract to Policy Studies Associates), April 1996, draft only.

¹¹ Free and reduced lunch is an imperfect measure of the incidence of poor children, particularly at the secondary level. MAP recommends further study by the State Department of Education and local school district personnel to establish a more reliable measure of poverty.

¹² Wyoming State Department of Education form WDE-615 (5/96)

¹³ Wyoming State Department of Education form WDE-641

¹⁴ Wyoming State Department of Education form WDE-646

¹⁵ Earlier drafts of the model included an adjustment for unusually small districts. Subsequent refinements of the necessary small school formula have obviated the need for this adjustment.

¹⁶ These definitions differ from earlier drafts in two important ways. High schools are now treated separately. This was done to recognize the higher costs associated with offering specialized programs and student activities. The second change is the elimination of the provision limiting small school funding to districts with ADM greater than 2500. Most states that provide necessary small school funding limit such funding to smaller districts. In the state programs that MAP reviewed the limit was set at around 2500. Because there was insufficient information available for MAP to recommend a specific limit in Wyoming, none was calculated in the model. Removing this limit adds approximately \$7 million to the annual cost to the state.

¹⁷ The range of cost of living differences existing are displayed by school district in Appendix A.

¹⁸ In the discussion above, "teachers," are used as an example, but the same is true of many of the products and services school districts purchase. For any product or service that is bought and sold in a less than fully competitive market, there is, in principle, a distinction between the prices actually paid for that product or service and what districts would spend in a pure economic environment.

¹⁹ Insurance carriers providing health insurance to Wyoming school districts do not offer geographic rates that vary by regions of the state. For this reason, an adjustment for school districts based on regional differences of the cost of medical care would not be justified. It is the case, however, that some carriers revise rates offered to districts based on the claims experience of those districts. This claims experience could be affected by regional cost differences, but MAP had no basis for understanding precisely what this effect might be.

X. Legislative Discretion

The Cost Based Block Grant Model is a tool for the Legislature to employ in making decisions that ultimately result in a block grant for each school district in the state. In its simplest terms, the model is comprised of (1) education "inputs," (2) a unit cost (dollar amounts) for each input, (3) quantities of each input module, and (4) adjustments to account for unique characteristics of each school district and its student body.

"Inputs" are resources modules necessary to educate students. These include personnel (e.g. teachers, custodians), supplies and equipment, services (e.g. food services, student activities), and operations (e.g. transportation, utilities). The inventory of these resources modules was derived from the advice of Wyoming educators, review of relevant research, observation of Wyoming school districts, expert judgments, and other sources. A review of these input components would reveal few surprises. Most individuals familiar with schools anywhere in the nation would compile a comparable list. Given the nature of these resources and the procedures by which they were derived, or until such time as research reveals new technologies for schooling, it is not recommended that Wyoming policy makers alter them.

The second feature of the model is the imputed unit cost for each of the resources used as modular inputs. These costs were systematically and rationally derived from a variety of sources. A more complete description of this procedure is provided elsewhere. While alternative methodologies have been proposed for estimating costs, it is MAP's judgment that those employed in this model are theoretically and practically defensible and in many ways superior. Thus, it is not recommended that Wyoming policy makers alter the unit costs associated with "inputs" in the model, except to the extent the alterations provide more up-to-date or accurate information..

As described elsewhere, translating modular inputs into educational outcomes is far from a precise science. Within defensible ranges, the quantities, combinations, and applications of various resources are best determined first by state policy makers, and ultimately by local educators. The Legislature first adopts a basket of goods and services which, in its judgment informed by expert advice and overall state policy, will yield a proper education for all Wyoming students. The reader is reminded that these decisions are for the purpose of defining the "basket" and the appropriate cost of the resources contained in it. The goal of the Cost Based Block Grant Model is to will ensure that each local district receives sufficient funding to acquire all of the resources in the model in sufficient quantities to provide a proper education to every student. Local decision makers retain maximum flexibility to combine those modular resources in configurations that meet local priorities and conditions.

Inherent in the design of the Cost Based Block Grant Model are a set of decisions the Legislature should make before the full cost implications of the model, both for the state in total and for individual districts, can be known.computed These legislative decisions are addressed below.

The Wyoming Legislature, not unlike Wyoming's citizens and private businesses, does not possess unlimited resources and thus must consider the potential effectiveness or likely improved outcomes from each choice, as well as its cost in the near and long term.

Health Benefits

Currently, there is significant variation among school districts in the level of health care benefits they include in employee compensation. Some districts pay all or most of the cost of health care insurance premiums. Others pay little or nothing toward these premiums. Because practices are so variable, a statewide average would bear little relation to the practice of any district. In each of the models, MAP has assumed an increased allocation for each employee of all for health care insurance premiums at an annual cost of approximately \$716 per covered employee. \$3,641 per employee This increases the statewide cost of education operations by approximately \$8 million and assumes the employee is responsible for a portion of the cost of the plan. A more comprehensive plan, with the state making the full contribution, would cost about \$18 million. The Legislature should decide if the current quantity of health care insurance provided by school districts is adequate or if it believes that the plan should be increased by some amount, equivalent to up to 100%. Any augmentation for this purpose is, in fact, an increase in total employee compensation in the model which school districts can use for this purpose, or for higher salaries or other purposes local decision makers determine appropriate.

Class Size

There is evidence that smaller class sizes are related positively to student achievement. Unfortunately, however, there is no compelling research that reveals a direct or linear relationship between specific changes in the class size and changes in student learning. Thus, based on the best available evidence, MAP has recommended ranges where a proper education can be reasonably accommodated. It is not possible to predict the specific effect of marginal increases or decreases in class size. Smaller classes seem more likely to produce outcomes superior to those of larger ratios, but ratios anywhere within recommended ranges are likely to produce an education that is defensible as proper.

Among the decisions the Legislature faces, this one carries some of the heaviest cost implications. Small changes in class sizes have large impacts on the total costs of various options. As an example, in the following models, a decrease in class size of one student per class would cost the state an additional \$14 million. Conversely, increasing class size by one carries with it a cost savings of over \$12 million.

Within the range of defensible ratios described in the report, the essence of the decision facing the Legislature in this case is a determination of the most cost effective class sizes Wyoming can now afford, considering its total resources and competing priorities.

Aides and Other Paraprofessionals

Based in large part on the advice of Wyoming educators consulted by MAP, the Cost Based Block Grant Model proposes an increase in the number of aides at each school. The justification for increasing the quantity of this resource to free teachers from nonprofessional clerical and administrative duties is so that they can spend more time on instruction and professional development. The Legislature should decide the appropriateness of this expenditure level in the context of deciding the desired overall number of adults at a school site and the amount of funding for professional development. The current model projects one aide for every 100 students, far beyond the amount currently allocated. MAP estimates the cost of this resource at approximately \$8.5 million.

Instructional Materials

Up-to-date instructional materials are an important part of a proper education. The model increases the current allocation \$30 per student for textbooks and \$15 per student for library materials. This augmentation would allow replacing, repairing, and maintaining textbooks and related instructional materials every five to six years and a substantial increase from the current annual expenditures for maintaining school library collections. On average, it is more likely to ensure that every student has access to timely content. The overall cost of these changes would be approximately \$4.4 million.

Technology

Technology seems to hold promise for improved student knowledge, especially in small remote schools. Educational technology is in its infancy, and the revolutionary effect it has had on manufacturing and other business sectors has yet to be substantially felt by schools. It would be premature to specify the type and quantity necessary for a proper education. There is a consensus that some amount of technology is necessary and, within reasonable limits, probably more is better than less. One limitation on any augmentation would be the ability of schools to absorb technology and to put it to good use. Therefore, a phase-in seems appropriate.

In the Cost Based Block Grant Model, an additional \$80 per ADM is contemplated, which is consistent with recent action by the Legislature. The Wyoming Department of Education's Technology Plan calls for a one-time expenditure of \$73 million and an annual expenditure of \$400 per ADM for maintenance and replacement.

Student Assessment

Elsewhere in this report, MAP has emphasized the need for comprehensive student assessment as an important element of an accountability system. Good student assessment is a good investment. Bad student assessment is worse than none. The model estimates student assessment costs at \$25 per ADM, which is a reasonable approximation of the annual cost of a system that is a mix of performance assessments and more traditional tests. The Wyoming Department of Education's estimate of \$50 could be justified rather easily. Even though the model includes the \$25 per ADM in district revenues, MAP strongly recommends against perpetuating current practices of each district choosing unique assessment instruments. It is essential that the assessments be standardized, and for that reason the budget for student assessment may be more appropriately retained at the state level.

The Wyoming Department of Education has estimated costs of \$2.8 million for developing and maintaining the student assessment system.

Student Activities

Wyoming educators argue that student activities are an important element of a proper education. MAP concurs in that judgment and has included the current level of expenditures in the model. Based on the advice of Wyoming school officials, the model allocates \$8 per elementary ADM, \$54 per middle school ADM, and \$167 for each high school ADM.

Transportation to and from sports events and other student activities is an integral part of a student activities program. The simulation includes student activities transportation funded at its current level. In the future, MAP recommends that funding for transportation for student activities be linked by formula to the home-to-school transportation amount. These expenditures bear a logical relationship to school-to-home transportation and a standard ratio of .10 is consistent with current expenditure patterns. The Legislature should determine if the proposed level of reimbursement is consistent with the priority it places on this expenditure.

Professional Development

Although many school districts allocate significant resources to the regular improvement of employee skills, this practice is not universal. It is not reasonable to expect teachers and other employees to sustain high levels of effectiveness without ongoing, systematic professional development. This need is well recognized among high performance organizations in the private sector.

The Cost Based Block Grant Model contemplates an allocation of between \$90 and \$100 per ADM (approximately \$1,500 per teacher) for professional development of school district employees. This amount represents an almost threefold increase in current budgeted levels. Increases of such a magnitude would cost the state an estimated \$7 million. The budget for this purpose in the private sector would be somewhat greater. However, school districts can call on other resources not specifically budgeted in this category for professional development. Perhaps the largest expenditure for staff development is that part of the salary schedule that increases teacher salaries for completion of additional academic units. This amount is currently about \$1,800 per teacher in Wyoming. As a consequence,

considering all sources, significant resources would be available for the continuous enhancement of teaching skills in Wyoming schools.

As elsewhere, there is little research to guide the Legislature in its decision. Within reasonable, but not precisely predictable limits, well-planned, sustained, professional development is likely to produce better outcomes. The decision, at both state and local levels, ultimately depends on relative priorities for scarce resources.

Procedures for Funding Special Education

MAP proposes that the current practice of reimbursing special education costs continue in the short term. However, the state may be better served in the future by converting to a census-based formula. The rationale for such a formula is discussed elsewhere in this report. If that recommendation is accepted, the Legislature will need to decide which disabilities would be fully reimbursed by the state and the procedures for small districts to appeal their annual allocation under the formula.

Criteria for Funding Services for Economically Disadvantaged Students

It is generally recognized that large concentrations of children from low-income families present special educational challenges. There is no agreement on what level of concentration should trigger special services or the specific nature of those services. The most frequent prescription is some form of increased adult attention in the school setting. Even at current pupil-teacher ratios, most Wyoming schools appear to be well positioned to attend to the needs of these students in the regular classroom. Any enhancements in pupil-teacher ratios contemplated by the model would further improve districts' abilities to provide the extra attention that these children need.

In an effort to ensure that districts with extraordinarily high concentrations of economically disadvantaged students receive extra resources to provide services to this population, MAP proposes that school districts with concentrations 1.5 times the state average of children from poor families receive an additional \$500 for each such student. Whether the trigger for district eligibility is appropriate depends largely on total resources available and thus upon the interaction of all the decisions around the model that the Legislature must make. Similarly, questions regarding the adequacy of the adjustment per eligible student is somewhat arbitrary, but not at all capricious. It is similar to amounts allocated for this purpose in other states. Ultimately, the Legislature should consider phasing in a program which allocates resources on a school-by-school basis as described above. MAP recommends that decisions on this issue be revisited when other decisions regarding overall pupil-teacher ratios are made.

Criteria for Funding Services for Gifted Students

Similar to the situation of disadvantaged students, the typical prescription for dealing with the special needs of gifted students is to offer additional attention from teachers and other adults at the school and a more challenging curriculum. Both can be provided comfortably in a school where there are sufficient numbers of teachers, counselors, and other adults relative to the number of students. Thus, as discussed above, the very resources needed to serve this population are being addressed by overall system enhancements. Nevertheless, Wyoming currently provides \$350,000 statewide for up to three percent of a district's enrollment for programs for gifted students. The model contemplates that funding be increased to \$450,000 and allocated on a more rational basis as described above.

In addition to deciding whether, in light of total system augmentations, there is adequate justification for a program of special funding for this population, the Legislature should decide what portion of the student population would qualify as gifted. Until recently, the accepted definition of a gifted student was one who scored in the top two percent of the population on a standardized test of intelligence. Many states have modified that definition to include talents and multiple measures of intelligence. Wyoming presently allows districts to designate almost any student as gifted. The model assumes three percent. MAP has no position on the definition chosen but recommends that it be objective and reasonably limit eligibility to about three percent of the population. There does not seem to be any reason to believe that any school district would enroll a disproportionate number of gifted or talented children. MAP therefore recommends that any resources provided for this purpose be allocated on a census basis.

