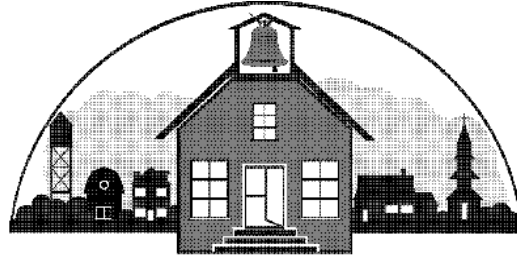


## **Shortchanging Small Schools: Nebraska School Finance Policy**

*The Impacts of LB 1114 and LB 806  
on State Aid and Property Tax  
Revenues for Nebraska Public  
School Systems by School Size*



**Alliance For Rural Education**

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## **Executive Summary**

Nebraska's small schools have been shortchanged by recently enacted school finance policies. LB 1114, which limits property tax levy rates, and LB 806, which changed the state aid distribution formula, were first implemented for the 1998-99 school year. These measures were intended to force school expenditure cuts, especially among smaller, higher-cost schools and bring about property tax relief. To some extent, these policies succeeded in the dual goals of property tax relief and school revenue reductions. But this limited success has been accompanied by a high level of school finance inequity for small schools.

### ***Findings***

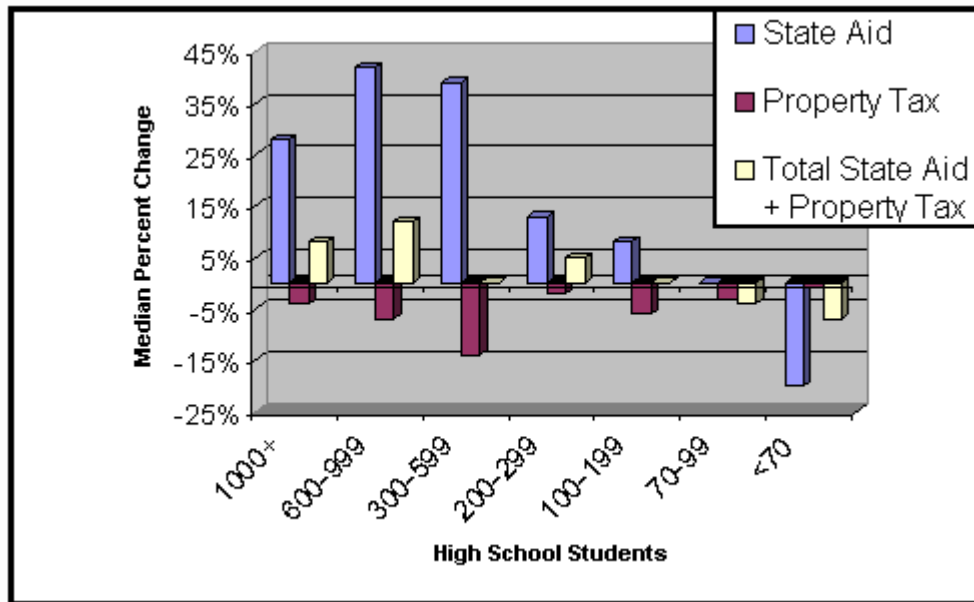
This report documents how Nebraska school finance policy shortchanges small schools. The findings are based on comparisons of state aid and property tax revenues for the 1997-98 school year (the last year prior to LB 1114 and LB 806 implementation) with the 1999-00 school year (the most recent year with complete data). Unless otherwise indicated, small schools refer to those with less than 70 high school students.

**Small schools have been shortchanged both in terms of adequate funding and property tax relief.**

- Small school total revenues declined by 7 percent on average compared to an overall increase of 6 percent statewide (see Figure 1);
- Small school property tax revenues declined by only 1 percent compared to an overall decline of 7 percent statewide (see Figure 1).

**In spite of a substantial, overall increase in state aid, there has been a major shift in aid away from small schools.**

- State aid increased overall by 28 percent while small schools averaged a 20 percent reduction (see Figure 1);
- Small schools received only 4 percent of state aid in 1997-98, but that was cut in half to only a 2 percent share in 1999-00;
- State aid to schools with 1,000 or more high school students increased by \$80 million, more than six times the total state aid to small schools.



