WYOMING EDUCATION FINANCE ISSUES:

Small Schools Report

Submitted by

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Submitted to

Legislative Service Office
of the
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Introduction

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

A similar dichotomy emerges for Wyoming's schools. Most schools are small. However, most students attend larger schools. For example, Figures One through Three in the Appendix 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 elementary school 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 periods of time each day to reach their schools. It is this unusual number of small schools, not an unusual number of all the state's students in small schools, which renders the design of a cost based school finance system in Wyoming a particular challenge.

How can a school finance distribution formula fairly and adequately take into account the educational needs of students in such schools? This is the topic around which this report is centered.

In November and December of 1997, MAP researchers visited, observed, interviewed professional educators, and collected financial, personnel, curricular and program data in 51[1] of these individual schools. The purpose of these visits was to understand better the operational activities and program offerings by which these small schools educate Wyoming students.

MAP researchers arrived at three principal conclusions from these recent visits. The state's small schools, as a group, are remarkably diverse, productively innovative, and educationally successful.

First, Wyoming small schools exhibit a wide spectrum of characteristics. It is not simply the range in number of students, but also the range in number of operating arrangements and circumstances.

A second small school characteristic of which MAP was impressed was the flexible and creative nature of their solutions to the instructional problems facing them. As will be described in greater detail later, some of these schools are unusually small, serving in some cases only a dozen or fewer students, yet they still manage to offer a rich and exciting educational program to their students. Some of these schools do so by attracting a breadth of resources from the community, nearby colleges, the internet, and from volunteers. Other small schools manage to serve and benefit students through innovative instructional arrangements such as an extended four day instructional week, preserving a fifth day for student activities other than formal instruction. Other schools are models of technology deployment. If there exists a useful innovative idea, then there seems to be at least one Wyoming small school presently taking advantage of it.

Third, Wyoming small schools appear to be succeeding in their efforts to instruct students. If one is to judge by the proportion of secondary school students applying to, gaining admission to, and attending colleges, then these small high schools are succeeding. Further, if one is to judge by standardized test scores, Wyoming elementary and secondary small schools outpace state and national norms.

Given these favorable conditions, and doubtless for other reasons as well, Wyoming citizens and public officials exhibit a substantial fondness for small schools. When operating under the administrative and financial arrangements existing prior to 1997, before legislative efforts to comply with the Campbell decision, Wyoming educators, parents, and others used the decision discretion then present in local districts to create and sustain large numbers of small schools. Many of these schools are necessitated by the geographic isolation of the students who attend them, population sparsity of

[1] This count is based on the current practice of allowing districts to count as three schools a single building where grades k-12 are served.

the areas they serve, or because there is no physical facility sufficiently large to permit higher enrollments. The pre 1997 school finance system in some cases, encouraged the operation of small schools by generating more funding than was required to operate the school. In other circumstances, communities have come to appreciate the instructional advantages, intense student engagement, and civic cohesion which often accompanies small schools and consciously have chosen to create and sustain such schools.

The principal purpose of this report is to explain means by which such schools can fairly and adequately be provided with financial resources, and to provide alternative public policy arrangements by which Wyoming officials can balance state interests and local decision making.

Why Change?

If MAP claims that the operation of small schools in Wyoming is, generally, so successful, then why should anything be altered? The principal answer to this question stems from the nature of the Wyoming Supreme Court's 1995 decision in the Campbell County case. Here the Court held that Wyoming school financing must be equitable in its distributional consequences, cost based, and adequate to ensure delivery of a legislatively determined basket of goods and services representing a "proper" education.

Meeting these criteria necessitates a new means for supplying revenues to districts which operate small schools. Previously existing financial arrangements, arrangements which the state supreme court found unconstitutional, were not based in costs, were not guaranteed to ensure delivery of an adequate education, and did not ensure that every similarly situated Wyoming student would be similarly treated**.**

Let us illustrate this latter dimension. Under previously operating financial arrangements, school district expenditure variations were due to the old "divisor" based CRU system which not only was not cost based but tended to exacerbate revenue inequalities, and by differences in local school district property wealth. Revenue inequities such as these are no longer acceptable constitutionally, and the MAP proposed cost based model, portions of which are contained in House Enrolled Act 2, enacted by the Wyoming Legislature in 1997 as an interim school funding measure, are intended to correct such an inequitable condition.

However justified or badly needed, development of a cost based, adequacy oriented, and equitable school finance system inevitably entails revenue shifts for local school districts. Frankly put, some districts will receive more revenue than was previously the case, and others will receive less. Those that receive less revenue are likely to be districts which were advantaged by

the divisors and those with above average levels of property wealth, or those which previously had been willing to make extraordinary local tax effort, or some combination of these factors. Districts receiving less per pupil revenue under the MAP developed cost based block grant model may have to reduce their spending, and the richness of the educational opportunities they offer in their small schools, or in schools of any size, may have to be altered. However, the MAP model, while perhaps necessitating a degree of redistribution, nevertheless, ensures that revenue amounts provided to a school district are cost based and adequate to provide every similarly situated student with an instructional program capable of ensuring a proper education. This latter condition is the objective of the Wyoming Supreme Court.

Criteria for Funding Small Schools

Given that the court has mandated change, by what criteria should proposed alterations in revenue flows be judged? Put differently, what ends should be served by a newly proposed small schools funding formula?

In developing its small school funding arrangements, MAP has adhered to the following criteria as ends to be sought or conditions to be minimized.

- Per pupil revenue amounts should be based in costs of providing education services.

- Similarly situated students should be treated similarly.

- Per pupil revenue amounts should be sufficient to ensure provision of instruction enabling a student to acquire a legislatively specified basket of education goods and services.

- Local school district decision making discretion and preferences should be preserved, within boundaries permitted by the above three criteria.

- Financing arrangements should be as understandable as reasonably possible to an informed layperson.

- Financial arrangements should be capable of accommodating changes in conditions or new knowledge.

Small School Cost Issues

1. What is the current status and the ultimate capability of small schools to provide the basket of goods under the MAP small school finance arrangements?

2. Does the MAP small school formula provide adequate financial resources to deliver the "Basket?"

3. Are there features of the small school formula which deserve additional attention and possible amendment, especially as the formula relates to unusually small schools (elementary schools of fewer than 30 ADM and high schools of fewer than 48 ADM)?

Why are there small schools? Why do they cost more per pupil to operate than do "normal" size schools? What portion of this added cost rightly should be borne by the state? In what circumstances and to what extent might a community be asked to support the funding of a small school?

Numbers of pupils to be served, the configuration of district and school attendance boundaries, school district geographic features, demographic sparsity and density, the capacity of already constructed physical facilities, preferences of citizens for school size, and historic conditions are illustrative of factors which explain school size.

The combination of conditions such as these can result in a community choosing or in some instances virtually being compelled to operate small schools. When it would otherwise be necessary for students to have to ride a bus for a long period of time each day, be subjected to unsafe transportation conditions, or because enrollments have dropped precipitously, it may be necessary to operate a small elementary or secondary school. Also, if a school district has, for whatever reason been unable to construct or maintain larger schools, then it may be forced because of these historic conditions into operating one or more small schools.

In other instances, a community may have a small school, not out of necessity, but simply because residents prefer that their students attend low enrollment, small schools or because prior funding arrangements encouraged the creation and maintenance of such schools. Small schools often have many advantages, e.g., intensity of faculty student interaction, a sense of individual engagement, and community identification and are therefore frequently favored by parents, students and educators.

However, small schools may, and usually do, cost more money per pupil to operate. Technically, this condition is attributed to "scale diseconomies," and

it can be illustrated this way. There are a set of operating and instructional conditions and services, almost no matter how many or how few students are enrolled in a school, which are needed. For example, the MAP prototypical elementary school calls for 16 pupils per teacher. However, if there are fewer than sixteen students in a school, then one can see that the per pupil costs of a teacher would be higher than those projected for the elementary school prototype. If it were necessary to operate a school for as few as four or eight students, for example in a remarkably remote location, one can see that per pupil cost might easily be substantially greater than in a school of 200 or more students.

Because of these diseconomic circumstances, and the added costs of operating small schools, a policy question is posed regarding the definition, necessity, and costs of operating such schools. When is a school to be declared "small?" When are the diseconomies of scale to be recognized? When is a small school necessary because of conditions beyond the control of the school district? When is a small school simply the preference of parents and public officials, and thus, perhaps undeserving of having their costly tastes subsidized by the state?