Level of Funding for Kindergarten

The current school formula now considers kindergarten programs half time. The model contemplates the continuation of the current practice of half-day programs with kindergarten children counted as half ADM. The cost to provide a full-day program for all kindergarten children would be approximately \$22 million. While there is not universal support among educators for full-day kindergarten programs, there is a growing trend toward such programs and a consensus that they may have a positive effect on subsequent student achievement. The Legislature should decide if it wishes to fund full-day kindergarten.

Criteria for Funding Services for Limited-English-Proficient Students

Decisions facing the Legislature regarding students with limited English proficiency are nearly identical to those concerning economically disadvantaged students. Based on experience elsewhere, leavened with professional judgment, MAP proposes that schools impacted with more than 20 such students at any grade level or when these students exceed 25 percent of the school's ADM, the district revenues be adjusted by a factor of 1.15 for each eligible student. This is an area in which better information is needed regarding definitions and precise numbers of students. The Legislature should affirm the need for such a program, the concentrations that trigger extra resources, and the amount of the adjustment.

Transportation Reimbursement Formula

MAP recommends minor but important modifications to home-to-school transportation reimbursement procedures. The Legislature should decide the minimum travel distance at which it will standardize reimbursement. Transportation reimbursement is discussed in more detail earlier in this report.

Definition of Necessary Small Schools

Unquestionably, small schools face diseconomies of scale. Elsewhere, MAP analyzes the extent of such diseconomies. The fundamental question facing the Legislature is, which of the many small schools in Wyoming exist because of the sparsity of the population they serve and are thus necessary, which are small because of local preference, and which are small because of creative interpretation and application of the definition of a "school?"

MAP proposes a definition of "small" that includes size as measured by ADM, and "necessary" based on distances students would have to travel if the school did not exist. A school is defined as a building or buildings at a geographic location.

The Legislature needs to decide all elements of this definition, including size, permissible distances for student travel, definition of a school, and district eligibility.

Many states that provide extra funding for "necessary small schools" restrict such funding to districts that are larger than approximately 2,500 students. If the Legislature were to decide to set such a limit for Wyoming, it should reduce the need for additional funding by approximately \$7 million per year. The Legislature should decide if the small school adjustment needs to be restricted to smaller districts.

Factors Included in Cost-of-Living Adjustment

The Legislature must decide which cost factors to include in the regional cost of living adjustment. The options are whether to include health care costs and/or housing costs in the adjustment. The rationale for MAP's recommendation that neither be included is found earlier in the report. This decision does have important cost and distributional implications which should be weighed by the Legislature.

Level of "Cap" on Increased Funding

The Legislature needs to decide if the revised formula will be fully implemented in year one or if it will be phased in over two to three years to allow districts that receive significantly more money to more effectively absorb the added resources. Capping increases at 15 percent over prior years' general fund revenues would allow full implementation in two years. A 10 percent cap over a district's prior years general fund revenues would allow full implementation in three years. Depending upon the percentage chosen and the change in overall expenditures, a cap will reduce the state's obligation each year until the formula is fully implemented. As an example in one MAP resource model, placing a 15 percent cap on the amount of increases a district can receive in any one year would save the state approximately \$16 million over the first year. A cap of 10 percent would save the state \$32 million in the first year. It is important to note that this is a one-time savings.

The Legislature needs to decide if districts whose budgets will be reduced under the revised formula should be held harmless and to what extent. In the extreme, the expenditures of these districts could be held constant until such time as the formula produced a positive revenue change for them. This approach, however, may be inconsistent with the intent of the Court's decision. A more reasonable, and perhaps more defensible approach, would be to limit to some percentage of a district's current revenues the amount of reduction any district would incur. This practice would increase the overall cost to the state, the amount depending on the percentage chosen and the overall change in revenues made available to schools. As an example, in the simulations of the model discussed in this report, to hold harmless districts which would lose money under the formula would cost the state about \$1.8 million. If the state were to limit any district's losses to ten percent, the cost to the state would be a little over \$100,000. If the number were five percent, the cost would be about \$707,000.

Teachers' Salaries

At public hearings held throughout the state, teachers and others were forceful in their views that salaries were too low to attract sufficient numbers of high-quality professionals. Nevertheless, MAP's research revealed that Wyoming's salaries were competitive with those paid in the five contiguous states and with salaries paid other professionals in Wyoming. The mean salary paid for beginning teachers was the highest in the region and the mean salary paid was second only to Colorado.

MAP was criticized for comparing Wyoming's salaries to those in neighboring states, because salaries in those states are below national averages. However, competitive labor markets tend to be regional, and it is with these surrounding states Wyoming is most likely to compete for talent. Although salaries in Connecticut, New Jersey, New York, and California are significantly higher than those in Idaho, Utah, Montana, Nebraska, and Colorado, few Wyoming teachers are likely to trade Wyoming housing prices, tax rates, and quality of life for the higher pay in those states.

Nevertheless, the Legislature could decide as a matter of policy to increase teachers' salaries to some arbitrary standard, such as highest in the six-state region, the national average, or the top 10 percent in the nation. While the precise costs of such action can be determined only after the full parameters of the Cost Based Block Grant Model are decided, it is possible to estimate the effect of each option by changing the salary level in the Prototypical Models. The cost of raising the statewide average teacher salary to \$36,364, which would be the highest in the six-state region, would be over \$42 million per year.¹ The statewide cost of raising Wyoming teachers' salaries to the national median of \$34,687 would be approximately \$27 million per year. To raise the average salary to the top 10 percent nationally (\$44,779) would cost approximately \$120 million per year. These increased costs would be *in addition to* amounts displayed on the simulations in the Appendix.

Additional Cost Considerations

A legislative draft bill which describes the "basket of educational goods and services" proposes the following material changes to current law:

- Requires the Wyoming Board of Education to implement a statewide student assessment program. The costs of this program are described earlier.

- Requires the Wyoming Board of Education to adopt uniform program standards and student performance standards for the common core of knowledge and skills. The common core of knowledge is comprised of reading/language skills, social studies, mathematics, science, art, physical education, health and safety, humanities, career/vocational options, foreign cultures and languages, applied technology, and government and civics. The common core of skills is comprised of problem solving; interpersonal communications; keyboarding and computer applications; critical thinking; creativity; and life skills, including CPR training.

These standards are considered necessary to "provide students with sufficient knowledge and skills to ensure them, at a minimum, an opportunity to enter the University of Wyoming and Wyoming community colleges, to prepare students for the job market or advanced vocational and technical training, or to achieve other purposes of education." It is this definition that MAP interprets as being a "proper education." The Cost Based Block Grant Model has been designed with this definition as its goal. The Wyoming Department of Education estimates the cost of developing standards at \$250,000.

- Sets minimum graduation standards of four years of English, three years of math, three years of science, and three years of social studies. The model provides sufficient resources for every student to be afforded a curriculum which will offer these courses.
- Increases the school year from 175 days to 185; the additional 10 days are for professional development of employees. The cost of adding 10 days to the school year depends on the state's aggregate level of schooling expenditures. However, nearly all costs associated with a longer school year would be comprised of payroll and would result in expenditures of an additional \$18 million to \$20 million.
- Mandates universal kindergarten and lowers the minimum school age from six to five. Lowering mandatory school attendance to age five will have little effect, as kindergarten attendance is almost universal presently. However, if the Legislature were to provide funds for full-day kindergarten, rather than the current half day, the cost would be approximately \$22 million.
- Requires the Wyoming Department of Education to develop an Education Technology Plan. The cost implications of that plan are discussed earlier.

The Joint Education Interim Committee asked MAP to estimate the cost of the following items:

- Class Size

K-3 20 students per teacher
 K-3 17 students per teacher
 4-6 24 students per teacher
 7-12 80 students per teacher (English) per day

These costs would depend on other assumptions, but the model will display estimates of the total cost of changing class size by any number.

- Counselors

Assuming existing practices in Wyoming, it would cost an additional \$6 million to provide one counselor

for every 250 K-12 student. The prototypes, however, can accommodate a somewhat richer ratio in the pupil support category.

- Librarians

Increasing current staffing of librarians to a ratio of one to 500 students would cost approximately \$2.5 million. Again, the prototypes contemplate a richer ratio.

- Nurses

Reducing the current ratio of school nurses to one to 500 would cost about \$4.3 million. The prototypes do not specify how many nurses a school would hire, but they do provide for nurses, as well as other specialists, in the pupil support category.

- Kindergarten

Required attendance in kindergarten for at least half day. Kindergarten attendance is nearly universal, and mandating half day would have little impact on total education expenditures. Increasing kindergarten attendance to full day would cost approximately \$22 million.

- Other

MAP could not obtain sufficient information to accurately estimate the cost of restricting the number of students in writing classes; emphasizing writing across the curriculum; or early interventions, such as reading recovery. However, any of these could easily be implemented with the availability of resources contemplated in the Cost Based Block Grant Model.

END NOTES

¹ These calculations include a pro rata increase in benefits as part of the total cost.

XI. Implementation Considerations

The proposed Cost Based Block Grant Model requires legislative adoption. However, there are numerous decision points to be incorporated into the final version. A longer list of decision points is described in the prior section. In this section, however, implementation decision points are described which apply particularly to the overall plan.

Among the decisions that have to be made are the speed with which to operationalize various provisions. For example, MAP recommends that a newly suggested approach for funding disabled students be postponed at least a year because its full benefit cannot take effect until more precise data are collected about the number and nature of handicapped students in Wyoming. Similarly, the existing transportation reimbursement formula, with minor modification, should be retained, but with refinements that will be possible only when more precise data can be obtained. Also, the "necessary small school" eligibility formula cannot operate effectively until a somewhat different data base is assembled.

Another decision regards the initial-year amounts of new revenue a district might receive, or by which it should be reduced, as a consequence of new revenue eligibility computations. Experience suggests that only rarely can a school district rapidly digest huge percentages of new revenue and continue to deploy all of its resources wisely. Hence, a "phase in" is often included as a school finance implementation component.

There is regrettably little science regarding the speed with which a district can wisely accommodate large amounts of additional revenue. However, experience in other states suggests that a ceiling, in year one, of a 10 to 15 percent increase over the prior year is appropriate. Then, in year two and each year thereafter, a district might well receive whatever additional revenue to which it was entitled in similar increments. This increase would continue until a district is fully compensated for the additional, per-pupil block grant amount for which it is eligible under the new formula. (In the illustrative simulations which follow, every revenue "receiving" Wyoming district could be leveled up within no more than two years, assuming a 15 percent ceiling on new additional revenues. It would take three years, if the ceiling were placed at 10 percent.)

The converse is also a legislative decision point. How much revenue can a district "lose," under a new eligibility computation, and still offer programs which do not curtail educational opportunity for its students? Here, also, there is insufficient technical knowledge. However, experience with budget reductions suggests that absorbing more than a five or 10 percent decrease in a year is difficult. Thus, the Legislature will have to deliberate regarding the speed with which revenues are reduced for districts so affected.

Moreover, the Legislature will have to determine whether or not to reduce districts at all. Holding a district "harmless" is, also, sometimes accomplished by freezing its current per-pupil revenue levels and not granting annual cost-of-living adjustments until other districts in the state eligible for revenue increases gain per-pupil revenue parity.

Buttressing State Administrative Capacity

The proposed Cost Based Block Grant Model has implications for the state's administrative role. The Wyoming Department of Education will have enhanced obligations in obvious areas, such as greater leadership in fiscal accounting. In addition, however, particularly if the Legislature decides to take advantage of the opportunity to link the model with measurements and accountability, the Wyoming Department of Education will need to lead on matters such as achievement testing. State leadership in other areas, such as curriculum, use of instructional technology, and distance learning, would assist in achieving greater equality and effectiveness for "necessary small schools." Finally, the model calls for greater and more detailed amounts of performance information on dimensions related to special education, transportation, "necessary small schools," and facilities construction. Taken as a whole, the future picture is one of an even more dynamic Wyoming Department of Education.

In addition, state leadership will be necessary on other administrative dimensions. The Regional Price Adjustment included in the model approach necessitates accurate and timely survey data regarding prices of items in a constantly shifting market basket of consumer goods and services. Consequently, enhancing the capacity of the Division of Administration and Information is also in order.

XII. Accounting and Information Collection Implications

Wyoming presently relies upon accounting procedures adapted from the uniform code of accounts promoted by the United States Department of Education. In so doing, the state's financial reporting and accounting procedures and definitions are generally consistent with what takes place throughout the remainder of the nation for local school districts. For most purposes, at least in the past, these procedures may have been sufficient. However, as Wyoming undertakes a transition to a cost-based model of school revenue distribution, these accounting and information procedures will need to be enhanced.

Implementation of several proposed Cost Based Block Grant Model reform features depend upon better fiscal and program information than now exists. Second, in keeping with the Wyoming Supreme Court's decision in Campbell, greater fiscal and program information will be needed to monitor equity. Third, the relative absence of local

discretion over revenue generation opens a larger prospect of citizen disengagement from fiscal matters and a wider window for financial misfeasance. Steps to enhance the state's fiduciary role are, therefore, in order. Finally, better accounting information, linked with better student performance information from a new assessment system, can contribute to a far better technical understanding of education and the processes that can render it more productive.