**Figure 1. State Aid and Property Tax Revenue Changes by School Size: 1997-98 to 1999-00**

**Small schools have lost state aid because the formula changed from size-based cost groups to sparseness cost groups.**

- Dropping size-based cost groups resulted in a 7 percent decline in estimated need per pupil for small schools while the estimated need increased by 11 to 15 percent for all larger school sizes;
- Smaller schools with fewer than 100 high school students in the "Standard" and "Sparse" categories experienced the greatest decline in state aid while only the "Very Sparse" had revenue increases;
- For small schools, the underestimates of per-pupil needs together with an average 7 percent decline in enrollment severely reduced their total needs as calculated for state aid;
- The cost groups and adjustment factors used in the new state aid formula do not adequately reflect the differences in actual costs of providing an adequate education for all students.

**Small schools have received the least amount of property tax relief and continue to**

**provide the greatest share of school funding from property tax revenues.**

- Small schools had the least decline in property tax levies in spite of one of the largest increases in assessed property valuation;
- Small schools have the highest average property tax levies (\$1.06) and are nearly twice as likely as the largest schools to set levies that are over the \$1.10 limit;
- For small schools, state aid provides only a 24 percent share of total revenue from state aid and property taxes, less than half the state aid share of total revenue for schools with 300 or more high school students.

***Policy Recommendations***

The impacts of LB 1114 and LB 806 have forced many small, rural schools to choose one or more undesirable options: major expenditure cuts, consolidation or high property tax levies.

It is inequitable for small, rural schools to have to cut costs to the extent of harming programs and student outcomes. It is inequitable for small, rural communities to be forced to close their public schools. It is inequitable for property owners in small, rural school districts to have to pay higher rates to maintain a quality, community-based school.

Undoubtedly, not all lawmakers intended to shortchange small schools or foresaw that these revenue losses would be so substantial and widespread. However, policymakers now must face up to the financial harm these policies have visited on small schools and develop a more adequate and equitable school finance system for Nebraska.

Nebraska's school finance system can be made more adequate and equitable through two essential objectives: base state aid to education on appropriate measures of actual costs and continue to reduce the property tax burden for support of public education.

**Base state aid to education on appropriate measures of actual costs.**

- Determine the actual costs of providing educational programs to meet basic accreditation standards and implement required procedures;
- Use the most appropriate unit measure such as classroom units, administrative units, or pupils in estimating specific cost components;
- Identify and measure programmatic costs associated with special needs populations such as low-income and limited English proficiency students;
- Evaluate the impact of school size, geographic location, and other potential factors on various cost components and develop appropriate cost groups as needed;
- Use school expenditure patterns prior to LB 806 and LB 1114 in estimating average costs for size-based groups;
- Incorporate a teacher salary parity mechanism into state aid distribution to enable small and rural schools to recruit and retain high quality teachers;

- Implement a biennial evaluation of the adequacy and equity of state aid distribution.

#### **Continue to reduce the property tax burden for support of public education.**

- Ensure that small schools receive an adequate level of state aid to enable them to keep property tax levies at average rates that are comparable to larger districts;
- Gradually reduce the local effort rate used to calculate local property tax resources in the state aid formula to 0.75 per \$100 value, replacing the reduced property tax resources with increased state aid;
- Implement property tax "circuit breakers" for lower-income property owners to reduce their property tax bills and use state aid to education funds to replace the lost revenue to school districts.

## **Shortchanging Small Schools: Nebraska School Finance Policy**

### **Introduction**

Nebraska's small schools are being shortchanged by state policies that were set deliberately to cut school expenditures, especially for small schools, and force small school consolidation. These "efficiency" measures were enacted in the name of property tax reduction. Some lawmakers wanted a funding shift that would replace the reduced property tax revenues with state aid funds, but those who wanted to ensure expenditure cuts prevailed.