MAP Proposed Small School Formula

The May 1997 MAP report undertaken for the Wyoming legislature contained a small school funding formula which was based upon operating information and financial data then available. In the intervening time, a separate contract was extended to MAP by the Legislature to undertake a more intense analysis of small school funding. As a consequence, MAP has been able to visit and collect added information from 51 small schools located throughout Wyoming. The key features of the May 1997 formula include[2]:

> **Elementary School**
>
> [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 x $8,925=$89,246).[3] 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

[2] Guthrie, James W., et al; A Proposed Cost Based Block Grant Model for Wyoming School Finance; Management Analysis and Planning Associates, LLC; May 27, 1997, pp. 88-90.
[3] Calculations reflect rounding.

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

[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 x $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

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.[4]

CAVEATS

On preceding page 5 we posed the following questions:
1. What is the current status and the ultimate capability of small schools to provide the basket of goods under current small school finance arrangements?

[4] To 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.

2. Does the current MAP small school formula provide adequate financial resources to deliver the "Basket?"

3. Are there features of the small school formula which deserve additional attention and possible amendment, especially as the formula relates to unusually small schools (elementary schools of fewer than 30 ADM and high schools of fewer than 48 ADM)?

Answers to these questions posed proved vexing and elusive. For example, not everyone MAP interviewed shared identical views about what was in the "Basket" and what was the appropriate standard to apply to see if a particular school could provide it. Ideally, there would be a uniform criteria on which all could agree and a standard—well-known and understood by all. For the most part, MAP relied on information provided to us by the principal of the school or in some cases the superintendent or his designee.

Reliable financial data compiled on a school-by-school basis to assess school expenditure patterns was in most cases not available and in most of those in which it existed, the information was not comparable. This continues to be a problem, especially for small schools, and most particularly for small schools within small districts. With some notable exceptions there was little ability to compare existing expenditure patterns with proposed expenditure patterns. Information on district and school revenue were more readily available but particularly in small schools, revenues may be significantly different from expenditures and costs. A dramatic example of this disparity was provided to MAP by the Superintendent from Carbon #2, in which Elk Mountain school with ADM of 23 generates some $19,327 per ADM, but spends only $11,698 at that school. Conversely, in Medicine Bow Junior and Senior high expenditures exceed revenues by over $4,000 per pupil. Throughout, MAP relied on information provided by local educators and state agencies.

An additional problem with drawing inferences about expenditures from revenue patterns was the inevitable interaction between a school-based formula like small schools and the general formula. It was quite frequently the case that a school was eligible for increased resources through the operation of the small school formula, but was to receive less funding under the operation of the general formula. As shown in the example above, it is commonplace to average out these patterns by shifting excess revenue which may be generated in one school or by one aspect of a school finance formula to another. It is therefore important to consider what happens to a school under other aspects of a formula.[5] So that under the small school formula

[5] As a hypothetical example, assume that a small school expends $9,000 per year, that the old CRU formula generated $7,000 and that the district contributed an additional $2,000 to enable the school to reach its expenditure level. Further assume that a new small school formula would generate $8,000 per year in revenue ($1,000 more than the old formula). It does not automatically follow that under the new formula the school would be able to increase spending even thought it may generate more revenue. In order to

revenue may be higher, but total revenues available might actually be lower because the district could not provide its traditional subsidy to the school. These complexities and others require enormous effort to accommodate in a single state wide formula.

Keeping these conditions and caveats in mind we now turn to the first two of three questions raised above.

1. What is the current status and the ultimate capability of small schools to provide the basket of goods under current small school finance arrangements?

2. Does the current MAP small school formula provide adequate financial resources to deliver the "Basket?"

The answer to the first question is that most schools are delivering the basket or could with reasonable modification of course offerings. The answer to the second question is "Yes, but not necessarily easily." MAP has arrived at these conclusions largely as a product of its visits to 51 Wyoming small schools. Before providing evidence that the proposed prototypes are sufficient in resources, however, a word is in order regarding the nature of proof.

The Nature of Proof by Existence

MAP makes no claim that currently every small school in Wyoming is sufficient or that by adopting the MAP funding model every small school would overnight be converted into an efficient instructional machine. Rather, what MAP has done in visiting and obtaining information from 51 small schools is to determine that substantial numbers of small schools are capable of delivering, indeed are currently delivering, the Wyoming legislatively determined basket of education goods and services within the resource amounts provided by the prototypical funding models. The fact that substantial numbers of schools can succeed within these resource ranges, strongly suggests that other schools, over time and with sufficient leadership and planning, can do the same. In an endeavor such as this it is not necessary to demonstrate that all schools are currently delivering the "Basket." It is necessary only to illustrate that within the resource levels available, schools can deliver the "Basket."

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ascertain whether the new formula produces more money for the school, one must know the impact of the total school finance formula on the whole district and how the district allocates total revenues among all its schools. It may be that the total impact of all aspects of the new formula results in <u>less</u> money for the district.

Delivering the "Basket"

A principal test of adequacy is whether or not small schools receive sufficient resources to deliver the "Basket" of learning outcomes and instructional services adopted by the Legislature. MAP directly addressed this issue in its November and December 1997 visits to small schools by reviewing course offerings, district high school graduation requirements, exploring high school graduation rates and college admissions evidence and by seeking opinions of school officials.

The schools described below were chosen to illustrate a range of circumstances and programmatic arrangements[6]. No claim is made that they are a scientifically representative sample. The descriptions are based on information provided to MAP by school officials as a part of the MAP visits to small schools during November and December 1997. Exhibit A is a sample of the data sheets used in this process. The case studies illustrate the extraordinarily diverse and creative ways in which Wyoming small school educators approach the task of delivering the "Basket."

These case studies demonstrate that creative, talented educators are able to provide a rich educational experience that, by almost all measures, seems to prepare students for college and employment, i.e. delivers the "Basket," with a level of resources that would be provided under the MAP model.

Before reviewing the results of MAP's November and December 1997 site visits, it is useful to consider just what is the "basket" and what are the demands it makes on Wyoming schools.

History of the Wyoming "Basket" of Instructional Outcomes and Services.

The requirements represented by the "Basket" are not a new concept for Wyoming schools. The bulk of the "Basket's" current requirements were adopted as State Board of Education regulations in 1990, and have been a central feature of the Department of Education's accreditation process since that time. That is to say, for all the intervening years, school districts have had to deliver the State Board's version of the "Basket" to be accredited. Changes to the "Basket" made by the Legislature will be discussed below.

It is essential to note that the "Basket" covers the kindergarten through grade 12 curriculum. We emphasize kindergarten here because it is important to realize that secondary schools do not bear the entire burden of delivering the whole "Basket." Other than the courses required for graduation, recently added by the Legislature, school districts are free to teach the "Basket's" specified skills and knowledge at any grade levels. Indeed some "Basket"

[6] Summaries of site visits are contained in Appendix 2.

measures, such as problem solving, would appropriately be introduced early and reinforced year after year in course after course. Other "Basket" items such as keyboarding, are mastered once and used as necessary thereafter.

Finally, the "Basket" is not a list of subject matter courses. One should not look for one-to-one correspondence between the "Basket specified" list of skills and knowledge and school course titles. Virtually all of the common core of skills are more appropriately taught in the context of a specific discipline rather than as stand alone courses. For example, humanities can and frequently are taught as an integral part of literature, fine arts or social studies courses. There is a growing national movement to teach various subject matter disciplines through the study of the arts. Career and vocational education can be taught in the context of mathematics, science and language arts, or those disciplines can be taught in vocational classes. Some of the skills and knowledge can and even should be taught as a part of student activities, rather than in formal courses. The proper combinations are best determined by local decision makers who are most familiar with local preferences, student needs and the strengths and interests of their faculty.

The Basket 1990-1997

Regulations[7] adopted by the State Board of Education in 1990 required that:

Section 7. Common Core of Knowledge. All public school students shall meet the student performance standards at the level set by the school and district in the following areas of knowledge:

(a) Language Arts;
(b) Social Studies;
(c) Mathematics;
(d) Science;
(e) Fine Arts and Performing Arts;
(f) Physical Education;
(g) Health and Safety;
(h) Humanities;
(i) Career Options;
(j) Foreign Cultures Including Languages;
(k) Applied Technology

Section 8. Common Core of Skills. All public school students shall meet student performance standards at the level set by school and district in the following skills:

(a) Problem Solving;
(b) Interpersonal Communications;
(c) Keyboarding and Computer Applications;
(d) Critical Thinking;
(e) Creativity;
(f) Life Skills, including Cardiopulmonary Resuscitation (CPR) training.