Improved Information. At several points in this report, mention has been made of a proposed reform being suspended until more precise information becomes available. For example, MAP suggests in an earlier section the definition of "necessary small schools" wait a year or two so that information regarding existing small schools and student transport times and distance data could be accumulated. Similarly, reference has previously been made to the need for more precise data regarding students' disabling conditions prior to implementing a proposed "Census" model for special education.

Equity. Ensuring that every Wyoming child benefits from resources sufficient to ensure a "proper" education will necessitate collecting data on a school-by-school basis. No longer will district-wide expenditure data be sufficient. School-based accounts will need to be designed and implemented. Modern computer programs can ease this burden, but this is a labor intensive enterprise which will require the extensive participation and support of school district business officials.

Fiduciary Oversight. Block grants appropriately empower professional educators, parents, and students with authority for deciding the mix of resources most likely to meet local needs and priorities. In return for the flexibility inherent in block grants, local decision makers must be accountable for wisely spending the taxpayer's money. Consistent with the Wyoming Supreme Court's decision, the state bears ultimate responsibility for the prudent and effective expenditure of education funding. Most informed observers concur that the most effective way for states to honor that responsibility is to hold school educators accountable for outcomes.

Specifying use of and restrictively measuring inputs is inconsistent with the philosophy underlying a block grant and rarely yields significant payoff in improved education. Schooling and instruction involve literally thousands of decisions every week regarding a classroom of students. Prescribing those decisions from a central authority simply makes no sense. Hence, measuring desired outcomes is a far more productive approach for accountability purposes.

It is beyond the scope of this report to specify all the features of an accountability system, but at a minimum it should include multiple measures of student performance, such as growth and level of achievement, attendance and retention rates, and parent satisfaction. Fundamental to the effectiveness of any accountability system is that there be consequences for failure to meet expectations. An equally important and closely related element of accountability is assurance that school districts do not incur financial obligations that jeopardize instructional programs or long-term viability.

In other states, school districts have found themselves technically bankrupt when their projected expenditures exceeded future revenues. This situation most typically happens when long-term commitments for capital construction or for employee compensation are made based on uncertain projections of future revenues. It is more likely to happen when the districts' abilities to raise additional revenues are constrained as they now will be in Wyoming. It is for this reason that MAP strongly urges the Legislature take the following measures.

First, current budgeting and accounting procedures employed by local school districts should be standardized. MAP has described various shortcomings in the existing system which illustrate the need for more reliable data. Second, budgets and expenditure reports should be submitted to the state, in sufficient detail and with sufficient frequency, to ensure timely analysis and response. Third, the Wyoming Department of Education should develop a contingency plan for a timely and effective response when a school district is discovered to be in financial difficulty. Fourth, the Wyoming Department of Education should develop a strategy aimed at general improvement of business practices in local school districts.

MAP encourages the Legislature and Wyoming Department of Education to develop any accountability system deliberately, carefully, and with appropriate involvement of those being held accountable.

Technical Efficiency. Financial accounting and program information changes, such as those suggested here —particularly if they are based upon the individual school as the operating unit —hold great promise of enhancing knowledge of the instructional process. Research regarding the relationship of fiscal resources to instructional outcomes is only rarely undertaken in education. Student performance data, based upon schools, when linked to components of a Cost Based Block Grant Model, can contribute to far more precise knowledge. For example, if a set of Wyoming schools consistently over performs on school tests, relative to what would be predicted based upon the social and economic characteristics of its students, then it becomes a ripe site for exploring how it deploys its resources so that others could benefit from such knowledge.

XIII. Simulations

How does the simulation program operate?

The simulation program is based upon a standard, computerized spreadsheet (Excel). Into the computer program are placed 1995-96 data for each of Wyoming's 49 school districts. For each district the model contains total enrollments; and students' characteristics, such as grade levels, disabilities, and household income proxies.

The simulation model also contains a calculating dimension for each of the previously listed 25 Cost Based Block Grant Model instructional and operational components (e.g., teachers, aides, librarians, and textbooks). Each of these individual model components has an imputed unit cost, a dollar amount. Thus, the interaction of a district's characteristics (e.g., number and grade levels of students) with legislatively determined quantities of a component (class size) can result in a computation for the an individual school's revenue eligibility on that specific dimension. The sum of each of these computations across all dimensions determines an entire school's revenue eligibility. Similar computations are made for operating items that are district based (e.g., transportation, maintenance, administration, whether or not there is a "necessary small school," and numbers of disabled students). The sum of all school revenues and all district revenues, when multiplied by the regional cost-of-living adjustment, comprises a district's block grant eligibility.

The simulation model lends itself to alternative decision scenarios. For example, the Legislature can probe the statewide financial and local district distributional consequences of altering class size, subsidies for scale diseconomies (small schools), and aid for students from low-income households.

Finally, the simulation model not only can provide alternative scenarios and local district revenue eligibility comparisons, it facilitates comparisons of any proposed new plans with the distributional consequences of the status quo. A local school district's present revenues, both in the aggregate and per pupil, are loaded into the model and thus, the model can be simulate comparisons of the status quo with proposed changes.

The computer simulation program can be updated each year with the most recent school and district data. If any legislative alterations are made to quantities of model components, these too can be altered in the model's calculation capacity. Thereafter, simulations can proceed accurately in future years.

What does a simulation look like?

The following pages present several alternative simulations. These are illustrations. They are not recommendations. They must remain illustrative until the Wyoming Legislature makes the numerous decisions needed to crystallize the model.

The distributional consequences for each Wyoming school district can be observed from each simulation. One simulation assumes that current statewide, mean per-pupil-spending levels are retained, but the new proposed distribution formula is deployed to distribute such revenues. This is a "Low Cost" steady state model.

A second illustrative simulation assumes a "Leveling-up" strategy in which low-revenue districts are "leveled up" to match the expenditure levels of high-revenue districts. This strategy is a very "High Cost" model; it brings revenue distributions into line, but it is extremely expensive for the state.

A third illustration assumes substantial augmentations of existing spending patterns: lower class size, additional professional and classified staff, increases in spending for instructional materials, professional development, and instructional equipment.

A fourth illustrative simulation provides healthy augmentations over the existing budget levels, but it is less generous on those dimensions than the third model. The fourth simulation contains class sizes which reside in a zone of effectiveness as determined by educational research. The simulation has many of the features of the third model, but it would be less expensive for the state to implement.

In all cases the additional revenues required are calculated as an annual amount. These amounts would be doubled for the state's biennium budget.

APPENDIX

Introduction

This Appendix explains, in step-by-step fashion, the manner in which the Proposed Cost Based Block Grant Model operates. Before beginning, a few caveats are in order:

- First, and foremost, this section is intended to inform the reader about how the model operates. It does not set forth an ideal school finance distribution formula for Wyoming—that is not what MAP has been asked to do. In these examples, relative quantities of resources in the model are illustrative.
- Secondly, this explanation relies upon the most recent data available. However, some of the calculations may change as more current information becomes available. Also, results may change as different assumptions are made.
- Third, the fact that the model is cost-based does not mean that districts are required to expend funds in the same categories employed by the model to determine eligibility. The state's responsibility is to provide resources. Local districts bear the responsibility of organizing and expending resources in a manner which is educationally sound for their students.
- Fourth, the prototypical schools and assumed grade configurations were constructed at a size and grade-level span for analytical purposes. They are not intended to suggest that all schools should have the same grade configuration or be of that size. Wyoming has a long history of local independence on this dimension, and the effect of the model is intended to be neutral upon such decisions. Although the model is based on schools of a specific size, special attention is given to small schools in the formula.

Every effort has been made to render the model rational and understandable. However, any school finance mechanism, especially one required to respond to specific court parameters, contains complexity. This explanation attempts to balance this complexity with the need for policy makers to understand the underlying rationale behind the decisions they make regarding the distribution of resources for education.

The first step in building the proposed model was to define a set of grade levels and school sizes that could serve as analytical guideposts for later components. With the advice of groups of highly qualified Wyoming educators, MAP developed three prototypes: an elementary and middle school of approximately equal size (300 students) and a high

school of roughly twice that size (600 students). Critical components for any school operation were identified, and costs were ascribed (using current Wyoming expenditure data) for each component.

The next phase in the development of a model is to determine how many of which components need to be in place to provide a "proper" education for the children of Wyoming. Final decisions on this task await the Wyoming Legislature over the next few months. The model should be seen as an analytical tool by which legislative decisions can more rationally be made.

Three prototypes are presented in the following section. Each prototype is accompanied by a table which displays district-by-district impact. This table is done in an Excel spreadsheet, which is linked in such a way that the statewide and district-by-district changes can be seen immediately for any alterations in the prototypes, or in any adjustments made to the model.

The explanation begins with the elementary school prototype, using some specific examples. The explanation then examines special provisions added to address specific issues faced by the Wyoming Legislature in the wake of the Supreme Court decision. The final stage concentrates on district-by-district impacts and implications created by various policy choices on statewide costs.

The Elementary Prototype

For purposes of this example, MAP has created an elementary school with a K-5 grade configuration with an ADM of 288 students. The model lists the components down the left-hand column and displays numbers and total dollar amounts down the right-hand column. These numbers are then summed to a total cost for an elementary school, and the total is divided by ADM to generate a per-ADM cost. For each category, important assumptions are made, and it is the purpose of this section to explore the prototype's components, describe these assumptions, and allow the reader to envision additional assumptions to test on future iterations of the model.

A. Personnel

1. Teachers

The largest single dollar category in the model encompasses costs for teachers. Decisions regarding numbers of teachers and teacher compensation have the largest weight in determining total school, district, and state expenditure patterns. There are several facets of this decision. The first is class size. Determining average class size in a school plays a huge role in the determination of total school, district, and state expenditures.

In the illustrative school, class sizes are assumed to be 15 for grades K-3 and 18 for grades 4 and 5, for a class size average of 16 students for the entire school. These class-size figures generate 18 teachers in the prototypical elementary school. Also, revenues are added for two full-time-equivalent teachers to augment subjects not covered in regular classes, such as visual and performing arts, physical education, and foreign language; and specialists for teaching reading and mathematics. The purpose here is to afford schools the flexibility to employ additional teachers who best meet the needs of their students. The 18 teachers in regular classrooms, plus the two specialist teachers, provide 20 full-time-equivalent teachers for the illustrative school.

The next step is to determine teacher costs. It is important, when discussing employees, to examine the costs of their total compensation package. Therefore, teacher costs are displayed in three columns. The first represents an average salary cost per teacher in Wyoming. The figure in this column is comprised of three discrete parts:

- (1) base salary, which equals the average beginning salary paid to teachers in the state,
- (2) adjustment for collegiate units and degrees beyond the bachelor's degree and,

(3) adjustment to the base salary for years of experience, or seniority.

For purposes of the model, an average adjustment for seniority has been made, but this topic will be revisited later when district-by-district seniority adjustments will be discussed. At that point district-by-district adjustments for differences in seniority will be computed. Mandated benefits are costed in the next column. These typically include items such as retirement and Social Security. Contributions for these benefits are normally calculated as an automatic percentage of salary costs (in Wyoming they approximate 19 percent).¹

The next column represents health benefits. An increase over current expenditures is displayed. There is significant variance in health benefits among Wyoming's districts, with some employees receiving full coverage and little or no employee contribution, while others have only minimal coverage. The model displays an increase in the average health care coverage of approximately \$716 to provide more adequate base line coverage for Wyoming employees.²

2. Substitute Teachers³

Substitutes are funded at current estimated rates of \$60 per day, assuming an average teacher absentee rate of five percent. With a 175-day school year, the formula yields .9 FTE.

3. Aides

Aides in Wyoming are compensated at approximately \$12,000 per year on average. Most are part-time and are ineligible for health benefits. Aides can be most useful in relieving teachers of non-professional activities, such as before- and after-school playground supervision, lunch duty, and other routine tasks which do not necessarily require professional expertise. Expert groups that advised MAP suggested that roughly one aide (FTE) per 100 students would be desirable. That increase is costed in the model.

4. Pupil Support

This category includes three types of pupil support personnel: counselors, nurses, and school social workers. Given the changing nature of students in Wyoming and the increased expectations placed on school performance, investing in additional pupil support services was deemed by Wyoming education experts to be appropriate. These services are costed at the same rate as a classroom teacher. The allocation calls for 1.5 pupil-support-personnel, which can be configured in the way most appropriate for the school. For example, one school may opt to have a full-time nurse and half-time counselor; another may have three half-time people, one in each category.

5. Library/Media

MAP site visits and expert groups confirmed that library/media was an area where Wyoming should improve. Given the Court's expectations that all students receive a "proper" education, providing access to media and other library materials appears particularly important. The model includes one full-time-equivalent professional position for this function. A school may choose to utilize these dollars by hiring a full-time librarian or by allocating these dollars for a blend of a part-time librarian, part-time media assistant, and part-time technician, or any combination.

6. School Administration

Average salary and benefits paid an elementary principal are included.

7. and 8. Clerical/Data Entry and Operations

The clerical/data entry and school operations personnel costs are very close to the current patterns on average pay and average total cost.