The dual hammers of LB 1114 for property tax levy limits and LB 806 for the distribution of state aid to education have indeed cut small school expenditures and forced some consolidations. However, the property tax levy lid has failed to bring average levies for the smallest schools down to the level of larger ones, putting a relatively higher burden on rural property owners. Furthermore, most larger school systems have received both property tax relief and large enough increases in state aid to maintain or increase total revenues.

This report is the third in a series on small schools commissioned by the Nebraska Alliance for Rural Education. *Small Schools, Big Results* (Funk and Bailey, 1999) showed that small schools outperformed larger schools in the state in terms of high school completion rates and postsecondary school enrollments. *Small Schools: Meeting the Poverty Challenge* (Funk, 2000), showed that small schools have excellent outcomes in spite of having higher poverty levels than larger schools. There is more equity among small schools in relation to poverty levels: the negative poverty impact on student outcomes among large schools in Nebraska does not occur for small schools, which demonstrate excellent performance at all poverty levels. The results of both studies document the importance of small schools in Nebraska because of the quality and equity

of student outcomes. School finance policies that under fund Nebraska small schools not only threaten the future of small schools and communities, but also undermine the overall quality of Nebraska’s public education system.

The purpose of this report is to document the impact of the recent school finance policy changes on small schools and to recommend policy initiatives that would bring about a more adequate and equitable school finance system. Specifically, the study examines the differential impacts by school size resulting from the LB1114 property tax levy limits and the LB 806 changes in the state aid distribution formula, both of which were implemented in the 1998/99 school year.

## Findings

This study examines the impacts of LB 806 and LB 1114 by comparing levels of state aid and property tax revenues for 1999-00, the most recent year for which complete data are available, with those for 1997-98, the year prior to the implementation of those school finance policies. Table 1 shows the median percent changes in state aid and property tax revenues separately and combined. The results clearly show that the largest schools benefited financially from the school finance changes, while the smallest schools lost revenue.

**Table 1. Nebraska School System State Aid and Property Tax Revenue Changes, 1997-98 to 1999-00 by High School Size<sup>1</sup>**

High School Students Fall 98	Number of School Systems	Median Percent Change in State Aid	Median Percent Change in Property Tax Revenue	Median Percent Change in State Aid + Property Tax Revenue
>1000	14	28%	-4%	8%
600-999	9	42%	-7%	12%
300-599	26	39%	-14%	0%
200-299	28	13%	-2%	5%
100-199	94	8%	-6%	0%
70-99	48	1%	-3%	-4%
<70	54	-20%	-1%	-7%
<b>Statewide total 273</b>		<b>28%</b>	<b>-7%</b>	<b>6%</b>

<sup>1</sup>Property tax revenue for each system is calculated from assessed valuation and general fund levy as reported by the Nebraska Department of Education for the specified school years. The statewide statistics are not medians but the overall total changes.

## State Aid Changes

Although total state aid increased by 28 percent between 1997-98 and 1999-00, only school systems with 300 or more high school students received a substantial increase on

average. Half of the school systems with less than 70 high school students suffered a 20 percent or greater decline in state aid. Ironically, the severe cuts in state aid to the smallest schools didn't make the slightest dent in the state's school aid budget, because small schools receive only a tiny fraction of state dollars – cut from four percent in 1997-98 and to two percent in 1999-00 (see Table 2). In fact, *the more than \$80 million increase in state aid to the largest schools after LB 806 is six times the total state aid to the smallest schools.* There is no basis for the notion that we could save even a modest amount of state dollars by consolidating or closing small schools: even an unlikely 25 percent saving from the small school share of the budget would result in a total saving of one half of one percent.