Section 11. At Risk Students. The district shall have policies and procedures for every school in the district to identify and intervene with at-risk students. In addition, all schools shall provide instruction as appropriate through the school curriculum directed at the prevention of at-risk behavior.

Section 12. [High School] Graduation Requirements.

(a) A student shall master the student performance standards within the common core of knowledge and skills at the levels set by the district and the schools, including alternative schools.

Section 13. Services. All districts shall provide the following support services for all students:

(a) Health Services;
(b) Media Services;
(c) Guidance Services

Section 14. Verification. All public school districts and schools and personnel within these districts shall provide verification of compliance with these rules and regulations to the Wyoming State Board of Education annually.

[7] Catchpole, Judy; Wyoming Department of Education, Accreditation Guide, November, 1995, Revised September 1996

The 1997 Basket

In 1997 the Legislature adopted these requirements into law and made the following modifications:

Common Core of Knowledge.
Changed "Language Arts" to "Reading/language arts" and required that reading writing and mathematics be emphasized in grades 1 through 8.
Changed "Career Options" to "Career/vocational education."
Added "Government and Civics (including state and federal constitutions)"

Common Core of Skills.
Changed "Life Skills, including Cardiopulmonary Resuscitation (CPR) Training" to "Life skills, including personal financial management skills."

Added [High School] Graduation Requirements.
Four school years of English
Three school years of Mathematics
Three school years of Science
Three school years of Social Studies
(including history, American government and economic systems and institutions)
Mastery of the common core of knowledge and skills

In 1997 the Legislature adopted the 1990 "Basket" somewhat modified. The changes to the Basket would seem to be of little consequence for practice in most schools. Adding reading to language arts, changing career options to career / vocational education, substituting personal financial management skills for CPR or adding government and civics to social studies are unlikely to cause schools to significantly change their curriculum. In most cases the changes may necessitate modification of some course content or the substitution of some electives for others that better emphasize the skills and knowledge adopted by the Legislature.

Essential to delivering the "Basket" is specification of content standards and where these standards will be taught, not course titles. This process has been required of school districts since 1990 and is integral to the current State accreditation process. It should be quite familiar to local educators. Thus, a cursory review of course titles would tell little about how much or how little of the "Basket" a particular school was presently delivering or how much change would be required to meet its intent. Some school districts have, in the past, chosen to minimize the number of specific courses required for graduation and instead encouraged students to choose from a broad range of elective courses. At first blush this practice would seem to conflict with the new law. But the conflict emanates more from connotations associated with traditional course titles than from actual course content. Electives can be alternative contexts for delivering the common core. Courses that are not designed to deliver skills and knowledge specified in the "Basket" fall under the rubric of local preference.

For some school districts, the most substantive of the legislative changes to the "Basket" was the addition of specific courses required for graduation from high school. While virtually all college bound students would have completed the now required courses, some districts allowed other students to graduate with fewer courses of English, mathematics, science or social studies. Here also, it is important to recognize that the law does not prescribe course content or imply that all students take the same courses. Thus it would be permissible, even desirable, for some students to meet some or all of the requirements in courses that may now be considered elective. (See the subsequent description of Tongue River High School for an example of this practice.) Science requirements could be delivered in a vocational agriculture class, or some of the mathematics requirements could be met as a part of business or accounting classes. These course requirements may however, require a shift in emphasis that causes scheduling conflicts or imbalances in class enrollments in the short run. They may require existing faculty to acquire additional content knowledge and enhanced methodological skills, or over time require a different mix of faculty specialties. For these reasons, it makes sense for the state to tolerate a reasonable period of transition, especially in the smallest schools.

Wyoming educators have pointed out to MAP, however, that until the State Board of Education and State Department of Education translate these changes into rules and regulations, it is not possible to predict with certainty their impact on local programs.[8] Small school educators in particular raise concerns about apparent conflict between the State's credentialling requirements and their need to hire teachers who can teach multiple subjects. These are legitimate concerns and should be addressed by state policy makers. They are not school finance issues, *per se*.

Site Visits

At each school visited by MAP in November and December of 1997, the principal, superintendent or other responsible administrator was provided a copy of the 1997 "Basket" and asked if they were now delivering the "Basket" or if they could deliver it. In general, responses were cautiously positive. Some principals displayed a "can do" attitude and were quick to assert that they would have little trouble meeting the requirements of the "Basket." A more typical response was that the school was currently delivering or could rather easily deliver it, but more resources would make the transition easier or enhance the program in some way deemed locally desirable.

[8] The Board's and Department's long standing practice of extensive involvement of local educators in the rule making process should minimize if not preclude any interpretations that would be excessively disruptive of local programs.

Chugwater Schools (Platte #1)

Chugwater Elementary, Junior High and High schools are on the same campus and under the leadership of one administrator. The three schools currently enroll 44 elementary students, 19 junior high students and 40 students in grades 9 through 12. With six teachers at the high school, Chugwater is able to deliver a program that, from all available evidence, including student performance and the opinions of the principal and district superintendent, meets the needs of its students and the requirements of the "Basket." Nationally normed test scores are at or above level. Most of the high school's graduates attend college and according to Chugwater educators, are able to compete quite successfully.

Because they plan to attend college, most of the high school's students already complete a course of study that would satisfy the state's adopted graduation requirements. However, the district will be required to increase its current graduation requirements by one additional year of science and one additional year of social studies. In both cases the school currently offers sufficient numbers of courses to obviate the need to add courses to comply with the law.

So how can a small remote school offer such a successful program? Much of the answer seems to lie in a priority for a rigorous academic program rather than one that attempts to maximize student choice. There appears to have been conscious choices by district and school leaders to emphasize depth rather than breadth. One example of this choice is in the limited number of courses and the academic nature of those courses. The second is the choice to block schedule, limiting course options to four 90 minute classes on any given day. As a consequence, students are able to take calculus and physics, but they may have to plan their program to accommodate the scheduling of advanced courses on alternate years. They can take a foreign language, but are restricted to Spanish. Among the 18 electives the school offers are art, physical education, computer applications and 8 classes in vocational education. Another factor contributing to the success of the Chugwater program is the intensity of teacher student interaction[9]. With only six or seven students in a class for a full 90 minutes, teachers are able to provide the kind of instruction frequently available only to families able to pay private school tuition.

What will be the effect of the MAP model on Chugwater? The MAP small school model as proposed, provides approximately the same or slightly additional resources for Chugwater's small schools. It is reasonable to conclude that this highly successful educational program will receive sufficient resources to continue to meet the needs of the Chugwater community and its children.

[9] The potential for such intensive interaction between teachers and students is perhaps the greatest strength of small schools, and is obviously prized by teachers and students alike.

A copy of the 1997-98 Chugwater class schedule is attached as Exhibit B.

Little Snake River Valley High School (Carbon #1)

Little Snake River is a classic case of isolation. The next nearest high school is in Encampment, 60 miles away. The high school shares the same campus with an elementary and middle school. High school enrollment is 67 with a senior class of 23. The faculty is comprised of 5.6 teachers and portions of a guidance counselor, music teacher, a librarian, 1.4 physical education teachers, and .5 art teachers, all of whom provide services to kindergarten through grade 12.

Test scores are above national averages and over half of the school's graduates attend college. The school offers 5 sections of English, 4 sections of mathematics through advanced mathematics, 6 sections of science, including physics and advanced biology, 3 sections of social studies, 13 periods of electives including Spanish, French and 6 periods of vocational subjects. A broad range of courses, including German, philosophy, microeconomics and U. S. history are also available via distance learning.

Little Snake River Valley High School offers seven 54 minute periods per day. Teachers teach six periods and have one period for planning. A copy of the 1997-98 class schedule is attached as Exhibit C.

Current graduation requirements fall short of the new law by one year each of mathematics, science and social studies. College bound students already complete a program consistent with the new requirements and there seem to be adequate class sections to accommodate the additional enrollment of students not planning to attend college. The principal indicated that the school was "close" to meeting the requirements of the Basket.