B. Supplies and Instructional Materials

The dollar figure displayed here includes the approximate current Wyoming average cost for an elementary student for supplies. High school costs in this category are substantially higher. The model also includes an augmentation of the instructional materials budget of \$30 per ADM to include sufficient revenue to allow a five- or six-year cycle for textbook purchase, replacement, and renewal. This increase is significant, but it falls short of the Wyoming Department of Education's recommendations. In addition, the model includes a \$15 per ADM augmentation for library materials, approximately doubling the current expenditure level.

C. Instructional Equipment

For purposes of the model, the typical allocation for instructional equipment has been augmented. It has been difficult to obtain a precise estimate for annual average expenditures for instructional equipment (e.g., computers, televisions, VCRs, and overhead projectors). However, it is clear that Wyoming will need to allocate additional dollars in this category if students are to experience the level of proper instruction expected by the Court. The model projects an additional \$80 per ADM to launch the process of computer purchases. This amount is significantly higher than current expenditure levels and is close to the figure recommended by the legislative committee, but it falls short of the Wyoming Department of Education's estimate of \$400 per student.

D. Food Service

This function is expected to be self-supporting, with the exception of small, remote schools which cannot hope to provide meals to students at cost. This factor will be considered in the "necessary small school" formula.

E. Categorical Aid

1. Special Education

For purposes of this illustration, the statewide average state and local costs for special education have been included. Currently, districts are reimbursed for 85 percent of their special education costs —the other 15 percent must come from existing district resources. The prototype displays statewide average costs, but later adjustments provide the full actual amount for special education expenditures for each district.⁴

The body of this report suggests that consideration be given, after appropriate study, to an alternative method for funding special education. However, for purposes of this illustration, it is assumed that total state and local costs are included in the model. Later, when district-by-district allocations are considered, this statewide average is replaced with actual district costs for reimbursement purposes.

2. and 3. Economically Disadvantaged and Limited-English-Speaking Children.

The incidence of these students is uneven (and currently unknown) across the state —some districts have several; some have none. Thus, there is no statewide dollar amount appropriate to provide services to such students. Later in this illustration, when statewide adjustments are considered, a provision which allocates dollars to these students in districts where the impact is greatest will be introduced.

4. Gifted

The model includes an allocation for gifted students which represents a modest augmentation over existing revenue amounts, and which would provide every district \$150 for three percent of its student body. This amount would be included in the existing formula to serve gifted and talented students in every district.

F. Student Activities

Student activities play an important role in education in Wyoming. A dollar amount based upon an estimate of current expenditures for this purpose has been included.⁵

G. Professional Development

As best as MAP can ascertain from existing district financial records, Wyoming schools now spend approximately \$38 per pupil on staff development. Given the substantial needs generated by proposed school reform laws, increased accreditation requirements, new expectations regarding student performance, and the changing social and economic complexity of Wyoming's students, the model includes a significant increase in this category to approximately 1.5 percent of the district's general fund budget. This amount converts to about \$90 to \$100 per ADM, depending on grade level.

H. Assessment

As the state moves to a system expected to be more accountable for results, it is important that consideration be given to assisting districts in paying for the increased costs related to a statewide testing program. The Wyoming Department of Education is recommending approximately \$50 per pupil for operating costs. The model includes \$25 per pupil to initiate the testing program. Significant developmental costs will need to be incurred by the state as well.

I. District Expenditures

Prototypical models focus on schools as the primary unit of analysis. But district offices, too, are important for providing leadership, services, and structure to what takes place in schools. The prototypical models include costs of these centralized functions. In addition, there are other categories of expenditures where the locus of the expenditures is not appropriately school based. In these cases, they are assigned to the district. It is important to note that this category includes a large portion of "other" and not just central office expenditures

For the categories of operations and maintenance and administration, the model approximates current expenditure patterns and makes no suggested augmentations. The body of this report discusses an operations and maintenance formula which should be pursued in the future.

Transportation deserves special mention. It is highly variable among districts and, like special education, requires a placeholder for the statewide average amount in the formula. Later, the model will substitute that amount with actual district expenditures for both home-to-school and student activities transportation. MAP recommends that districts be placed under a more coherent statewide transportation policy, so that the state is subsidizing the same activity in each district. MAP also recommends that, if feasible, student activities transportation be funded based on some reasonable percentage relationship to home-to-school transportation.

These, then, are the principal components that comprise the typical school expenditure pattern for an elementary school. MAP has attempted to describe the manner in which the model operates on a component-by-component basis. A similar set of assumptions has been made for middle schools and high schools.

Policy makers can use this model to simulate a virtually limitless set of options, such as to assess the impact of increasing or decreasing class size, increasing teachers' salaries or benefits, and augmenting the budget to provide for more instructional resources. Whatever set of options is chosen, a cost-per-ADM number will be derived for each level of schooling. Districts will generate revenue by multiplying their ADM per grade level by the appropriate per-ADM amount (for elementary the number in the model is \$6,165, found in the lower right-hand corner of the page). This number will be fed into another spread sheet and multiplied by the number of K-5 youngsters in the state to derive district-by-district impact and to arrive at a figure representing the statewide costs of contemplated changes.

Following the elementary prototype are the middle school and high school prototypes, which will not be reviewed on an item-by-item basis, since most of the comments would be similar or even identical. The next step is to link the elements in the Prototypical Model to district-by-district impact tables.

District-by-District and Statewide Impact

In order to ascertain the total impact of a formula on a district or to assess the impact of any change in any component, the spreadsheet is designed to display district-by-district figures as well as statewide impacts. The prototypes are linked to this model, and when combined they produce a statewide composite model-funding level.

In this spread sheet, districts are listed alphabetically with the current ADM in the next column and general fund revenue per ADM in the last full fiscal year (1995-96). The revenue per ADM amount (Column 3) is the amount against which any new models will need to be assessed. Districts and the state need to know the implications of any proposed changes, or the cumulative implications of several changes. Whichever the case, the first place districts naturally will look will be to see how the new formula compares with the old. Are they better or worse off than before? Legislators, too, will pay attention to these numbers, which reflect what will happen to local constituents' schools. In addition, legislators will be particularly interested in assessing cost implications of any proposed change. With this model they will be able to compare and contrast the statewide impact of any number of important variables and to make rational judgments about the relative weight to be given to any changes they may be considering, both in terms of the impact on their constituents and cost implications for the state.

Column 4 is a composite figure determined by averaging the three prototypes to arrive at one statewide figure. The dollar amounts are appropriately weighted to reflect the varying numbers of students in elementary, middle and high schools within each district.

Earlier, highly variable costs associated with special education, transportation, and activities transportation were discussed. In Column 5, the statewide averages in the illustrative model are now replaced by actual expenditures of each district. This revision is accomplished by subtracting statewide average allocations for these three categories from the model, and then replacing them with the actual per-ADM amounts for each district. For example, the number in Column 4 for Albany #1, Laramie, represents the base model, minus the state average for special education, transportation and activities transportation, plus actual district expenditures for those three categories. It is important to note that although the revenue number is no longer uniform, it is cost based. It fits the Wyoming Supreme Court's edict that the state's school finance program be rationally based on costs.

The next several columns all represent adjustments to the base formula. Again, it is important to note that all of these adjustments are made with specific assumptions in mind. Throughout, every effort to be explicit about assumptions will be made. The model quite easily adapts to other assumptions. It is also important to reemphasize that these are mainly examples of adjustments that might be made.

Necessary Small Schools

The first set of adjustments occurs for small schools in Column 6. The small schools are identified by the districts in which they are located. MAP has suggested a definition of "necessary small school" which the Legislature can consider. It is not possible to precisely ascertain which of the current small schools meet this definition.

The adjustment for small school size is based on a Prototypical Model for a school of 10 students, much in the same way that MAP designed the prototypes for larger schools by identifying the key components of schooling, ascribing a cost to them, and determining the appropriate quantity for each. Even more so than larger schools, small schools' budgets are dominated by personnel costs. Very small schools, those with 30 ADM and under, obviously have special circumstances which do not permit their class sizes to reach the levels identified in the model.

Elementary School

MAP proposes a cost-model-based small elementary school formula, which assigns a specific dollar amount per pupil to students in a prototypical school of 10 students. All students enrolled in schools with ADM between one and 10 would receive a flat dollar amount based on that computation (i.e. $10 \times \$8,925 = \$89,246$). Students in schools of ADM between 11 and 20 would receive double that amount (i.e. \$178,493), and students in schools with ADM between 21 and 30 would receive three times that amount (\$267,739). From ADM of 31 to ADM of 199 (the limit of the small school differential), schools would receive a graduated rate per additional student, which decreases gradually for each additional student until the 200-ADM threshold is reached, at which point the per-ADM amount would equal the elementary revenue per-ADM for the prototypical elementary school. Concomitant with this formula are two additional notions: for one-teacher schools, the state reimburses for actual costs or the costs generated by the formula, whichever is less; secondly, eligibility for additional dollars is tied to the employment of additional teachers. A school of 12 students with only one teacher would be eligible only for the allocation provided a school of 10 students or less.

Elementary

School Size	Teachers	Block Grant
1-10	1	\$89,246
11-20	2	\$178,493
21-30	3	\$267,739

High School

MAP proposes a cost-model-based small high school formula which assigns a specific dollar amount per pupil to students in a prototypical high school of 16 students (i.e. $16 \times \$10,136 = \$162,173$). All students enrolled in schools with ADM between one and 16 would receive a flat dollar amount based on that computation. Students in schools of between 17 and 32 students would receive double that amount (\$324,345), and students in schools with ADM between 32 and 48 would receive three times that amount (\$486,518). From ADM of 49 to ADM of 399 (the limit of the small high school differential), schools would receive a graduated rate per additional student. This rate would decrease gradually for each additional student until the 400-ADM threshold is reached, at which point the per-ADM amount would equal the high school revenue per ADM for the prototypical high school.

High School

School Size	Teachers	Block Grant
1-16	2	\$162,173
17-32	4	\$324,345

33-48	6	\$486,518
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In this model, each student would generate the dollar amount he or she is eligible for under the regular formula for elementary and high schools —the difference between what the regular formula would generate and what the small school formula would generate would be added to the amount.⁶

MAP has chosen to merge the elementary and middle school formulae into one K-8 model. For middle schools the formula makes a simple adjustment to correct for the increased costs associated with those programs. The model assumes that only the elementary amount is deducted to determine the total received by the formula.⁷

The simulations which are attached make two notable assumptions, which tend to overestimate the cost of this provision of the model and the district-by-district impact. The model assumes that all small schools are "necessary." If the Legislature adopts a definition of "necessary small schools", the model will cost less. Secondly, the model assumes that all one-teacher models are funded at the maximum amount, and that would likely not be the case.

Necessary Small Districts

In earlier versions of this model, MAP included a small district formula, which awarded \$100,000 for each small district of less than 400 ADM. This version does not contain such a factor. But it is left in the spreadsheet (Column 7), in case in the future a small district formula is deemed worthwhile.

Economically Disadvantaged/Limited-English-Speaking Youth

The model calls for small classes and additional pupil support services for each child. Even with that, there may be districts in which such large numbers of at-risk students reside, causing a critical mass of needy students who may require special treatment beyond that provided in a less impacted school (Column 8). The model provides that eligible students in districts which have over one-and-one-half times the state average of their children eligible for free and reduced price lunches (a proxy for economic need) be qualified for a \$500 per pupil amount to assist students in need. There are only a few school districts in Wyoming so impacted. This provision speaks directly to the Court's concern about at-risk students. Obviously, the allowance, the percentage for eligibility, and the method for identifying at-risk youngsters can vary. This factor is intended to be a first step in ultimately arriving at a new formula for economically disadvantaged youth, which would be on a school-by-school basis.

Limited-English-speaking students form a small but growing segment of Wyoming's population. These students, too, may require special assistance. Many of them will be in schools covered by the Economically Disadvantaged Youth program described above. The same principles apply for these children. Small classes, individualized instruction, and increased pupil support personnel could enhance these students' opportunities to learn. But for those districts that enroll large numbers of these students, some form of state aid may be necessary to enable them to be able to benefit from a "proper" education.

Teacher Seniority

Seniority among the teaching staff is an important cost consideration over which districts have little control. This adjustment (Column 9) modifies dollar amounts set forth in the component models, upward or downwards, depending on the actual seniority of district personnel. If districts are to be able to compensate their employees fairly, such a factor is advisable.

Column 10 is the new modified revenue per ADM, taking into account the adjustments above.

Regional Cost-of-Living Adjustment

The final adjustment to the base is an adjustment for regional differences in cost of living (see Column 11). The formula MAP employed for assessing regional cost of living is explained in the report's text. The premise undergirding this provision is that it is necessary, in order to provide districts with equal opportunity to employ personnel of comparable quality, to be competitive by adjusting for higher cost of living in some areas of the state.

Column 12 shows revised revenue per ADM.

Again, variations on this formula are possible. This particular adjustment excludes housing and medical. Having housing in or out of the formula has a large impact on distribution.

Change in Revenue per ADM

Column 13 displays whether this model, with this particular configuration of provisions, provides each district with greater or fewer general fund resources than current law. Any state redistribution effort, especially one designed to comply with the tightly constrained court mandates, will have differential impacts on districts. This formula is no exception. Column 14 contains total change in annual revenue per district. The number at the bottom of Column 14 contains the total first-year cost minus the gain limit discussed below.