**Table 2. State Aid Distribution by School Size, 1997-98 and 1999-00**

High School Students Fall 98	Total State Aid 1997-98	Total State Aid 1999-00	% of Total Aid 1997-98	% of Total Aid 1999-00
<b>1,000+</b>	\$246,229,763	\$327,824,213	53%	56%
<b>600-999</b>	\$35,010,423	\$49,373,042	8%	8%
<b>300-599</b>	\$45,285,793	\$64,032,378	10%	11%
<b>200-299</b>	\$25,778,409	\$33,759,050	6%	6%
<b>100-199</b>	\$69,797,944	\$77,761,513	15%	13%
<b>70-99</b>	\$22,135,500	\$22,669,374	5%	4%
<b>&lt;70</b>	\$16,286,573	\$13,778,666	4%	2%
<b>Total<sup>1</sup></b>	\$460,524,405	\$589,198,236	100%	100%

<sup>1</sup> A few school systems were excluded from this analysis because they were not operational during both time periods. The totals are therefore less than the actual total state aid dollars for those years.

The main reasons for the decrease in state aid to small schools are the LB 806 changes in how needs are calculated and declining small school enrollment. The following sections of this report examine the impact of those factors.

### Need Estimate Changes

A principal component in state aid need calculations is the average basic cost per pupil for different categories of schools, i.e., cost groups. Prior to LB 806, school districts were grouped both by high school size (nine tiers) and grade school size (7 tiers) to determine average costs at the high school and grade school levels. Per-pupil costs were substantially above the statewide average for the smallest schools. This tiered cost group methodology acknowledged that there are justifiable differences in per pupil expenditures based on school size.

LB 806 replaced the size-based classification with one based on sparseness: standard, sparse and very sparse. The explicit purpose of this change was to force small schools to either consolidate or cut per pupil expenditures down to the statewide average, while

allowing somewhat higher costs for those that are in too sparse an area to consolidate. Since sparse and very sparse districts tend to be in the smaller size categories, their average per pupil costs are somewhat higher than those in the standard group. Overall, 74 percent of schools systems are in the standard category, including 59 percent of schools with fewer than 70 high school students.

Table 3 presents a comparison of the per pupil "needs" component of equalization aid for 1999-00 with what it would have been based on the formula for 1997-98, excluding the transportation allowance in both cases (see Appendix A for details of the methodology). Special education was included in the basic costs under the 1997-98 model, but is a separate allowance under the new formula. For purposes of comparison with 1997-98, special education is included as a needs component for 1999-00.

The 1999-00 formula includes several adjustments to the number of formula students: grade-level weighting, poverty, limited English proficiency, Indian land students and extreme remoteness. Although the state aid formula computes these adjustments as additional students, they have been translated into per pupil dollars in Table 3 for the purposes of comparing per pupil estimates of need. Most of the cost adjustments tend to favor smaller schools, but do not compensate for the loss of size-based cost groups.

The grade-level weighting factors are: kindergarten 0.5; grades 1-6, 1.0; grades 7-8, 1.2; grades 9-12, 1.4. This adjustment increases every school system's number of formula students, but tends to be of greatest benefit to smaller schools. A principle reason is that small schools have a greater proportion of high school students because of much lower dropout rates (*Small Schools, Big Results*, Funk and Bailey, 1999).

The poverty adjustment is also of greater benefit to small schools because they have the highest average poverty rates (*Small Schools: Meeting the Poverty Challenge*, Funk, 2000). Small schools also benefited, but in small ways, from the Indian land and extreme-remoteness adjustments.

**Table 3. Comparison of State Aid Basic Cost Estimates Per Pupil by School Size: 1997-98 Model and 1999-00**

High School Students Fall 1998	1997-98 Average Per Pupil Tier Group Cost	-----1999-00 Average Per Pupil Basic and Adjustment Costs in Dollars-----								Total Adjusted Costs 1999-00	Increase in Cost Estimate s 1997-98 to 1999-00
		Basic Sparsenes Group Cost	Special Education Allowanc e	Grade Level Weighting Adjustmen t	Poverty Adjustmen t	Limited English Proficiency Adjustmen t	Indian Land Students Adjustmen t	Extreme Remotenes s Adjustment			
1,000+	4972	4363	454	553	105	30	0	0	5505	11%	
600-999	4854	4363	446	593	76	81	0	0	5560	15%	
300-599	4852	4397	423	622	73	14	0	0	5529	14%	
200-299	4925	4501	429	612	114	22	0	0	5678	15%	
100-199	5058	4564	429	674	133	8	7	0	5815	15%	