The MAP small schools formula will provide Carbon #1 additional dollars to not only maintain, but perhaps enhance Snake River Valley's already successful program.

Kaycee Junior/Senior High School (Johnson #1)

Not all of the school administrators with whom MAP met were confident that they were able to deliver the "Basket." The superintendent and principals of Johnson County School District #1 were typical of those who expressed concern about their ability to meet the requirements of the law. Kaycee Junior/Senior High School serves 58 students in grades 9-12. The secondary school faculty is comprised of 8 regular teachers, 1 resource teacher , .2 speech therapist, .4 guidance counselor and .5 librarian. The principal's time is shared with the elementary school.

According to the superintendent the district's schools are

> ...partially meeting the intent of a proper education for all students. That doesn't mean we aren't offering programs for all of the common core of knowledge and skills, it simply translates to the realization that some are more adequately addressed than others are."[10] "Individual schools have indicated difficulties meeting some of the common core of knowledge, specifically as follows:....
> Kaycee Schools
> 1) fine arts
> 2) career / vocational
> 3) foreign language
> 4) science"[11]

The superintendent's reservations notwithstanding, the Kaycee schools offer a broad range of courses, which seem to produce notable student outcomes.

> KHS could be typified by small classes with great variety for the number of teachers available. In order to offer as much choice as possible with a small staff, KHS has featured for over a decade a modular block of eight classes which cycles, six classes being offered every day.....This schedule offers the student a choice of nine different classes during a semester (an optimum of seven being those offered in a single day).
>
> Facilities at the school supporting the curriculum include: two fully equipped computer labs--one IBM type, the other, Macintosh. A wood [shop] and Ag / Industrial Arts shop, a gym (10 feet smaller than regulation size which still causes problems) a small stage at the end of the gym, a non regulation track, and a 6000 volume library with computer access to the Internet and CD-ROM material are present. All teachers have Internet and E-Mail access in their classrooms. [12]

The high school program includes 5 classes of English, 5 classes of mathematics, 7 classes of science, 4 classes of social studies, and 26 electives, including 11 vocational classes.

> In addition to the standard courses, students have the opportunity to elect Spanish, art, band, choir, physics, chemistry, calculus, agriculture, home economics, technology, computer[,] wood shop and business. The school has a history of offering some distance classes each year to fill out the elective schedule.
>
> The school has a tradition of academic and activity excellence. The school led the state in ACT scores in 1996, and most graduates have attempted post-secondary education in recent years. Also, in recent years, Kaycee had qualifiers in every state culminating activity in which the school participates (sic). Most students participate in one or more extra-curricular activities.
>
> The Kaycee community and school was (sic) featured on "CNN Sunday Morning" in May of 1996 as a great place to live and go to school in the nation.... .[13]

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[10] Johnson County #1; "Responses to MAP Questions/Issues" undated document provided by each Johnson County #1 school visited.
[11] Ibid.
[12] Johnson County #1; "Instructional Characteristics--KJSHS" undated document provided by principal.
[13] Johnson County #1; "Kaycee Schools School Profile, 1997-98" document provided by principal.

It will be necessary for Kaycee to increase existing graduation requirements one year each for English, mathematics, science and social studies. The recommended course of study for students planning to attend college would exceed the "Basket" requirements, and approximately 2/3 of the high school's graduates attempt college. Moreover, a review of the class schedule indicates that the additional requirements could be accommodated easily.

See Kaycee High School's class schedule, Exhibit D.

Johnson County School District #1 would receive additional funding under the MAP small schools formula.

Tongue River High School (Sheridan #1)

Tongue River High School is yet another example of a small high school where local decision makers are able to provide a high quality program with existing resources. Student performance is well above national averages on ACT and other national tests. Approximately half of all graduates attend college. The principal reports that the quality of the program is such that extra measures are taken to ensure that non-resident students do not enroll without prior approval.

Enrollment is 182. The faculty is comprised of 15 teachers, a guidance counselor, a resource teacher, a librarian, and part time nurse, art, physical education and home economics teachers. The principal teaches one class of history and monitors study hall.

The school offers 5 sections of English, 7 sections of mathematics, 7 sections of science, 7 sections of social studies and 24 electives, including 12 classes of vocational education. A unique feature of this school's schedule is that the academic classes are protected by conducting them four days per week and offering student activities on the fifth.

A copy of the Tongue River High School class schedule is attached as Exhibit E.

The Tongue River approach to graduation requirements may serve as a model for those districts where decision makers feel that the new requirements cannot be met without adding additional faculty. Tongue River currently requires all students to complete 4 years of English, and 3 years each of mathematics, science and social studies. They, however, offer three diplomas with course content varied to meet the needs and interest of each track.

Under the MAP small schools formula Tongue River schools will receive additional revenue.

Pinedale High School (Sublette #1)

Pinedale High School, with 184 students, has approximately the same enrollment as Tongue River, but approaches program and scheduling much differently. Pinedale offers four 90 minute block periods daily, with blocks alternating weekly, providing in-depth instruction and 90 minute planning periods for teachers. The school offers 8 classes of English, 8 classes each of mathematics and science, 6 classes of social studies and 26 electives including 12 vocational classes. Students can choose from a broad menu of advanced classes in virtually all areas of the curriculum, including calculus, honors English, physics, economics, studio art and Spanish.

Current graduation requirements do not conform to the Basket, but the principal reports that 90% of the students take four years of English and three years each of mathematics, science and social studies. The number and nature of electives offered would seem to be quite adequate to cover the need to provide opportunities for all students to meet the graduation requirements specified in the "Basket."

Student performance is at or above national norms. Over 70 percent of graduates attend college.

The faculty is comprised of 12.5 regular teachers, a resource teacher, .75 guidance counselor, .5 art teacher, .25 music instructors, one librarian, a full time computer network administrator, and one principal (who teaches one class per day). Separate principals are employed at the elementary and middle schools which share the campus with the high school. The principal reports that the school needs 18 teachers and 2.5 coaches to provide an adequate educational program. He feels that the current offering of 12 vocational classes is inadequate to "offer students sufficient vocational opportunities."

Beyond programming and staffing differences, there are noticeable differences between the facilities available to Tongue River students and those at Pinedale. In addition to the modern 50,000 square foot high school building and the elementary and middle schools, the 46 acre campus houses an 11,000 square foot swimming complex, a 36,000 square foot auditorium, a stadium, track and two practice fields. A new middle school gymnasium and additional classrooms are under construction.

Under the MAP small school formula, as proposed, Pinedale high school would generate more revenue than it would have under the old school finance system. However, depending on the level of state funding for schools, Sublette District #1 could receive an overall reduction of total revenues.[14]

[14] See discussion on page 8.

See Exhibit F, for Pinedale High School's class schedule.

Big Piney High School (Sublette #9)
Big Piney High School shares a campus with an elementary school and a middle school. Current enrollment in grades 9-12 is 215 students. The faculty is comprised of 18.625 regular teachers, a special education teacher and an adaptive physical education teacher, .9 guidance counselor, .3 librarian and a principal.

The school offers 7 classes of English, 8 classes of mathematics, 7 classes of science, 6 classes of social studies and 32 electives, including 8 classes of fine and performing arts and 16 vocational classes. Big Piney's class schedule is based on two alternating blocks of four 90-minute periods. Students perform at or above grade level on national tests and approximately 80 percent attend college.

Students can choose between two diploma levels, college prep or vocational. The primary difference between two is an additional year of English required for the college prep diploma. The principal reports that 90% of the students opt for the more rigorous diploma.

Because of his perceived uncertainty as to the content of the "Basket" the superintendent was unwilling to comment as to whether the school could deliver its content.

Big Piney teachers and students enjoy many resources not available to their peers in other Wyoming schools. The entire district is connected via fiber optics, every teacher has a networked workstation connected to the Internet. Athletic facilities range from good to excellent and include a gymnasium (two full size basketball courts), weight room, two pool swimming complex (with whirlpool), a track complex built last year, two football fields and a gymnasium annex. Team sports include volleyball, football, basketball, swimming, track and skiing.

The main high school is built around a large square, with classrooms laid out around the competition-size swimming complex and gymnasium. In addition to the 89,000 square foot main high school, vocational students attend classes in a separate 23,000 square foot industrial arts building. The district operates a 36,000 square foot fine arts center on campus.

The district reports high utility and maintenance costs associated with operation of their facilities. Annual pool maintenance is approximately $100,000.