At this point, the Legislature has several options. These options are displayed in the next few columns.

Hold Harmless

One option for the Legislature is to "hold harmless" districts that lose revenues, freeze their revenues at current levels, do not permit revenue increases over time, and allow the rest of the districts to catch up (Column 15). A hold-harmless provision of this nature has the advantage of providing no harm to the districts which would otherwise lose money, but it has the disadvantage of costing the state money and possibly running afoul of the Court (depending on the time it would take for the other districts to catch up).

Gain or Loss Limits

Another option is to place a limit both on the amount of money districts can gain or lose in any one year. It can be argued that districts have difficulty absorbing large spending increases quickly and, thus, it may be prudent for the state to phase in the increases. Column 16 displays district-by-district dollar savings available to the state by such a limit.

Conversely, it can be argued that sustaining a large revenue loss in any one year can be catastrophic, and these losses should be limited by some amount. For purposes of the model, a 15 percent limit for formula gainers and a 10 percent limit for formula losers has been chosen. Limiting districts to a 15 percent gain would save the state significant sums for two years (but districts remain entitled to those funds in future years).

Cost Implications

Another valuable feature of the model is its ability to display the total state costs of adding or subtracting any variable or combination of variables. For example, by holding all elements in the model constant and by changing any one, two, or more variables, Wyoming policy makers can assess the state cost implications of even the slightest policy change. Policy makers can also easily compare costs associated with two equally desirable policy options and take costs into consideration when arriving at their decisions. Conversely, policy makers can immediately see what a given dollar amount buys in terms of policy choices.

Prototypes

WYOMING PROTOTYPICAL MODEL

ELEMENTARY SCHOOL: K-5; 288 STUDENTS; CLASS SIZE 16;

**PUPIL/TEACHER RATIO 14.4
PRELIMINARY COSTS**

Description	Units	Salary Cost	Mand. Benefits	Health Benefits	Total Cost
A. Personnel					
1. Teachers	20	\$31,758	\$6,034	\$3,641	\$828,660
2. Substitute Teachers (5%)	.9	\$10,500	\$803		\$10,173
3. Aides (FTE)	3	\$10,080	\$1,915		\$35,986
4. Pupil Support	1.5	\$31,758	\$6,034	\$3,641	\$62,150
5. Library/Media	1	\$31,758	\$6,034	\$3,641	\$41,433
Certif. Librarian					
Media Assistant					
Technician					
6. School Administration	1	\$50,877	\$9,667	\$3,641	\$64,185
7. Clerical/Data Entry	2	\$16,000	\$3,040	\$3,641	\$45,362
8. Operations	2.5	\$20,000	\$3,800	\$3,641	\$68,603
Description					Cost
B. Supplies and					\$61,950
Instructional Materials					
C. Equipment					\$37,837
D. Food Service					
E. Categorical Aid					
1. Special Education					\$152,514
2. Limited English Speaking (see spread sheet)					
3. Disadvantaged Youth (see spread sheet)					
4. Gifted					\$1,296
F. Student Activities					\$2,167
G. Professional Development					\$26,352
H. Assessment					\$7,200

I. District Expenditure					
1. Maintenance and Operations					\$93,064
2. Administration and miscellaneous expenditures					\$159,323
3. Transportation					\$77,180
	288			Total Cost	\$1,775,433
				Adj.\$/ADM	\$6,165

Prototypes

**WYOMING PROTOTYPICAL MODEL
MIDDLE/JUNIOR HIGH 6-8; 300 STUDENTS; CLASS SIZE 20;
PUPIL/TEACHER RATIO 15.4
PRELIMINARY COSTS**

Description	Units	Salary Cost	Mand. Benefits	Health Benefits	Total Cost
A. Personnel					
1. Teachers	19.5	\$31,758	\$6,034	\$3,641	\$807,944
2. Substitute Teachers(5%)	1	\$10,500	\$803		\$11,021
3. Aides (FTE)	3	\$10,080	\$1,915		\$35,986
4. Pupil Support	3	\$31,758	\$6,034	\$3,641	\$124,299
5. Library Media					
Certificated Librarian	1	\$31,758	\$6,034	\$3,641	\$41,433
Media Assistant	1.5	\$18,000	\$3,420	\$3,641	\$37,592
Tech. Assistant					
6. School Administration	1	\$50,792	\$9,650	\$3,641	\$64,083
7. Clerical/Data Entry	2	\$16,000	\$3,040	\$3,641	\$45,362
8. Operations	3	\$20,000	\$3,800	\$3,641	\$82,323
					Cost
B. Supplies and					\$56,887
Instructional Materials					
C. Equipment					\$43,880

D. Food Service					
E. Categorical Aid					
1. Special Education					\$158,869
2. Limited English Speaking (see spread sheet)					
3. Disadvantaged Youth (see spread sheet)					
4. Gifted					\$1,350
F. Student Activities					\$16,179
G. Professional Development					\$27,450
H. Assessment					\$7,500
I. District Expenditure					
1. Maintenance and Operations					\$112,500
2. Administration and miscellaneous categories					\$165,961
3. Transportation					\$80,396
	300			Total Cost	\$1,921,014
				Adj.\$/ADM	\$6,403

Prototypes

**WYOMING PROTOTYPICAL MODEL
HIGH SCHOOL: 9-12; 600 STUDENTS; CLASS SIZE 17;
PUPIL/TEACHER RATIO 17
PRELIMINARY COSTS**

Description	Units	Salary Cost	Mand. Benefits	Health Benefits	Total Cost
A. Personnel					
1. Teachers	41.2	\$31,758	\$6,034	\$3,641	\$1,706,066
3. Substitute Teachers(5%)	1.7	\$12,250	\$937		\$22,418

4. Aides (FTE)	6	\$10,080	\$1,915		\$71,971
5. Pupil Support	5	\$31,758	\$6,034	\$3,641	\$207,165
6. Library Media					
Certificated Librarian	1	\$31,758	\$6,034	\$3,641	\$41,433
Media Assistant	2	\$18,000	\$3,420	\$3,641	\$50,122
Tech. Asst.					
7. School Administration	1	\$53,071	\$10,083	\$3,641	\$66,795
	1	\$47,675	\$9,058	\$3,641	\$60,374
8. Clerical/Data Entry	5	\$16,000	\$3,040	\$3,641	\$113,405
9. Operations	5	\$20,000	\$3,800	\$3,641	\$137,205
					Cost
B. Supplies and					\$164,765
Instructional Materials					
C. Equipment					\$97,266
D. Food Service					
E. Categorical Aid					
1. Special Education					\$317,738
2. Limited English Speaking (see spread sheet)					
3. Disadvantaged Youth (see spread sheet)					
4. Gifted					\$2,700
F. Student Activities					\$100,203
G. Professional Development					\$58,500
H. Assessment					\$15,000
I. District Expenditure					
1. Maintenance and Operations					\$342,600
2. Administration and miscellaneous categories					\$331,923
3. Transportation					\$160,792

	600				Total Cost	\$4,068,441
					Adj./ADM	\$6,781

Wyoming District by District Impact

COST BASED BLOCK GRANT MODEL	2 ADM 95-96	3 Revenue per ADM 95-96	4 Model Revenue per ADM	5 Revised Model per ADM	6 Small School Adj/ADM	7 Small District Adj/ADM	8 EDY LES Adj/ADM
Albany #1 (Laramie)	4,154	\$5,521	\$6,418	\$6,511	\$226	\$-	\$-
Big Horn #1 (Byron)	794	\$7,668	\$6,422	\$6,598	\$1,901	\$-	\$215
Big Horn #2 (Lovell)	810	\$5,821	\$6,419	\$6,217	\$457	\$-	\$-
Big Horn #3 (Greybull)	564	\$6,563	\$6,408	\$6,522	\$924	\$-	\$-
Big Horn #4 (Basin)	423	\$7,979	\$6,488	\$6,610	\$2,105	\$-	\$-
Campbell #1 (Gillette)	7,989	\$6,345	\$6,415	\$6,255	\$162	\$-	\$-
Carbon #1 (Rawlins)	2,198	\$6,154	\$6,441	\$6,331	\$311	\$-	\$-
Carbon #2 (Saratoga)	1,043	\$8,831	\$6,409	\$6,851	\$1,975	\$-	\$-
Converse #1 (Douglas)	1,812	\$5,850	\$6,422	\$6,555	\$175	\$-	\$-
Converse #2 (Glenrock)	886	\$7,118	\$6,427	\$6,526	\$737	\$-	\$-
Crook #1 (Sundance)	1,299	\$7,640	\$6,444	\$6,646	\$1,347	\$-	\$-
Fremont #1 (Lander)	2,062	\$5,346	\$6,420	\$6,370	\$63	\$-	\$-
Fremont #2 (Dubois)	347	\$7,182	\$6,436	\$6,603	\$1,900	\$-	\$-
Fremont #6 (Windriver)	412	\$8,145	\$6,430	\$7,172	\$1,637	\$-	\$217
Fremont #9 (Jeffrey City)	38	\$16,768	\$6,466	\$7,647	\$4,908	\$-	\$-
Fremont #14 (Ethete)	761	\$6,871	\$6,389	\$6,710	\$702	\$-	\$420
Fremont#21(Ft.Washakie)	279	\$10,015	\$6,243	\$9,064	\$474	\$-	\$426
Fremont #24 (Shoshoni)	368	\$7,966	\$6,440	\$6,790	\$1,337	\$-	\$-
Fremont #25 (Riverton)	2,919	\$5,193	\$6,446	\$6,637	\$-	\$-	\$-
Fremont #38 (Arapahoe)	351	\$7,663	\$6,245	\$7,227	\$456	\$-	\$462
Goshen #1 (Torrington)	2,278	\$6,251	\$6,426	\$6,673	\$574	\$-	\$-
Hot Springs #1 (Thermopolis)	858	\$6,907	\$6,417	\$6,934	\$595	\$-	\$212

Johnson #1 (Buffalo)	1,317	\$6,376	\$6,434	\$6,580	\$652	\$-	\$-
Laramie #1 (Cheyenne)	13,759	\$5,259	\$6,406	\$6,229	\$61	\$-	\$-
Laramie #2 (Pine Bluffs)	972	\$7,374	\$6,420	\$6,629	\$1,619	\$-	\$-
Lincoln #1 (Kemmerer)	998	\$7,180	\$6,443	\$6,568	\$237	\$-	\$-
Lincoln #2 (Afton)	2,738	\$5,639	\$6,439	\$6,439	\$208	\$-	\$-
Natrona #1 (Casper)	12,713	\$5,443	\$6,417	\$6,331	\$154	\$-	\$-
Niobrara #1 (Lusk)	507	\$6,815	\$6,420	\$6,777	\$1,190	\$-	\$-
Park #1 (Powell)	1,932	\$5,261	\$6,413	\$6,288	\$59	\$-	\$-
Park #6 (Cody)	2,706	\$4,898	\$6,418	\$6,059	\$56	\$-	\$-
Park #16 (Meeteetse)	167	\$10,215	\$6,414	\$6,907	\$2,615	\$-	\$213
Platte #1 (Wheatland)	1,464	\$6,690	\$6,425	\$6,549	\$583	\$-	\$-
Platte #2 (Guernsey-Sunrise)	264	\$8,449	\$6,452	\$6,718	\$2,036	\$-	\$-
Sheridan #1 (Ranchester)	927	\$7,079	\$6,420	\$6,712	\$1,257	\$-	\$-
Sheridan #2 (Sheridan)	3,512	\$5,410	\$6,437	\$6,440	\$42	\$-	\$-
Sheridan #3 (Arvada)	100	\$13,031	\$6,434	\$8,799	\$4,654	\$-	\$-
Sublette #1 (Pinedale)	653	\$8,280	\$6,403	\$6,590	\$810	\$-	\$-
Sublette #9 (Big Piney)	668	\$7,803	\$6,436	\$6,816	\$947	\$-	\$-
Sweetwater #1 (Rock Springs)	5,670	\$5,749	\$6,424	\$6,355	\$265	\$-	\$-
Sweetwater #2 (Green River)	3,669	\$5,814	\$6,428	\$6,487	\$88	\$-	\$-
Teton #1 (Jackson)	2,207	\$7,056	\$6,393	\$6,441	\$310	\$-	\$-
Uinta #1 (Evanston)	3,715	\$5,661	\$6,410	\$6,252	\$-	\$-	\$-
Uinta #4 (Mt. View)	952	\$6,553	\$6,435	\$6,598	\$419	\$-	\$-
Uinta #6 (Lyman)	1,014	\$6,400	\$6,451	\$6,313	\$305	\$-	\$-
Washakie #1 (Worland)	1,740	\$5,186	\$6,430	\$6,417	\$-	\$-	\$-
Washakie #2 (Ten Sleep)	156	\$9,330	\$6,413	\$7,059	\$2,948	\$-	\$-
Weston #1 (Newcastle)	1,121	\$5,812	\$6,427	\$6,352	\$299	\$-	\$-
Weston #7 (Upton)	345	\$7,578	\$6,436	\$6,678	\$1,735	\$-	\$-
Wyoming Total	98,635	\$5,964	\$6,420				