<b>70-99</b>	<b>5466</b>	4697	440	699	172	11	26	15	<b>6060</b>	<b>11%</b>
<b>&lt;70</b>	<b>6671</b>	4752	423	695	256	2	24	78	<b>6230</b>	<b>-7%</b>

Note: Per pupil is per formula student as defined by the state

In spite of a series of adjustments that tend to benefit smaller schools, the LB 806 formula has seriously cut estimates of need for small schools relative to larger ones. The changes in the formula have substantially increased estimates of per pupil need for all but the smallest schools systems, which have had a seven percent decrease. Small schools are at a disadvantage because state aid is distributed based on the relative gap between estimated needs and resources. It will not necessarily fill the entire gap, but the total aid available is distributed proportionately based on the percent of needs that are unmet by other resources. The decreased need estimate together with increases for all other school sizes results in substantially less aid for the smallest schools.

While the smallest schools overall have taken a hit from LB 806 on the calculation of needs, it is primarily the 87 smaller schools in the standard and sparse cost groups that have experienced declines in state aid as well as property tax revenues (see Table 4). Only the handful of smaller schools in the very sparse category have had substantial increases in aid and property tax revenues.

**Table 4. Median Percent Changes in State Aid and Property Tax Revenues by Cost Group and School Size, 1997-98 to 1999-00**

High School Students Fall 1998	<70	70-99	100-199	200-299	300-599	600-999	1000+	
<b>Standard Cost Group</b>								
Number of systems	32	28	70	23	25	9	14	
% change in state aid	-	32%	-13%	1%	10%	39%	42%	28%
% change in state aid plus property tax revenues	-8%	-7%	-4%	6%	0%	12%	8%	
<b>Sparse Cost Group</b>								
Number of systems	10	17	18	4	1	0	0	
% change in state aid	-	13%	4%	48%	*	*	*	*
% change in state aid plus property tax revenues	-	10%	-4%	11%	*	*	*	*
<b>Very Sparse Cost Group</b>								
Number of systems	12	3	6	1	0	0	0	
% change in state aid	33%	*	116%	*	*	*	*	
% change in state aid plus property tax revenues								

plus property tax revenues                      12% \*      15%      \*           \*           \*           \*

\* too few observations to calculate median

<b>Student Enrollment</b>
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Student enrollment is a critical component in the calculation of school system need. Essentially, total need is calculated by multiplying estimates of per pupil need by the number of students. Although the current formula involves weightings and adjustments to the number of formula students, enrollment has a direct impact on estimated need and, ultimately, on state aid dollars.

The smallest schools in Nebraska lost state aid between 1997-98 and 1999-00 not only because of LB 806 changes in the distribution formula, but also because of enrollment declines. Table 5 below shows that while enrollments overall were fairly stable between the fall of 1997 and the fall of 1999, schools with less than 70 high school students (less than 200 total students, approximately) had a seven percent decline in enrollment. Although this represents an average loss of only nine students per K-12 system in the smallest size group -- less than one student per grade -- the enrollment change reduced the estimate of need by approximately \$60,000 per school.

<b>High School Students Fall 1998</b>	<b>Median change in number enrolled</b>	<b>Median change in percent enrolled</b>
<b>&gt;1000</b>	-26	-1%
<b>600 - 999</b>	8	0%
<b>300 - 599</b>	12	1%
<b>200 - 299</b>	8	1%
<b>100 - 199</b>	-3	1%
<b>70 - 99</b>	-3	-1%
<b>&lt;70</b>	-9	-7%

Changes in student enrollment do not translate necessarily into corresponding changes in costs. The critical factor is whether staffing levels change as a result. A more appropriate estimate of need would incorporate the number of classroom units required rather than the number of students. Undoubtedly this would be more complicated and require pupil-teacher ratio standards to be established, but it would reflect actual costs more accurately than does student enrollment.