Big Piney High School's class schedule is Exhibit G.

The superintendent reports that the district is presently deficit spending at a rate of $500,000 per year. The small school portion of the formula, as proposed, would generate more revenue than the old formula for Big Piney, but would not necessarily offset losses for the district as a whole.[15]

It is clear to see from the discussions of Big Piney and Pinedale that not all small schools will receive more funding under the MAP model. This is almost inevitable given that the Supreme Court no longer permits local property wealth or an inequitable school finance system to determine how much funding will be made available for educating the State's pupils. In the past large differences in property tax bases, comparable tax rates would yield remarkably different revenues among school districts. Similarly, many of the schools advantaged by the CRU/divisor system were able to out spend similarly situated, but less advantaged neighbors. School districts advantaged for several years by the old school finance system typically enjoy much more richly funded school programs than could reasonably be made available for the majority of school districts and the vast majority of Wyoming's school children. It is these school districts which will receive less money under MAP than they currently are able to spend. They will receive less money, not because they are small, but because they are currently spending more than could be justified on the basis of cost.

We now turn to the third question:

3. Are there features of the small school formula which deserve additional attention and possible amendment, especially as the formula relates to unusually small schools (elementary schools of fewer than 30 ADM and high schools of fewer than 48 ADM)?

OTHER SMALL SCHOOL FORMULA ADJUSTMENTS

Necessary Small School Definition:

The initial MAP recommendations, (submitted in May of 1997) regarding "small schools" called for a distinction to be made between small schools and "necessary" small schools. This distinction normally is implemented by states to ensure that state resources be made available only to those schools which are small for reasons other than local preference. Other states employ decision criteria that usually include measures of size and some indicator of geographic remoteness:

(1) Size: MAP's previously recommended definition of "necessary" included elementary or middle schools with an ADM of fewer than

[15] See discussion on page 8.

200 students and high schools of fewer than 400. It further required that in order to be eligible for a small school adjustment, elementary and middle schools be considered as a single entity if located in the same building or in multiple buildings located within a quarter-mile radius.

(2) Remoteness: MAP's May 1997 report recommended that the definition of necessary also included a measure of remoteness. MAP suggested a measure based on the amount of time each day students would have to be transported to attend another school, if the school in question did not exist. MAP's prior recommendation called for eligible small school elementary students otherwise to be transported for more than one hour per day, 90 minutes for middle school students, and two hours per day for high school students.

While MAP's prior recommendations were consistent with practices in many other states, in almost no other state do small schools comprise a large percentage of all schools. As witnessed directly by MAP consultants, many Wyoming communities have come to value these small schools, which not only contain important instructional advantages but also contribute to a sense of community cohesion.

Since the Campbell decision, the state is now responsible for all school funding, it should ensure that all schools provide an adequate and proper education for all students. The state accreditation process is an appropriate vehicle for assessing whether all schools are delivering a program consistent with the requirements of the "basket" adopted by the Legislature. This accreditation process could be relied upon to ensure that small schools indeed provide students an educational program adequate for each student to receive a "proper" education.

Therefore, as a replacement for MAP's earlier recommendation, MAP now recommends that the legislature consider providing small schools funding for all existing small elementary and middle schools with an ADM of fewer than 200 and all high schools with ADM fewer than 400, and that all existing schools[16] meeting these size limits[17] be grandfathered [18]into the small school block grant adjustment.

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[16] Because it is not uncommon for enrollments in small schools to fluctuate from year to year, some schools would qualify as small one year and not the next. MAP therefore recommends that the State use the average ADM of the current and past two years to determine which schools would be eligible for funding under the small school formula.

[17] The diseconomies that justify an adjustment for small schools are less pronounced in larger districts. Most states recognize that larger districts enjoy offsetting economies and restrict small school adjustments to districts where enrollments are lower than some minimum number, such as 2,500. The 5 mile rule adopted by the Legislature in HEA#2 seems to MAP a reasonable approach to addressing the very different circumstances of small schools in large districts. MAP might have made a recommendation for a large

Further, in a manner to be determined by the legislature or the state board of education, any small schools to be proposed in the future should be subjected to a set of rigorous criteria which would ensure that their location and enrollment size justified the construction and operation of a school and that there was no more cost-effective alternative. Secondly, the legislature or the state board of education should establish criteria by which existing small schools would be examined periodically to determine whether they should continue to exist. The purposes of such an evaluation would be to ensure that operating costs were not disproportionately high and that there was no more cost effective alternative to a school's continued operation. More importantly, the state must ensure that each school remains able to provide an adequate and proper education. Requirement for state approval for continued existence could be triggered by a school operating at less than 75 percent capacity or failure to maintain state accreditation.

In MAP's November and December of 1997 visits throughout Wyoming, we found schools which were unusually small, with declining enrollment, extraordinarily expensive to operate, and which were in reasonably close geographic proximity to other schools with surplus space. In such instances, the state should make judgments about whether it is in the state's interest to continue to subsidize these schools.

Unusually Small Schools Formula

Within the definition of small schools, there is a subcategory of unusually small schools which requires additional attention. The size of these schools is so small that a different set of adjustments is required. MAP's recommendation is that for schools of fewer than 30 ADM in elementary and middle schools and fewer than 48 in high schools, districts receive a block grant for ranges of students rather than a per ADM amount. The rationale for the different adjustment is that many marginal costs are not linear in nature. In fact they tend to occur in substantial aggregates or increments. When very small schools are required to add an additional teacher, their costs per student suddenly soar.

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district exclusion from the small schools adjustment in Wyoming, but the standard of proof required to justify the amount of the adjustments and the affected district sizes implies a costly and time consuming study. The absence of such a provision will cost Wyoming approximately $7 million annually.

[18] In order to avoid providing school districts incentives to make policy changes merely to qualify for the small school adjustment, MAP recommends that the State require prior approval for changes in attendance boundaries, grade configurations or any other changes that would cause a school not presently designated as a necessary small school to qualify for the small schools adjustment.

This portion of the formula provides for three levels of funding: for elementary and middle schools from 1-10, 11-20 and 21-30 and for high schools from 1-16, 17-32 and 33-48. The break points (10, 20, and 30 and 16, 32 and 48) are specified at those levels where it may be necessary to add another teacher in order to deliver the "Basket" of instructional outcomes and services. As originally conceived, districts would receive a block grant equal to 10 times the per pupil regular funding prototype for elementary and middle schools of 1-10 ADM, a block grant equal to 20 times the per pupil prototype amount for schools of 11-20 and 30 times the prototype for schools from 21-30. For high schools the formula operates the same way with the appropriate numbers—16, 32 and 48 respectively. The centerpiece of the proposal is the rich student-teacher ratios for both the elementary and high school portions of the model.

There are two additional provisions which apply to these unusually small schools. MAP previously recommended that in order to move to the next level of funding, districts must increase the number of teachers appropriately. That is, in order to be eligible for added funding as a school increases in ADM and moves from one category to the next, the actual funding block grant is adjusted only when an additional teaching FTE is added.

As an example the small school formula assumes that for an elementary school of 1-10, one full-time teacher would be required. In order to qualify for the next higher level of funding, even though the ADM may have grown to 15, the district would not be not eligible for added funds until the second teacher is added. The same is true for moving from the second level to the third and applies as well to the high school small school funding model.

In the MAP recommendation submitted in May of 1997, the amount of the total operating small school block grant increased by a factor of 10 as a district moved from one stair stepped enrollment category to another. Moving from 10 ADM to 11 and adding a teacher doubled the school's revenue entitlement. This created a dramatic step increase which can lead to apparent distortions in funding. An alternative to the original MAP proposal is to increase the base amount only by the added cost of the additional personnel and expenses directly related to the addition of that person. This would reduce the size of the step and tend to "smooth" the formula for these unusually small-sized schools.

In the MAP recommendation submitted in May of 1997, the amount of the unusually small school block grant increased dramatically as schools became eligible for the next level of funding.[19] In order to more closely reflect the

[19] As an example as an elementary school moves from 10 to 11 ADM and adds an additional teacher, its entitlement doubles. As it moves from 20 to 21, its entitlement increases by the same dollar amount again, or 50%.

costs of the additional teacher and to reduce the size of the increase, the legislature could consider an alteration to the adjustment which would not generate such a sudden change in funding. An alternative would be to make the step adjustment equal to the cost of adding an additional teacher and costs directly related to that teacher, i.e. salaries, benefits. To that would be added incrementally the costs associated with adding an individual student within that range.