Wyoming District by District Impact

EDUCATION RESOURCE MODEL	9 Seniority Adj/ADM	10 Modified Revenue	11 Regional C of L	12 TotalModel Rev.	13 Difference Current	14 Total Change in
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		ADM	Adj./ADM	With C of L	Revenue	Revenue
Albany #1 (Laramie)	\$39	\$6,777	\$100	\$6,877	\$1,356	\$5,410,154
Big Horn #1 (Byron)	\$(128)	\$8,586	\$(81)	\$8,505	\$837	\$640,697
Big Horn #2 (Lovell)	\$44	\$6,718	\$(64)	\$6,654	\$833	\$651,101
Big Horn #3 (Greybull)	\$46	\$7,492	\$(71)	\$7,421	\$858	\$463,608
Big Horn #4 (Basin)	\$(44)	\$8,670	\$(82)	\$8,588	\$610	\$250,352
Campbell #1 (Gillette)	\$72	\$6,489	\$(73)	\$6,416	\$72	\$551,232
Carbon #1 (Rawlins)	\$183	\$6,825	\$180	\$7,004	\$851	\$1,806,707
Carbon #2 (Saratoga)	\$(164)	\$8,662	\$228	\$8,890	\$58	\$58,612
Converse #1 (Douglas)	\$(70)	\$6,659	\$(93)	\$6,567	\$717	\$1,257,422
Converse #2 (Glenrock)	\$(66)	\$7,197	\$(100)	\$7,097	\$(21)	\$(18,287)
Crook #1 (Sundance)	\$(45)	\$7,948	\$(105)	\$7,843	\$204	\$255,286
Fremont #1 (Lander)	\$(8)	\$6,424	\$(147)	\$6,277	\$931	\$1,860,739
Fremont #2 (Dubois)	\$(209)	\$8,295	\$(190)	\$8,105	\$923	\$306,268
Fremont #6 (Windriver)	\$(1)	\$9,024	\$(206)	\$8,818	\$673	\$267,487
Fremont #9 (Jeffrey City)	\$(218)	\$12,336	\$(282)	\$12,055	\$(4,714)	\$(177,913)
Fremont #14 (Ethete)	\$(212)	\$7,620	\$(174)	\$7,446	\$575	\$416,991
Fremont#21(Ft.Washakie)	\$(226)	\$9,738	\$(223)	\$9,516	\$(499)	\$(129,623)
Fremont #24 (Shoshoni)	\$161	\$8,288	\$(189)	\$8,098	\$132	\$46,567
Fremont #25 (Riverton)	\$(30)	\$6,607	\$(151)	\$6,456	\$1,263	\$3,565,163
Fremont #38 (Arapahoe)	\$(223)	\$7,922	\$(181)	\$7,741	\$78	\$25,821
Goshen #1 (Torrington)	\$(142)	\$7,104	\$(64)	\$7,040	\$789	\$1,721,639
Hot Springs #1 (Thermopolis)	\$(48)	\$7,693	\$(124)	\$7,568	\$661	\$549,358
Johnson #1 (Buffalo)	\$6	\$7,239	\$32	\$7,271	\$895	\$1,138,754
Laramie #1 (Cheyenne)	\$171	\$6,461	\$(27)	\$6,434	\$1,175	\$15,556,860
Laramie #2 (Pine Bluffs)	\$(142)	\$8,116	\$(34)	\$8,082	\$708	\$669,076
Lincoln #1 (Kemmerer)	\$(110)	\$6,695	\$(48)	\$6,646	\$(533)	\$(517,236)

Lincoln #2 (Afton)	\$(66)	\$6,582	\$(47)	\$6,534	\$896	\$2,367,394
Natrona #1 (Casper)	\$(39)	\$6,446	\$53	\$6,499	\$1,056	\$12,928,644
Niobrara #1 (Lusk)	\$(56)	\$7,911	\$(110)	\$7,801	\$986	\$475,921
Park #1 (Powell)	\$(134)	\$6,213	\$115	\$6,328	\$1,067	\$1,975,124
Park #6 (Cody)	\$(64)	\$6,051	\$112	\$6,163	\$1,266	\$3,307,945
Park #16 (Meeteetse)	\$(213)	\$9,522	\$177	\$9,698	\$(516)	\$(83,743)
Platte #1 (Wheatland)	\$(174)	\$6,958	\$(63)	\$6,895	\$205	\$288,401
Platte #2 (Guernsey-Sunrise)	\$(132)	\$8,622	\$(78)	\$8,545	\$96	\$24,641
Sheridan #1 (Ranchester)	\$(78)	\$7,891	\$130	\$8,021	\$942	\$843,957
Sheridan #2 (Sheridan)	\$(5)	\$6,477	\$106	\$6,583	\$1,173	\$3,987,152
Sheridan #3 (Arvada)	\$(647)	\$12,807	\$211	\$13,017	\$(14)	\$(1,371)
Sublette #1 (Pinedale)	\$(49)	\$7,351	\$245	\$7,596	\$(684)	\$(429,739)
Sublette #9 (Big Piney)	\$(112)	\$7,651	\$255	\$7,906	\$102	\$66,342
Sweetwater #1 (Rock Springs)	\$(76)	\$6,544	\$60	\$6,604	\$855	\$4,700,080
Sweetwater #2 (Green River)	\$14	\$6,589	\$61	\$6,650	\$836	\$2,973,925
Teton #1 (Jackson)	\$(2)	\$6,749	\$661	\$7,410	\$353	\$748,507
Uinta #1 (Evanston)	\$(18)	\$6,234	\$(69)	\$6,165	\$504	\$1,796,312
Uinta #4 (Mt. View)	\$347	\$7,364	\$(82)	\$7,282	\$729	\$670,915
Uinta #6 (Lyman)	\$49	\$6,667	\$(74)	\$6,593	\$193	\$189,234
Washakie #1 (Worland)	\$8	\$6,426	\$(61)	\$6,365	\$1,179	\$1,978,404
Washakie #2 (Ten Sleep)	\$(99)	\$9,908	\$(94)	\$9,814	\$484	\$71,726
Weston #1 (Newcastle)	\$(177)	\$6,475	\$(98)	\$6,377	\$565	\$614,589
Weston #7 (Upton)	\$35	\$8,447	\$(128)	\$8,320	\$741	\$247,139
Wyoming Total						\$76,368,331
					Total Cost	\$60,763,354

Wyoming District by District Impact

EDUCATION RESOURCE MODEL	15 Full Hold Harmless	16 State Savings for Gain Limit	17 State Cost for Loss 15%
Albany #1 (Laramie)	\$-	\$-	\$-
Big Horn #1 (Byron)	\$-	\$-	\$-
Big Horn #2 (Lovell)	\$-	\$-	\$-
Big Horn #3 (Greybull)	\$-	\$-	\$-
Big Horn #4 (Basin)	\$-	\$-	\$-
Campbell #1 (Gillette)	\$-	\$-	\$-
Carbon #1 (Rawlins)	\$-	\$-	\$-
Carbon #2 (Saratoga)	\$-	\$-	\$-
Converse #1 (Douglas)	\$-	\$-	\$-
Converse #2 (Glenrock)	\$(18,287)	\$-	\$-
Crook #1 (Sundance)	\$-	\$-	\$-
Fremont #1 (Lander)	\$-	\$258,720	\$-
Fremont #2 (Dubois)	\$-	\$-	\$-
Fremont #6 (Windriver)	\$-	\$-	\$-
Fremont #9 (Jeffrey City)	\$(177,913)	\$-	\$114,623
Fremont #14 (Ethete)	\$-	\$-	\$-
Fremont#21(Ft.Washakie)	\$(129,623)	\$-	\$-
Fremont #24 (Shoshoni)	\$-	\$-	\$-
Fremont #25 (Riverton)	\$-	\$1,366,327	\$-
Fremont #38 (Arapahoe)	\$-	\$-	\$-
Goshen #1 (Torrington)	\$-	\$-	\$-
Hot Springs #1 (Thermopolis)	\$-	\$-	\$-
Johnson #1 (Buffalo)	\$-	\$-	\$-

Laramie #1 (Cheyenne)	\$-	\$5,115,681	\$-
Laramie #2 (Pine Bluffs)	\$-	\$-	\$-
Lincoln #1 (Kemmerer)	\$(517,236)	\$-	\$-
Lincoln #2 (Afton)	\$-	\$131,525	\$-
Natrona #1 (Casper)	\$-	\$2,936,361	\$-
Niobrara #1 (Lusk)	\$-	\$-	\$-
Park #1 (Powell)	\$-	\$513,837	\$-
Park #6 (Cody)	\$-	\$1,387,923	\$-
Park #16 (Meeteetse)	\$(83,743)	\$-	\$-
Platte #1 (Wheatland)	\$-	\$-	\$-
Platte #2 (Guernsey-Sunrise)	\$-	\$-	\$-
Sheridan #1 (Ranchester)	\$-	\$-	\$-
Sheridan #2 (Sheridan)	\$-	\$1,229,391	\$-
Sheridan #3 (Arvada)	\$(1,371)	\$-	\$-
Sublette #1 (Pinedale)	\$(429,739)	\$-	\$-
Sublette #9 (Big Piney)	\$-	\$-	\$-
Sweetwater #1 (Rock Springs)	\$-	\$-	\$-
Sweetwater #2 (Green River)	\$-	\$-	\$-
Teton #1 (Jackson)	\$-	\$-	\$-
Uinta #1 (Evanston)	\$-	\$-	\$-
Uinta #4 (Mt. View)	\$-	\$-	\$-
Uinta #6 (Lyman)	\$-	\$-	\$-
Washakie #1 (Worland)	\$-	\$673,438	\$-
Washakie #2 (Ten Sleep)	\$-	\$-	\$-
Weston #1 (Newcastle)	\$-	\$-	\$-
Weston #7 (Upton)	\$-	\$-	\$-

Wyoming Total	\$(1,357,912)	\$15,719,599	\$114,623
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Four Alternative Simulations

In this section, MAP displays four alternative scenarios, each designed to illustrate a point related to the distribution of the state's school finance formula:

The first example is the most stark. It merely reallocates existing state resources. As the reader can see, there are large numbers of districts that lose substantial sums of revenue, and several districts that gain significantly. Under this scenario, which is perfectly equalizing, several districts would suffer catastrophic losses.

The second example is at the other end of the continuum. It displays what would happen if the amount which holds every district harmless were leveled up. Under this scenario, every district would gain revenue. While this may be seen as a positive outcome by the schools, it would require increasing the total expenditures astronomically.

The third example is the model described in the Appendix. It is shown here so that it may be compared to the fourth model, which is a lower cost variation of the model MAP described. The fourth model has been altered in the following manner:

Elementary School

1. Increase class size by one.
2. Reduce the number of resource teachers from two to one.
3. Reduce the number of aides from three to two.
4. Reduce the allocation for pupil support services from 1.5 to one.

Middle School

1. Increase class size by one.
2. Reduce the number of resource teachers from two to one.
3. Decrease pupil support personnel by one.
4. Decrease aides from three to two.

High School

1. Increase class size by two.

2. Decrease pupil support personnel by one.

3. Decrease aides by one.

Overall, the cap on allowable expenditures in any one year was decreased from 15 percent to 10 percent.

These alterations to the model reduce the first-year state costs from approximately \$60 million to a little over \$31 million. The purpose of the example is to show how relatively modest changes in the model may have large statewide fiscal impacts.