While this enrollment-based state aid problem is not a result of the LB 806 changes in state aid distribution, its impact on small schools is more acute because they already have

been shortchanged by current school finance policies. A provision of LB 806 called the "small school stabilization" factor was purported to minimize the impact of enrollment declines for small schools. However, the provisions are so restrictive, that only a handful of schools have qualified for this benefit.

## Resource Changes

The amount of available resources, primarily property tax revenue, is compared against the amount of need to determine the funding gap that state aid is to address. The levy limits imposed by LB 1114 restrict levies to \$1.10 per \$100 value, without voter override. Changes in property tax revenues between 1997-98 and 1999-00 reflect both changes in property valuation (mostly increases) and in levies (mostly decreases). The purpose of the limits is to reduce the tax burden on property owners while increasing the state aid share of school finance to offset the loss of revenue.

The levy lids clearly reduced both the general fund levy for most school systems, regardless of size (see Table 6). However, small school districts with fewer than 100 students still have higher levies than the larger systems. Schools with fewer than 70 high school students are nearly twice as likely as the largest schools to have levies above the \$1.10 limit.

**Table 6. Changes in Valuations and General Fund Levies by School Size, 1997-98 to 1999-00**

High School Students Fall 1998	Median Change in Valuation 1997-98 to 1999-00	Median Levy 1997-98	Median Levy 1999-00	Median Change in Levy 1997-98 to 1999-00	Percent of Systems above 1.10 Levy Limit 1999-00
<b>1000+</b>	15%	1.13	1.00	-13%	14%
<b>600-999</b>	12%	1.13	1.00	-11%	0%
<b>300-599</b>	8%	1.21	1.00	-18%	12%
<b>200-299</b>	13%	1.14	0.99	-11%	11%
<b>100-199</b>	10%	1.18	1.01	-11%	18%
<b>70-99</b>	12%	1.19	1.03	-13%	19%
<b>&lt;70</b>	14%	1.19	1.06	-10%	26%

In spite of undergoing one of the largest valuation increases of any of the size groups, the smallest schools had the least decrease in their general fund levy. This is a direct consequence of their 20 percent average decline in state aid (see Table 1). The combination of LB 806 and LB 1114 policy changes hurt the smallest schools in two ways: property tax revenue decline of only one percent, well below the statewide average of seven percent, and a seven percent loss in revenues from property tax and state aid combined, compared to an increase of six percent for the state overall.

The LB 1114 levy limits were successful in shifting a greater share of the school finance burden to state aid, but primarily for schools with 300 or more students. Table 7 shows the state aid share of school revenues from property taxes and state aid, the two largest sources of funding for most school systems. Prior to LB 806 and LB 1114, the state aid share of this revenue ranged from 42 percent for the largest schools to only 25 percent for the smallest. After the policy changes, the state aid share increased to around 50 percent for schools with 300 or more students, but actually dropped to 24 percent for the smallest schools. Clearly these policies have shortchanged small schools and not produced for them either the property tax relief or the level of state support that was promised.

**Table 7. State Aid Share of Total School Revenues from State Aid and Property Taxes: 1997-98 and 1999-00**

High School Students Fall 1998	Median State Aid Percent Share of State Aid + Property Tax Revenue	
	1997-98	1999-00
1000+	42%	50%
600-999	39%	49%
300-599	35%	49%
200-299	30%	35%
100-199	40%	40%
70-99	32%	34%
<70	25%	24%

## Policy Implications and Recommendations

When the Nebraska legislature enacted LB 1114 and LB 806 the following year, there should have been no doubt that small schools would have substantial revenue losses as a consequence. Whereas LB 1114 pressured most schools, large and small, to become more efficient and reduce expenditures, LB 806 took the pressure off larger schools and tightened the screws on smaller ones.

To some extent, these policies succeeded in the dual goals of property tax relief and school revenue reductions. But this limited success came with a high level of inequity: larger school systems have achieved the most property tax relief while their total revenues have held steady or increased; smaller schools systems have achieved the least property tax relief while their total revenues have decreased. Not all lawmakers intended to shortchange small schools or foresaw that these revenue losses would be so substantial and widespread. Now, policymakers must face up to the financial harm these policies

have visited on small schools and develop a more adequate and equitable school finance system for Nebraska.