There is an additional but related feature which was also included in the May MAP recommendations which bears on this issue. For one teacher schools, districts can be reimbursed for actual costs, not to exceed a specified amount. Under this variation, districts are not entitled to some amount larger than the costs of operating these very small schools. An alternative for the legislature to consider is to make this provision applicable not only for one teacher schools, but also to schools which qualify for the unusually small school formula. The bands would continue to exist (10, 20 and 30 for elementary and 16, 32 and 48 for high schools) but districts would only be entitled to their actual costs within the band. This would have the double effect of smoothing out the formula and would also insure that schools would not be eligible to receive either more or less than they expend. The variation in circumstances impacting these very small schools is staggering. Schools with exactly the same numbers of students may have significantly disparate expenditure patterns for totally different sets of reasons. It is, as our site visits have so vividly portrayed, probably unlikely that there is a single state formula which could handle all the variation which exist in these unusually small schools appropriately.

Concomitant with this flexibility, however, comes heightened responsibility for accounting for expenditures. Districts now complete only a very cursory expenditure sheet for one teacher schools, which contains very little detailed or independently verified information on expenditure patterns. The district entry essentially determines the amount of dollars it will receive from the state for a one teacher school. There are few one teacher schools and students involved, and so the impact of such a provision on state costs is minimal. Expanding this provision to larger schools and more students will increase state costs. We propose that the state department of education require districts to report these expenditures in much greater detail using the MAP prototypical model components as the template and that districts be subject to periodic review of expenditure patterns.[20]

[20] MAP's recommendation for the small school formula contained two small school calculations, one for students enrolled in grades 1-8 and another for students enrolled in grades 9-12. There was no separate small school MAP prototype for middle or junior high students. Since the way the formula operates is that the small school factor represents the amount of the entitlement and the regular formula is subtracted from it, the net result would be approximately the same. That is, constructing a higher middle school small school entitlement and subtracting a higher regular middle school formula amount would have relatively the same impact as determining a lower elementary small school entitlement and subtracting the lower elementary

Transportation

Frequently cited by Wyoming districts as a major cost factor in operating these small schools was the high proportion of their budgets devoted to transportation, both home-to-school and student activities. MAP recommended that both these categories be included as fully reimbursable for all schools regardless of size. The one area of concern MAP previously expressed was that clear criteria for eligibility for reimbursement be prescribed by the state. In other words, what cost components were to be eligible for full subsidy from the state. While MAP believes it is reasonable to reimburse actual expenditures for transportation, it is not equitable to allow individual districts to play by different rules in determining what is reimbursable. We therefore renew our recommendation that the Legislature clearly define and set reasonable limits on which expenditures are reimbursable.[21] (A Legislative Service Office working group is currently addressing this issue. MAP merely wishes to underscore its earlier recommendation.)

Utilities

In May of 1997, MAP recommended a per ADM amount for utilities[22] for all schools. The rationale was that utilities represented a small portion of the total expenditure pattern for the state and did not warrant a separate utility adjustment (such as the factors designed for transportation and high-cost special education programs). While, for the most part, utilities do play a very small role in the overall funding of schools, the amounts and variations in utility costs which MAP observed in the site visits to Wyoming small schools argue for consideration of an alternative to MAP's earlier recommendation.

If the MAP alternative proposal dealing with the treatment of unusually small schools is accepted, then those unusually small schools will be entitled to be reimbursed for their utilities costs. MAP further recommends that the Legislature consider extending this reimbursement provision to all schools that meet the small schools definition. State costs would increase by the

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regular amount from it. Therefore, MAP doesn't feel that a separate middle school or junior high school prototype be constructed.

[21] For example, MAP recommends that among the limitations on reimbursable expenditures that the Legislature adopt would be restrictions on type of roads buses will travel (e.g. paved, gravel) or permissible distances from paved roads buses will travel, wage rates paid to bus drivers and mechanics (e.g. require justification for exceeding regional cost adjusted state wide average) and restriction of payment of such wages to hours necessary to drive bus routes in the case of bus drivers. The Legislature may choose also to specify some maximum number of mechanics and drivers a district employs that is based on the number of buses operated that would qualify for reimbursement. MAP recommends that "other" travel, i.e. travel of district employees, if reimbursed, be subtracted from "district administration and miscellaneous expenses" in the MAP model and that it be monitored carefully.

[22] Utilities to be reimbursed include heating, cooling and light only. (State accounting code 450).

addition of such a provision, but the adoption of such a provision would more closely represent actual school costs.

A concern about this and other unconditioned reimbursement provisions is that the state may be subsidizing inefficient schools, which otherwise might close, or continued operations that are not cost-effective. It will be important in reviewing the status of small school expenditures periodically to ensure that these concerns are addressed. A necessary companion to the notion of reimbursable expenditures is heightened accountability for responsible expenditure.

Student Activities

MAP's May 1997 recommendation for student activities funding included two separate provisions in the model. The first was, upon adoption of uniform rules regarding eligibility for funding, that the state reimburse student activity transportation consistent with a set of guidelines to ensure uniform treatment. This, for the districts MAP visited in November and December of 1997, was the most important consideration surrounding the provisions of student activities.

The second provision of the MAP May 1997 recommendation was a uniform dollar amount per ADM to provide student activities.

As so often has been the case in dealing with Wyoming's small schools, actual practices vary extensively. For the small high schools MAP visited in November and December of 1997, the new finance formula's per ADM figure for student activities is less than most currently reported spending. If the MAP recommendation for reimbursing unusually small schools for actual expenses up to a maximum is approved, this issue will be resolved for those students.

Food Service

MAP's May 1997 recommendation included a provision which required that food service programs be self-supporting. Included within that recommendation was the tacit understanding that requiring small schools to meet this requirement might be difficult; especially small schools located in small districts. In fact, most of the food service programs in the small schools which were visited were subsidized by the district. Some very substantially so. Although, this was not uniformly the case. Some small schools were able to operate a self sustaining food services program, several were operated at only a modest annual loss. In the smallest schools, it was not uncommon that no meals were served.

Billy Creek Elementary (ADM 12) in Johnson #1, Bondurant (ADM 6) in Sublette #1 and Willadsen (ADM 11) in Laramie #1 do not provide food services. Students furnish their own lunches in these schools. Arvada Elementary (ADM 13) in Sheridan #3 prepares lunches on site at a reported cost of $12.00 each. Kaycee Schools (174 ADM) operate a food services program at a modest $5,786 annual loss, while Saratoga Schools (ADM 472) lose over $96,000 per year. Big Piney Schools, Sublette #9 (ADM 668) reportedly lose approximately $95,000 per year on their food services program. Lunches for Tongue River High School, Sheridan #1 (ADM 927) are prepared and transported from Ranchester. Tongue River students are charged $1.85 for lunch and the program is reported to be self supporting. The price students pay for a lunch ranged from $1.00 at Arvada Elementary (for lunches that cost $12.00 to prepare) to $1.85 at Buffalo High School.[23] The federal government reimburses lunches for children of low income families at $1.90. The business manager at Goshen #1 (ADM 2278) reported that the federal subsidy was greater than the average cost of meals served in his district.

MAP recognizes and continues to agree that unusually small schools may need assistance in meeting the food service needs of their students. MAP recommends an alternative for the legislature to consider which includes the following:

> (1) to establish a minimum amount that students will be charged for meals before the district would qualify for state assistance. The recommended rate would be the $1.90 per meal used by the federal government to reimburse schools for lunches for low income students;
>
> 2) to establish an upper limit on expenditures[24] per meal beyond which the state would not reimburse to encourage districts to be efficient in their food service programs, and;
>
> 3) to arrive at an appeal process for extenuating cases of extreme hardship.

Appeals should be rare. MAP stands with its previous recommendation that food services for the bulk of the students in the state should be viewed as self-supporting enterprises.

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[23] Students from low income families receive federally subsidized lunches for free or at a reduced price.

[24] MAP does not, at this time, have sufficient information to recommend a specific upper limit. We recommend that the State Department of Education be asked to analyze the practices in those schools and districts operating cost effective programs and recommend the amount beyond which the state will not subsidize food services.