EXAMPLE 1 REDISTRIBUTION OF EXISTING RESOURCES EXISTING RESOURCES	ADM	Revenue per ADM	Total Model Rev	Difference Current	State Savings for Gain	State Costs for Loss	Total Change
District	95-96	95-96	w/ C of L	Revenue	Limit (15%)	Limit (10%)	Revenue
Albany #1 (Laramie)	4,154	\$5,521	\$6,186	\$666	\$0	\$	\$2,655,957
Big Horn #1 (Byron)	794	\$7,668	\$5,955	(\$1,713)	\$0	\$	(\$1,312,117)
Big Horn #2 (Lovell)	810	\$5,821	\$5,751	(\$70)	\$0	\$	(\$54,816)
Big Horn #3 (Greybull)	564	\$6,563	\$6,066	(\$497)	\$0	\$	(\$268,526)
Big Horn #4 (Basin)	423	\$7,979	\$5,985	(\$1,994)	\$0	\$	(\$818,829)
Campbell #1 (Gillette)	7,989	\$6,345	\$5,810	(\$535)	\$0	\$	(\$4,116,106)
Carbon #1 (Rawlins)	2,198	\$6,154	\$6,196	\$43	\$0	\$	\$90,483
Carbon #2 (Saratoga)	1,043	\$8,831	\$6,406	(\$2,426)	\$0	\$	(\$2,441,579)
Converse #1 (Douglas)	1,812	\$5,850	\$5,943	\$93	\$0	\$	\$162,839
Converse #2 (Glenrock)	886	\$7,118	\$5,913	(\$1,205)	\$0	\$	(\$1,034,779)
Crook #1 (Sundance)	1,299	\$7,640	\$6,040	(\$1,599)	\$0	\$	(\$2,003,645)
Fremont #1 (Lander)	2,062	\$5,346	\$5,770	\$424	\$0	\$	\$847,468
Fremont #2 (Dubois)	347	\$7,182	\$5,787	(\$1,395)	\$0	\$	(\$462,836)
Fremont #6 (Windriver)	412	\$8,145	\$6,551	(\$1,594)	\$0	\$	(\$633,774)
Fremont #9 (Jeffrey City)	38	\$16,768	\$6,769	(\$9,999)	\$0	\$	(\$377,421)

Fremont #14 (Ethete)	761	\$6,871	\$5,934	(\$937)	\$0	\$	(\$680,193)
Fremont#21(Ft.Washakie)	279	\$10,015	\$8,363	(\$1,652)	\$0	\$	(\$428,914)
Fremont #24 (Shoshoni)	368	\$7,966	\$6,326	(\$1,640)	\$0	\$	(\$577,727)
Fremont #25 (Riverton)	2,919	\$5,193	\$5,985	\$792	\$36,538	\$	\$2,235,373
Fremont #38 (Arapahoe)	351	\$7,663	\$6,569	(\$1,094)	\$0	\$	(\$362,948)
Goshen #1 (Torrington)	2,278	\$6,251	\$6,013	(\$238)	\$0	\$	(\$520,363)
Hot Springs #1 (Thermopolis)	858	\$6,907	\$6,328	(\$579)	\$0	\$	(\$481,149)
Johnson #1 (Buffalo)	1,317	\$6,376	\$6,144	(\$232)	\$0	\$	(\$295,321)
Laramie #1 (Cheyenne)	13,759	\$5,259	\$5,933	\$674	\$0	\$	\$8,921,779
Laramie #2 (Pine Bluffs)	972	\$7,374	\$6,006	(\$1,368)	\$0	\$	(\$1,292,867)
Lincoln #1 (Kemmerer)	998	\$7,180	\$5,936	(\$1,244)	\$0	\$	(\$1,206,846)
Lincoln #2 (Afton)	2,738	\$5,639	\$5,856	\$217	\$0	\$	\$574,445
Natrona #1 (Casper)	12,713	\$5,443	\$5,887	\$444	\$0	\$	\$5,439,518
Niobrara #1 (Lusk)	507	\$6,815	\$6,178	(\$637)	\$0	\$	(\$307,433)
Park #1 (Powell)	1,932	\$5,261	\$5,811	\$549	\$0	\$	\$1,017,268
Park #6 (Cody)	2,706	\$4,898	\$5,644	\$746	\$30,274	\$	\$1,950,296
Park #16 (Meeteetse)	167	\$10,215	\$6,361	(\$3,854)	\$0	\$	(\$625,315)
Platte #1 (Wheatland)	1,464	\$6,690	\$5,860	(\$830)	\$0	\$	(\$1,165,182)
Platte #2 (Guernsey- Sunrise)	264	\$8,449	\$6,043	(\$2,406)	\$0	\$	(\$618,032)
Sheridan #1 (Ranchester)	927	\$7,079	\$6,280	(\$799)	\$0	\$	(\$715,956)
Sheridan #2 (Sheridan)	3,512	\$5,410	\$6,059	\$649	\$0	\$	\$2,206,723
Sheridan #3 (Arvada)	100	\$13,031	\$7,809	(\$5,222)	\$0	\$	(\$501,256)
Sublette #1 (Pinedale)	653	\$8,280	\$6,305	(\$1,974)	\$0	\$	(\$1,240,990)
Sublette #9 (Big Piney)	668	\$7,803	\$6,439	(\$1,364)	\$0	\$	(\$883,020)
Sweetwater #1 (Rock Springs)	5,670	\$5,749	\$5,873	\$124	\$0	\$	\$681,562
Sweetwater #2 (Green River)	3,669	\$5,814	\$6,093	\$278	\$0	\$	\$990,830
Teton #1 (Jackson)	2,207	\$7,056	\$6,599	(\$458)	\$0	\$	(\$969,138)

Uinta #1 (Evanston)	3,715	\$5,661	\$5,724	\$63	\$0	\$	\$223,933
Uinta #4 (Mt. View)	952	\$6,553	\$6,402	(\$152)	\$0	\$	(\$139,892)
Uinta #6 (Lyman)	1,014	\$6,400	\$5,810	(\$590)	\$0	\$	(\$577,290)
Washakie #1 (Worland)	1,740	\$5,186	\$5,903	\$718	\$0	\$	\$1,204,267
Washakie #2 (Ten Sleep)	156	\$9,330	\$6,449	(\$2,881)	\$0	\$	(\$426,535)
Weston #1 (Newcastle)	1,121	\$5,812	\$5,626	(\$186)	\$0	\$	(\$201,714)
Weston #7 (Upton)	345	\$7,578	\$6,146	(\$1,432)	\$0	\$	(\$477,574)
Wyoming Total	98,635	\$5,964			\$66,812		\$982,658
					Total	State Cost	\$915,847

EXAMPLE 2 - WYOMING COST BASED BLOCK GRANT MODEL LEVEL UP	ADM	Revenue per ADM	Total Model Rev	Difference Current	State Savings for Gain	State Costs for Loss	Total Change
District	95-96	95-96	w/ C of L	Revenue	Limit (15%)	Limit (10%)	Revenue
Albany #1 (Laramie)	4,154	\$5,521	\$14,199	\$8,678	\$31,319,487	\$0	\$34,623,245
Big Horn #1 (Byron)	794	\$7,668	\$14,198	\$6,530	\$4,119,329	\$0	\$5,000,132
Big Horn #2 (Lovell)	810	\$5,821	\$13,623	\$7,801	\$5,413,420	\$0	\$6,095,680
Big Horn #3 (Greybull)	564	\$6,563	\$14,019	\$7,456	\$3,495,820	\$0	\$4,027,621
Big Horn #4 (Basin)	423	\$7,979	\$14,171	\$6,192	\$2,051,540	\$0	\$2,543,050
Campbell #1 (Gillette)	7,989	\$6,345	\$13,558	\$7,214	\$48,193,487	\$0	\$55,517,953
Carbon #1 (Rawlins)	2,198	\$6,154	\$14,272	\$8,118	\$15,282,159	\$0	\$17,242,721
Carbon #2 (Saratoga)	1,043	\$8,831	\$14,971	\$6,140	\$4,846,632	\$0	\$6,180,082
Converse #1 (Douglas)	1,812	\$5,850	\$13,725	\$7,875	\$12,273,975	\$0	\$13,813,078
Converse #2 (Glenrock)	886	\$7,118	\$13,819	\$6,701	\$4,837,705	\$0	\$5,754,699
Crook #1 (Sundance)	1,299	\$7,640	\$14,121	\$6,482	\$6,684,398	\$0	\$8,119,983
Fremont #1 (Lander)	2,062	\$5,346	\$13,385	\$8,039	\$14,459,350	\$0	\$16,061,368

Fremont #2 (Dubois)	347	\$7,182	\$13,883	\$6,701	\$1,865,807	\$0	\$2,223,259
Fremont #6 (Windriver)	412	\$8,145	\$14,810	\$6,665	\$2,163,835	\$0	\$2,649,540
Fremont #9 (Jeffrey City)	38	\$16,768	\$16,746	(\$22)	\$0	\$0	(\$843)
Fremont #14 (Ethete)	761	\$6,871	\$14,135	\$7,264	\$4,523,045	\$0	\$5,270,988
Fremont#21(Ft.Washakie)	279	\$10,015	\$16,408	\$6,394	\$1,270,282	\$0	\$1,660,403
Fremont #24 (Shoshoni)	368	\$7,966	\$14,248	\$6,282	\$1,792,380	\$0	\$2,213,418
Fremont #25 (Riverton)	2,919	\$5,193	\$13,598	\$8,405	\$21,526,620	\$0	\$23,725,456
Fremont #38 (Arapahoe)	351	\$7,663	\$14,649	\$6,986	\$1,936,744	\$0	\$2,318,193
Goshen #1 (Torrington)	2,278	\$6,251	\$13,846	\$7,595	\$14,535,236	\$0	\$16,582,521
Hot Springs #1 (Thermopolis)	858	\$6,907	\$14,208	\$7,301	\$5,205,881	\$0	\$6,066,852
Johnson #1 (Buffalo)	1,317	\$6,376	\$14,133	\$7,757	\$8,653,496	\$0	\$9,870,563
Laramie #1 (Cheyenne)	13,759	\$5,259	\$13,705	\$8,446	\$101,347,029	\$0	\$111,788,209
Laramie #2 (Pine Bluffs)	972	\$7,374	\$14,102	\$6,728	\$5,310,850	\$0	\$6,355,857
Lincoln #1 (Kemmerer)	998	\$7,180	\$13,672	\$6,492	\$5,253,342	\$0	\$6,298,076
Lincoln #2 (Afton)	2,738	\$5,639	\$13,632	\$7,994	\$18,895,417	\$0	\$21,131,286
Natrona #1 (Casper)	12,713	\$5,443	\$13,778	\$8,335	\$92,023,522	\$0	\$102,015,805
Niobrara #1 (Lusk)	507	\$6,815	\$14,269	\$7,453	\$3,104,668	\$0	\$3,598,172
Park #1 (Powell)	1,932	\$5,261	\$13,771	\$8,510	\$14,295,695	\$0	\$15,756,982
Park #6 (Cody)	2,706	\$4,898	\$13,601	\$8,703	\$20,825,749	\$0	\$22,745,772
Park #16 (Meeteetse)	167	\$10,215	\$14,966	\$4,751	\$522,307	\$0	\$770,901
Platte #1 (Wheatland)	1,464	\$6,690	\$13,786	\$7,096	\$8,555,489	\$0	\$9,964,715
Platte #2 (Guernsey- Sunrise)	264	\$8,449	\$14,154	\$5,706	\$1,140,156	\$0	\$1,465,700
Sheridan #1 (Ranchester)	927	\$7,079	\$14,538	\$7,459	\$5,731,239	\$0	\$6,682,626
Sheridan #2 (Sheridan)	3,512	\$5,410	\$13,995	\$8,585	\$26,416,276	\$0	\$29,174,038
Sheridan #3 (Arvada)	100	\$13,031	\$17,980	\$4,949	\$287,354	\$0	\$474,968
Sublette #1 (Pinedale)	653	\$8,280	\$14,587	\$6,307	\$3,183,582	\$0	\$3,964,190
Sublette #9 (Big Piney)	668	\$7,803	\$14,504	\$6,700	\$3,580,022	\$0	\$4,337,819
Sweetwater #1 (Rock	5,670	\$5,749	\$13,782	\$8,032	\$39,413,137	\$0	\$44,153,461

Springs)							
Sweetwater #2 (Green River)	3,669	\$5,814	\$14,001	\$8,187	\$26,031,507	\$0	\$29,135,124
Teton #1 (Jackson)	2,207	\$7,056	\$15,232	\$8,176	\$15,073,653	\$0	\$17,315,250
Uinta #1 (Evanston)	3,715	\$5,661	\$13,429	\$7,767	\$24,671,486	\$0	\$27,699,784
Uinta #4 (Mt. View)	952	\$6,553	\$14,210	\$7,657	\$6,144,575	\$0	\$7,049,684
Uinta #6 (Lyman)	1,014	\$6,400	\$13,575	\$7,175	\$6,081,126	\$0	\$7,020,357
Washakie #1 (Worland)	1,740	\$5,186	\$13,621	\$8,435	\$12,846,588	\$0	\$14,151,554
Washakie #2 (Ten Sleep)	156	\$9,330	\$15,079	\$5,749	\$644,019	\$0	\$851,237
Weston #1 (Newcastle)	1,121	\$5,812	\$13,364	\$7,553	\$7,263,811	\$0	\$8,211,693
Weston #7 (Upton)	345	\$7,578	\$14,154	\$6,576	\$1,813,579	\$0	\$2,192,630
Wyoming Total	98,635	\$5,964			\$666,906,806	\$0	\$751,865,849
					Total	State Cost	\$915,847

EXAMPLE 3 - WYOMING COST BASED BLOCK GRANT MODEL District	ADM 95-96	Revenue per ADM 95-96	Total Model Rev w/ C of L	Difference Current Revenue	State Savings for Gain Limit (15%)	State Costs for Loss Limit (10%)	Total Change Revenue
Albany #1 (Laramie)	4,154	\$5,521	\$6,877	\$1,356	\$2,106,397	\$0	\$5,410,154
Big Horn #1 (Byron)	794	\$7,668	\$8,505	\$837	\$0	\$0	\$640,697
Big Horn #2 (Lovell)	810	\$5,821	\$6,654	\$833	\$0	\$0	\$651,101
Big Horn #3 (Greybull)	564	\$6,563	\$7,421	\$858	\$0	\$0	\$463,608
Big Horn #4 (Basin)	423	\$7,979	\$8,588	\$610	\$0	\$0	\$250,352
Campbell #1 (Gillette)	7,989	\$6,345	\$6,416	\$72	\$0	\$0	\$551,232
Carbon #1 (Rawlins)	2,198	\$6,154	\$7,004	\$851	\$0	\$0	\$1,806,707
Carbon #2 (Saratoga)	1,043	\$8,831	\$8,890	\$58	\$0	\$0	\$58,612
Converse #1 (Douglas)	1,812	\$5,850	\$6,567	\$717	\$0	\$0	\$1,257,422
Converse #2 (Glenrock)	886	\$7,118	\$7,097	(\$21)	\$0	\$0	(\$18,287)