LB 1114, enacted in 1996, played the first hand in reducing funding resources for small schools. Its stated intent was to reduce property taxes by limiting the amount that local governments could levy. In addition to school districts, specified levy limits were placed on most other subdivisions of local government. An amendment that would have guaranteed that a substantial portion of the resulting school property tax revenue losses would be replaced by state aid was defeated. Opponents of the amendment argued that if other sources of revenue were available, it would take away the incentives to look for ways to be more cost-effective (*Unicameral Update*, March 22, 1996). Although some lawmakers saw the levy limits as a way to shift more of school finance from property taxes to state income and sales taxes, the predominate view was that the property tax "problem" should be addressed by cutting local expenditures, especially among school districts.

Although LB 1114 impacts all school systems, it was clear in 1996 that small schools would be the most vulnerable because they tended to have the highest levies (see Table 6). During debate, concerns were raised that the limits would be harmful to public schools. Supporters argued that community and state leaders would make sure nothing drastic happened to school districts (*Unicameral Update*, April 12, 1996, p. 4). Unfortunately, many smaller schools have faced substantial cuts in revenues in spite of relatively high property tax levies.

The officially stated intent of LB 806, enacted in 1997, was "providing state funding sufficient to support general fund operating expenditures which cannot be met by local resources." (LB 806, Introducers Statement of Intent, 95<sup>th</sup> Legislature, 1<sup>st</sup> Session, 1997.) This is a change in Section 79-1002 from a state aid goal of providing 45 percent of general fund operating expenditures. This LB 806 intent language gives the legislature more flexibility in responding to changes in local property tax resources, especially under the levy limits imposed by LB 1114. In and of itself, this intent does not discriminate against small schools. However, the debate on the bill reveals a more overriding goal that clearly hurt small, rural schools.

Supporters of LB 806 indicated that the goal was to "make schools more cost-efficient while still preserving the quality of education for all students in the state." (*Unicameral Update*, May 30, 1997, page 2). They argued that the changes in state aid distribution were necessary because of the property levy limits imposed by LB 1114. The rationale for replacing per pupil average costs based on size with a statewide average based on the sparseness group was to force higher spending districts to become more efficient. It was acknowledged that this change would tend to shift state aid away from small, rural schools. (*Unicameral Update*: April 24, 1997, page 2; May 2, 1997, pages 2-6; May 16, 1997, page 6, and May 30, 1997, pages 2-5)

LB 806 was a deliberate attempt to reduce resources available to small schools so that they had to cut costs down to the statewide average or consolidate with another district.

During debate it was argued that the size-based tier system inappropriately protected inefficient schools that could easily consolidate with nearby schools (*Unicameral Update*, May 2, 1997, page 5). A third, unmentioned, alternative for small schools is increase property tax revenues. Class I schools were especially impacted, not only because of their small size, but also because they were required to affiliate with a district that had a high school for the purposes of property tax levies, state, aid distribution and budgets as a way to force spending reductions.

Proponents justified the policy changes by arguing that the use of scarcity of population as a factor in state aid distribution protected schools that were small by necessity. Also, in response to the objections of many rural senators, the bill was amended to lessen the impact on some rural schools. One change was to alter the criteria for the sparse category in a way that would include a few more schools. Another change was to redistribute excess aid to small schools: extra aid would be "lopped off" from schools that would otherwise have a total revenue increase over the previous year and redistributed to "small" school systems with 900 or fewer students that had costs below average for that size group and were facing revenue losses of more than 10 percent. An additional factor was added to state aid distribution to increase aid for those schools with fewer than 200 students that met the "extreme remoteness" criteria.