Small District Formula

Another variable impacting school expenditures is school district size. Schools of identical or similar sizes tend better to be able to cope with problems of small scale if embedded in larger school districts. Small schools situated in small districts have fewer degrees of flexibility in coping with local conditions. MAP's November and December of 1997 site visits confirmed that on a variety of dimensions requiring flexibility, including staffing, support services, food services, transportation, district wide services, etc. small schools in small enrollment districts were disadvantaged when compared to their more sizable district colleagues.

There are at least two variables which should be considered when determining which districts should be eligible for a small district adjustment. One is obviously school district enrollment size. The other is the percentage of a district's ADM enrolled in schools eligible for the small school factor. The legislature may wish to give consideration to a small district adjustment in order to assist schools with these characteristics.

MAP recommends that initially the adjustment be applied to districts which either are fewer than 500 in district-wide total enrollment or have 100% of their enrollment in small schools. Based on the information we currently have, these seem to be the districts most in need of an additional revenue adjustment. Once eligibility is determined, the amount of the adjustment also needs to be determined. MAP is still analyzing this facet of the formula and will require additional data before offering a recommendation. A supplemental report will be delivered in March 1998.[25]

Summary of Small School Recommendations

1. With the exceptions described below, MAP recommends that the Wyoming Legislature retain the small schools adjustment proposed in the May 1997 report.

MAP recommends that the Legislature consider including the following elements in its statutory arrangements for financing "small schools:"

2. Permit all presently existing Wyoming "small schools," schools enrolling 200 or fewer students for elementary grades and 400 or fewer for secondary grades, to qualify for the MAP proposed small school funding formula. Reservations regarding this recommendation are detailed in footnote 16 of this report.

[25] Subsequent analysis revealed no compelling justification for such an adjustment. See memorandum dated February 17 in Appendix 3.

3. Establish rigorous qualifying criteria to be applied in the instance of any local school district proposing formation of a new "small school." These criteria should take into account the enrollment capacity of the school, distance to other serviceable schools, transportation time for students involved, and capacity of the proposed new school adequately to deliver the basket of instructional goods and services determined by the legislature.

4. Establish criteria by which existing small schools would be examined periodically to determine whether they should continue to exist. Such criteria should include consideration of excessive operating costs or failure to maintain state accreditation.

5. Modify the unusually small schools (elementary schools of fewer than 30 ADM and highs schools of fewer than 48 ADM) formula to:

- Increase the block grant amount by the actual costs of adding an additional teacher, rather than the full increment as proposed in the May 1997 report. Incremental adjustments then would be made for each student;
- Provide that all unusually small schools be reimbursed for actual costs up to the full amount of this new formula; and,
- Increase the reporting requirements for these schools to provide more detailed expenditure data for regular monitoring by the state.

6. Establish procedures for reimbursing all small schools (elementary schools of fewer than 200 ADM and high schools of fewer than 400 ADM) for utilities costs.

7. Establish procedures for reimbursing all small schools for their actual expenditures for food services under certain conditions.

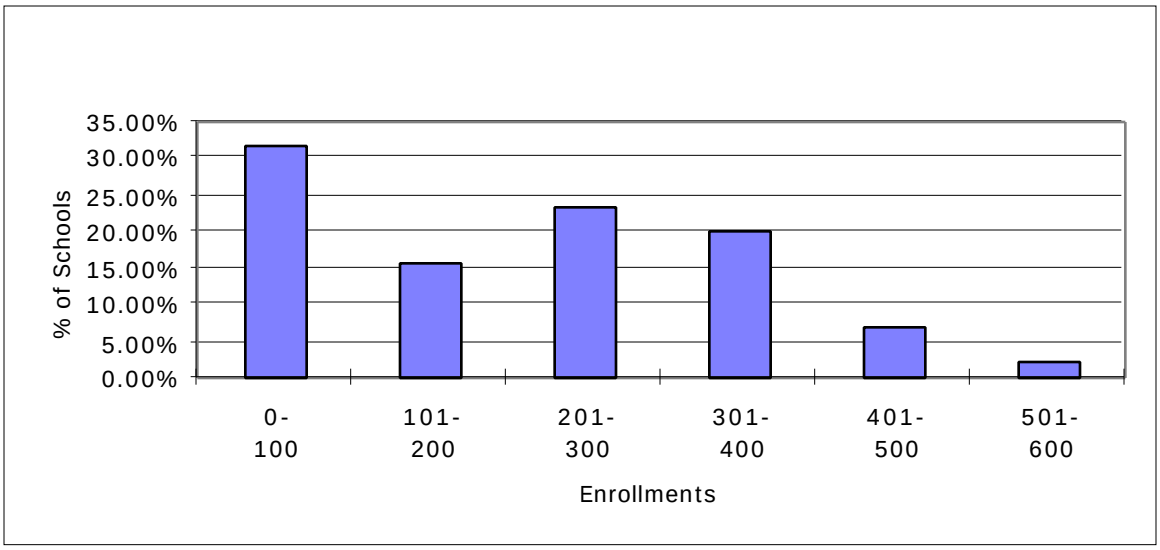
8. Establish criteria for "Small School Districts" by which districts meeting specified criteria would be eligible for added financial resources based on the fact that the proportion of their schools which qualified as "small" or the proportion of their students enrolled in qualified "small" schools was sufficient to erode all hope of scale economies in the operation of the entire district.[26]

[26] Ibid.

Appendix 1

Figure One
Elementary School Size and Enrollment Distribution

Elementary Schools



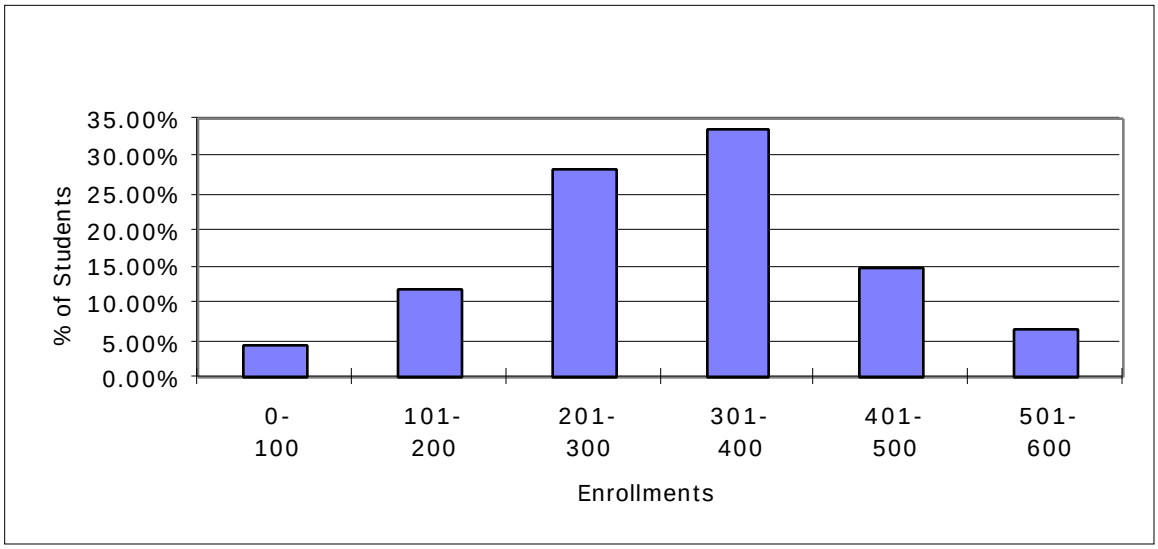
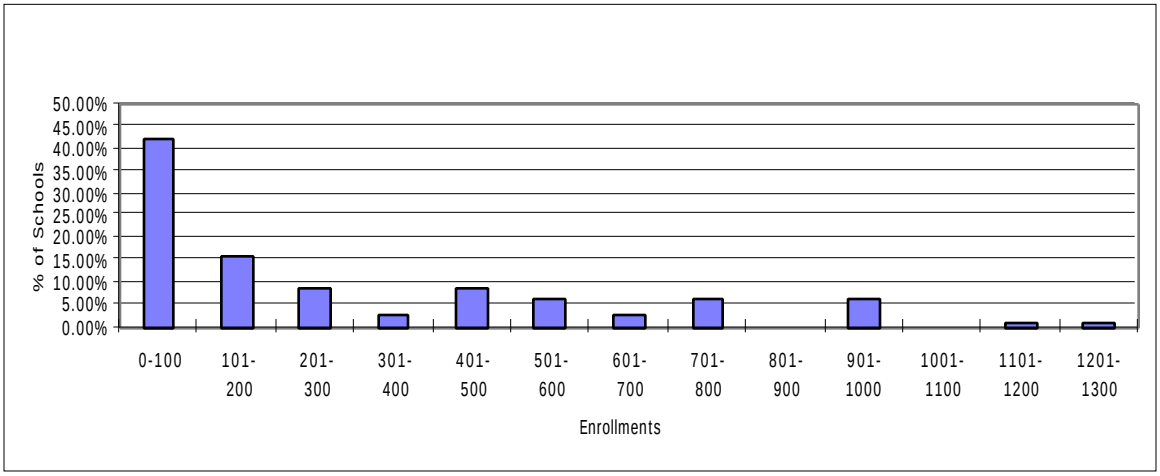