Crook #1 (Sundance)	1,299	\$7,640	\$7,843	\$204	\$0	\$0	\$255,286
Fremont #1 (Lander)	2,062	\$5,346	\$6,277	\$931	\$258,720	\$0	\$1,860,739
Fremont #2 (Dubois)	347	\$7,182	\$8,105	\$923	\$0	\$0	\$306,268
Fremont #6 (Windriver)	412	\$8,145	\$8,818	\$673	\$0	\$0	\$267,487
Fremont #9 (Jeffrey City)	38	\$16,768	\$12,055	(\$4,714)	\$0	\$114,623	(\$177,913)
Fremont #14 (Ethete)	761	\$6,871	\$7,446	\$575	\$0	\$0	\$416,991
Fremont#21(Ft.Washakie)	279	\$10,015	\$9,516	(\$499)	\$0	\$0	(\$129,623)
Fremont #24 (Shoshoni)	368	\$7,966	\$8,098	\$132	\$0	\$0	\$46,567
Fremont #25 (Riverton)	2,919	\$5,193	\$6,456	\$1,263	\$1,366,327	\$0	\$3,565,163
Fremont #38 (Arapahoe)	351	\$7,663	\$7,741	\$78	\$0	\$0	\$25,821
Goshen #1 (Torrington)	2,278	\$6,251	\$7,040	\$789	\$0	\$0	\$1,721,639
Hot Springs #1 (Thermopolis)	858	\$6,907	\$7,568	\$661	\$0	\$0	\$549,358
Johnson #1 (Buffalo)	1,317	\$6,376	\$7,271	\$895	\$0	\$0	\$1,138,754
Laramie #1 (Cheyenne)	13,759	\$5,259	\$6,434	\$1,175	\$5,115,681	\$0	\$15,556,860
Laramie #2 (Pine Bluffs)	972	\$7,374	\$8,082	\$708	\$0	\$0	\$669,076
Lincoln #1 (Kemmerer)	998	\$7,180	\$6,646	(\$533)	\$0	\$0	(\$517,236)
Lincoln #2 (Afton)	2,738	\$5,639	\$6,534	\$896	\$131,525	\$0	\$2,367,394
Natrona #1 (Casper)	12,713	\$5,443	\$6,499	\$1,056	\$2,936,361	\$0	\$12,928,644
Niobrara #1 (Lusk)	507	\$6,815	\$7,801	\$986	\$0	\$0	\$475,921
Park #1 (Powell)	1,932	\$5,261	\$6,328	\$1,067	\$513,837	\$0	\$1,975,124
Park #6 (Cody)	2,706	\$4,898	\$6,163	\$1,266	\$1,387,923	\$0	\$3,307,945
Park #16 (Meeteetse)	167	\$10,215	\$9,698	(\$516)	\$0	\$0	(\$83,743)
Platte #1 (Wheatland)	1,464	\$6,690	\$6,895	\$205	\$0	\$0	\$288,401
Platte #2 (Guernsey-Sunrise)	264	\$8,449	\$8,545	\$96	\$0	\$0	\$24,641
Sheridan #1 (Ranchester)	927	\$7,079	\$8,021	\$942	\$0	\$0	\$843,957
Sheridan #2 (Sheridan)	3,512	\$5,410	\$6,583	\$1,173	\$1,229,391	\$0	\$3,987,152
Sheridan #3 (Arvada)	100	\$13,031	\$13,017	(\$14)	\$0	\$0	(\$1,371)
Sublette #1 (Pinedale)	653	\$8,280	\$7,596	(\$684)	\$0	\$0	(\$429,739)

Sublette #9 (Big Piney)	668	\$7,803	\$7,906	\$102	\$0	\$0	\$66,342
Sweetwater #1 (Rock Springs)	5,670	\$5,749	\$6,604	\$855	\$0	\$0	\$4,700,080
Sweetwater #2 (Green River)	3,669	\$5,814	\$6,650	\$836	\$0	\$0	\$2,973,925
Teton #1 (Jackson)	2,207	\$7,056	\$7,410	\$353	\$0	\$0	\$748,507
Uinta #1 (Evanston)	3,715	\$5,661	\$6,165	\$504	\$0	\$0	\$1,796,312
Uinta #4 (Mt. View)	952	\$6,553	\$7,282	\$729	\$0	\$0	\$670,915
Uinta #6 (Lyman)	1,014	\$6,400	\$6,593	\$193	\$0	\$0	\$189,234
Washakie #1 (Worland)	1,740	\$5,186	\$6,365	\$1,179	\$673,438	\$0	\$1,978,404
Washakie #2 (Ten Sleep)	156	\$9,330	\$9,814	\$484	\$0	\$0	\$71,726
Weston #1 (Newcastle)	1,121	\$5,812	\$6,377	\$565	\$0	\$0	\$614,589
Weston #7 (Upton)	345	\$7,578	\$8,320	\$741	\$0	\$0	\$247,139
Wyoming Total	98,635	\$5,964			\$15,719,599	\$114,623	\$76,368,331
					Total	State Cost	\$60,763,354

EXAMPLE 4 - WYOMING COST BASED BLOCK GRANT MODEL (MODIFIED) District	ADM 95-96	Revenue per ADM 95-96	Total Model Rev w/ C of L	Difference Current Revenue	State Savings for Gain Limit (10%)	State Costs for Loss Limit (10%)	Total Change Revenue
Albany #1 (Laramie)	4,154	\$5,521	\$6,480	\$960	\$1,627,529	\$0	\$3,830,034
Big Horn #1 (Byron)	794	\$7,668	\$8,353	\$685	\$0	\$0	\$524,685
Big Horn #2 (Lovell)	810	\$5,821	\$6,302	\$481	\$0	\$0	\$375,516
Big Horn #3 (Greybull)	564	\$6,563	\$7,131	\$568	\$0	\$0	\$306,665
Big Horn #4 (Basin)	423	\$7,979	\$8,447	\$469	\$0	\$0	\$192,501
Campbell #1 (Gillette)	7,989	\$6,345	\$6,030	(\$315)	\$0	\$0	(\$2,421,244)
Carbon #1 (Rawlins)	2,198	\$6,154	\$6,623	\$469	\$0	\$0	\$997,060
Carbon #2 (Saratoga)	1,043	\$8,831	\$8,707	(\$125)	\$0	\$0	(\$125,478)
Converse #1 (Douglas)	1,812	\$5,850	\$6,174	\$324	\$0	\$0	\$569,067

Converse #2 (Glenrock)	886	\$7,118	\$6,776	(\$342)	\$0	\$0	(\$293,533)
Crook #1 (Sundance)	1,299	\$7,640	\$7,597	(\$43)	\$0	\$0	(\$53,708)
Fremont #1 (Lander)	2,062	\$5,346	\$5,886	\$540	\$10,660	\$0	\$1,078,672
Fremont #2 (Dubois)	347	\$7,182	\$7,930	\$748	\$10,000	\$0	\$248,301
Fremont #6 (Windriver)	412	\$8,145	\$8,611	\$466	\$0	\$0	\$185,296
Fremont #9 (Jeffrey City)	38	\$16,768	\$12,046	(\$4,722)	\$0	\$114,320	(\$178,224)
Fremont #14 (Ethete)	761	\$6,871	\$7,130	\$259	\$0	\$0	\$187,916
Fremont#21(Ft.Washakie)	279	\$10,015	\$9,176	(\$839)	\$0	\$0	(\$217,839)
Fremont #24 (Shoshoni)	368	\$7,966	\$7,864	(\$102)	\$0	\$0	(\$35,962)
Fremont #25 (Riverton)	2,919	\$5,193	\$6,056	\$863	\$971,400	\$0	\$2,437,290
Fremont #38 (Arapahoe)	351	\$7,663	\$7,398	(\$265)	\$0	\$0	(\$87,819)
Goshen #1 (Torrington)	2,278	\$6,251	\$6,709	\$458	\$0	\$0	\$999,501
Hot Springs #1 (Thermopolis)	858	\$6,907	\$7,238	\$331	\$0	\$0	\$275,211
Johnson #1 (Buffalo)	1,317	\$6,376	\$6,940	\$563	\$0	\$0	\$717,059
Laramie #1 (Cheyenne)	13,759	\$5,259	\$6,034	\$775	\$3,298,806	\$0	\$10,259,592
Laramie #2 (Pine Bluffs)	972	\$7,374	\$7,885	\$511	\$0	\$0	\$483,005
Lincoln #1 (Kemmerer)	998	\$7,180	\$6,269	(\$911)	\$0	\$166,839	(\$883,328)
Lincoln #2 (Afton)	2,738	\$5,639	\$6,155	\$517	\$0	\$0	\$1,366,363
Natrona #1 (Casper)	12,713	\$5,443	\$6,105	\$663	\$1,449,386	\$0	\$8,110,908
Niobrara #1 (Lusk)	507	\$6,815	\$7,525	\$710	\$13,530	\$0	\$342,533
Park #1 (Powell)	1,932	\$5,261	\$5,916	\$655	\$238,217	\$0	\$1,212,409
Park #6 (Cody)	2,706	\$4,898	\$5,752	\$854	\$951,868	\$0	\$2,231,883
Park #16 (Meeteetse)	167	\$10,215	\$9,635	(\$580)	\$0	\$0	(\$94,097)
Platte #1 (Wheatland)	1,464	\$6,690	\$6,550	(\$140)	\$0	\$0	(\$196,998)
Platte #2 (Guernsey- Sunrise)	264	\$8,449	\$8,406	(\$43)	\$0	\$0	(\$11,071)
Sheridan #1 (Ranchester)	927	\$7,079	\$7,760	\$681	\$0	\$0	\$610,335
Sheridan #2 (Sheridan)	3,512	\$5,410	\$6,172	\$762	\$749,421	\$0	\$2,587,928
Sheridan #3 (Arvada)	100	\$13,031	\$12,999	(\$32)	\$0	\$0	(\$3,114)

Sublette #1 (Pinedale)	653	\$8,280	\$7,275	(\$1,004)	\$0	\$90,777	(\$631,273)
Sublette #9 (Big Piney)	668	\$7,803	\$7,610	(\$193)	\$0	\$0	(\$124,947)
Sweetwater #1 (Rock Springs)	5,670	\$5,749	\$6,226	\$477	\$0	\$0	\$2,622,400
Sweetwater #2 (Green River)	3,669	\$5,814	\$6,243	\$429	\$0	\$0	\$1,526,031
Teton #1 (Jackson)	2,207	\$7,056	\$7,000	(\$56)	\$0	\$0	(\$119,064)
Uinta #1 (Evanston)	3,715	\$5,661	\$5,759	\$98	\$0	\$0	\$348,416
Uinta #4 (Mt. View)	952	\$6,553	\$6,929	\$376	\$0	\$0	\$346,089
Uinta #6 (Lyman)	1,014	\$6,400	\$6,228	(\$171)	\$0	\$0	(\$167,686)
Washakie #1 (Worland)	1,740	\$5,186	\$5,960	\$775	\$429,462	\$0	\$1,299,440
Washakie #2 (Ten Sleep)	156	\$9,330	\$9,732	\$402	\$0	\$0	\$59,526
Weston #1 (Newcastle)	1,121	\$5,812	\$6,011	\$199	\$0	\$0	\$216,554
Weston #7 (Upton)	345	\$7,578	\$8,142	\$563	\$0	\$0	\$187,781
Wyoming Total	98,635	\$5,964			\$9,750,279	\$371,937	\$41,090,581
					Total	State Cost	\$31,712,239

END NOTES

¹It is important to note that many expenditures are automatically linked to other expenditures. If, for example, the state chose to increase teacher salaries, the total cost to the district would automatically increase beyond the amount of the increase in salaries because mandated benefits would increase as well. Looking at the total compensation package is important to understanding the full effect of raising fewer salaries.

²This same increase is also provide for other employees.

³ Districts pay only the social security benefits for substitutes.

⁴Reimbursable expenditures for special education are reported in Wyoming Department of Education form 401. The total reimbursable costs consist of two types: direct-those included in budget categories 1210, 1220 and 1230; and indirect, which occur elsewhere in the budget (e.g. percent of counselor, administrator, etc.). The prototypical model includes only the direct charges, but districts are later reimbursed the full amount. Displaying it in this manner avoids double-counting special education expenditures.

⁵Student activities transportation is another important consideration. For the purposes of this model, see the section below on transportation.

⁶To take a simple example: if the small school adjustment was \$178,493 for an elementary school with an ADM of 11-20 with two teachers, and the regular program generated \$6,165 per pupil in a school of 15 ADM: the school would receive \$92,475 (15 * \$6,165) pursuant to the regular formula. The remainder (\$86,018) would be generated by the small school formula.

⁷For a middle school with two teachers and 15 pupils and a formula which generated \$6,403 per pupil, the adjustment would work in the following manner: the regular program would generate $15 * \$6,403$ or \$96,045. The single small school formula would generate \$178,493, but instead of deducting from the model the middle school rate, the formula deducts at the elementary rate of \$6,165 per student. This school would therefore be eligible for \$86,018.