Figure Two
Middle School Size and Enrollment Distribution

Middle Schools



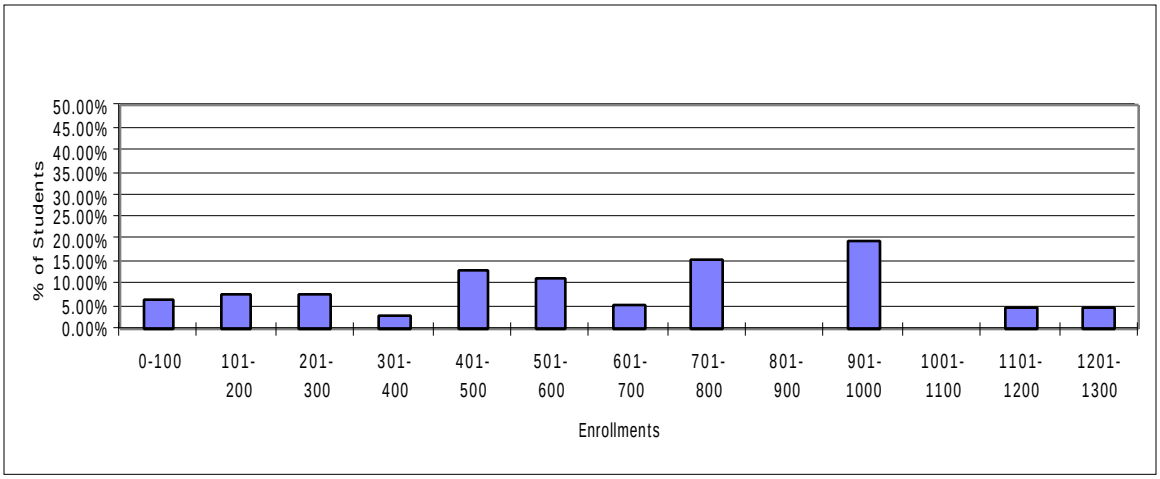
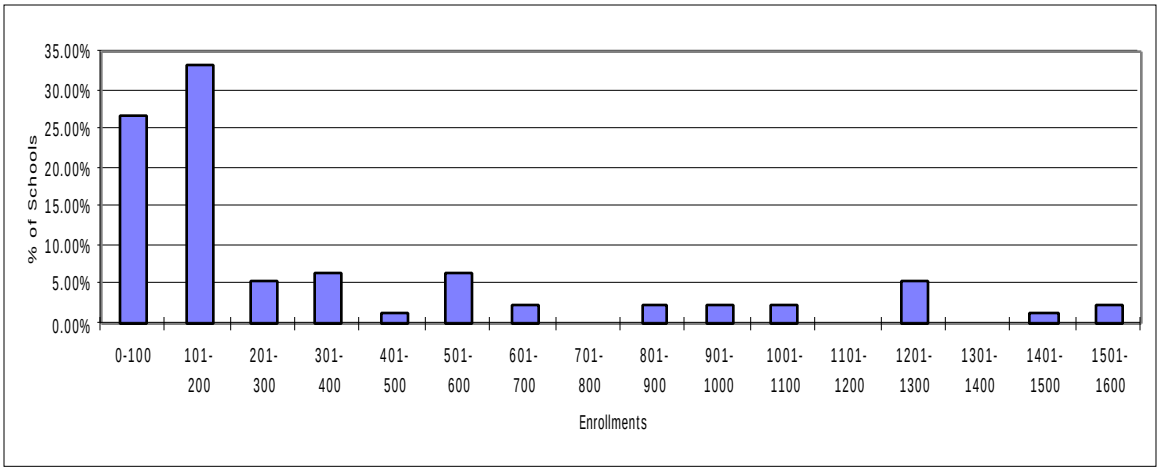
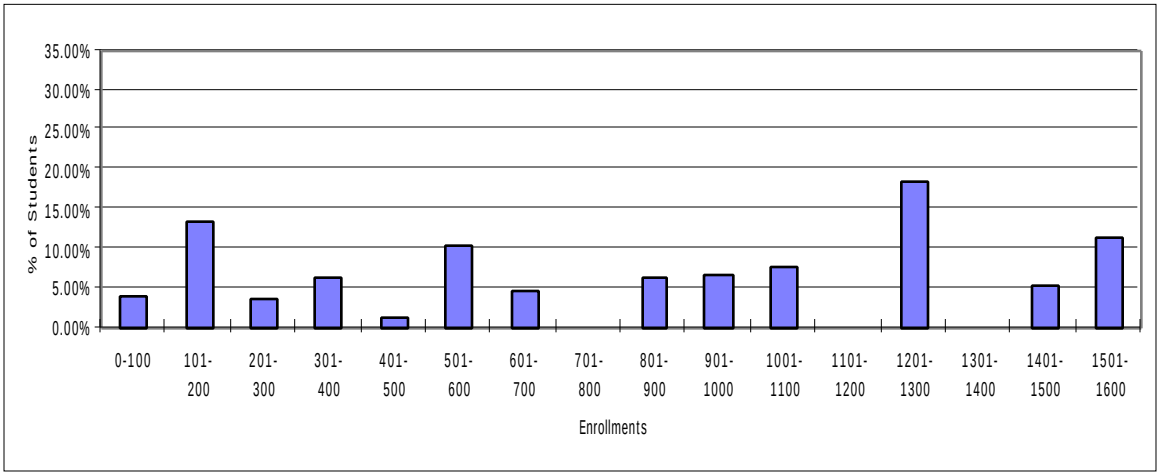


Figure Three
High School Size and Enrollment Distribution

High Schools





Appendix 2
MAP School Site Visit Data Sheets

An electronic copy of Appendix 2 is not available at this time. Please contact MAP for a printed copy at (530) 753-3130 or send email to map@edconsultants.com.

Appendix 3

Memorandum

DATE: February 17, 1998

TO: Rick Miller

FROM: James R. Smith

RE: Small School District Adjustment

MAP's January 1998 report entitled, Wyoming Education Finance Issues: Funding Small Schools (page 29), had as one of its recommendations the development of a small district formula. This adjustment was contemplated for the purpose of compensating for diseconomies of scale in the cases where small schools were part of small school districts. The argument seemed a logical one, i.e. larger districts with small schools have more degrees of freedom in responding to the needs of these schools than do smaller districts. Small districts do not have the same capacity as larger districts to spread costs across schools or the ability to cost average among schools of different sizes.

In MAP's report, we suggested that the legislature "give consideration to a small district adjustment in order to assist small districts with a large percentage of small schools." We suggested that the formula first be applied to districts of fewer than 500 ADM or districts which have 100% of their enrollment in small schools. We agreed to continue to analyze existing data to see if an appropriate amount for such an adjustment could be determined. Once again, data and reporting inconsistencies made an appropriate adjustment problematical. Currently, precision of analysis suffers because of the minimal capacity for small districts to report data accurately and consistently across categories.

Most of the sources of diseconomies will have been addressed when MAP's recommendations regarding small school adjustments for transportation, special education, utilities, student activities, and food service are adopted. While MAP concedes that there may a theoretical case for a small district formula, the data available at this time do not support any further adjustment for these districts in Wyoming. Thus, based on the best available evidence, MAP recommends that no small district adjustment be adopted. We do recommend that this issue be revisited in the future in light of valid and reliable information. Therefore, we recommend that the Department of Education collect and analyze, over time, data aimed specifically at determining central administrative costs associated with operating small school districts.