These aspects of LB 806 only protected a handful of small schools from revenue losses. One reason was that the majority (59%) of schools with fewer than 100 high school students were in the standard category, with costs based on an average dominated by the largest schools (see Table 4). Furthermore, the average cost for the sparse group was just 20 percent higher than for the standard group for 1999-00. While this is an improvement, it is still below the average costs for those schools with less than 100 high school students. Only the 15 small schools in the very sparse category tended to have revenue increases. One reason is that nearly three fourths of the very sparse schools are small so the group average cost is relatively high. In addition, seven of these 15 schools qualified for increased aid under the extreme remoteness factor. No other schools met the extreme remoteness criteria.

Transportation is the primary area of increased costs for schools that can be attributed to being sparse, very sparse or extremely remote. However, since transportation costs are calculated separately, there is no need to have separate cost groups based on sparseness when calculating school system needs. Although a number of small schools are sparse or very sparse, their higher non-transportation costs are generally due to small enrollment not to sparseness.

Distance to the nearest high school is a sparseness criterion that relates not to cost, but to the potential for consolidation. The intention of the sparseness cost groupings is to reduce funding for higher-cost small schools, except for those that have no consolidation option, i.e., are "small by necessity". However, even small schools in the sparse category saw substantial reductions in state aid (see Table 6).

The redistribution of excess aid impacted almost no schools in any size group, because so few met the criteria. In 1999-00 only \$161,000 of the \$4,600,000 available from aid that was "lopped off" was redistributed. Of the four school systems that received such aid only two had fewer than 100 high school students.

Records of the debate on LB 806 provide little discussion on the rationale behind the weighting and adjustment factors used in calculating needs in the state aid distribution formula. In addition to the sparseness cost groups, state aid factors include grade-level weighting, poverty, limited English proficiency, Indian land students and extreme remoteness. Based on debate on the poverty factor (*Unicameral Update*, May 16, 1997, page 8), the argument for these adjustments is that schools have higher financial needs if they have relatively high numbers of poor students, students with limited English language proficiency or Native American students residing on Indian land. The implication is that the new formula for distributing state aid more accurately reflects actual costs than the size-based formula established in 1990 under LB 1059, thereby making state aid distribution more equitable. However, the linkages between provisions of LB 806 and actual costs are very thin and reflect a strong bias against small schools.

Sparseness, as noted above, primarily affects transportation costs, a need which is handled separately from the other equalization aid components. Higher non-transportation costs for schools in the sparse category are due to the disproportionate number of small schools that are sparse. But it is not sparseness that accounts for the higher costs. The substitution of sparseness for size discriminates against the majority of small schools that fall into the standard category.

The extreme remoteness factor, like the sparseness factor, relates primarily to transportation costs. Only seven school systems qualified for this factor in 1999-00. They ranged in size from 38 to 80 high school students, and all are in the very sparse category.

Grade level was also a cost factor under LB 1059, but the method used to enter it into the formula changed under LB 806. Instead of separate cost estimates for grade school and high school students, LB 806 introduced a weighting scheme for the number of students at different grade levels. There is no obvious impact on school finance due to this change. The question is whether the weighting factors used are a reasonable estimate of differences in costs, and whether those factors are generally the same for all school sizes.

During debate, some senators supported an amendment that would have dropped the poverty factor on the grounds that state and local resources were too limited to provide for that additional state aid, and that there was no empirical evidence that it costs more to educate low income students. The amendment was defeated, with supporters of the poverty factor arguing that poor children are at risk developmentally. (*Unicameral Update*, May 16, 1997, page 8). Ironically, support for dropping the poverty factor came primarily from rural lawmakers although small schools have benefited the most from that adjustment because of higher poverty rates. Recent research has shown that poverty is a factor in student outcomes for Nebraska's largest schools but not for the smallest (*Small Schools: Meeting the Poverty Challenge*, Funk, 2000). However, its impact on costs is

not clear, and dependent on the level of special needs poor students present and what schools do to address those needs.

It can also be argued that students with limited English proficiency also tend to perform below average educationally, but attaching a percent increase in costs to each student in a that category does not necessarily reflect the actual cost to provide the needed services. It would make more sense for the state to provide targeted funds to schools for programs specifically designed to improve outcomes for at risk students, rather than an overall increase in state aid based on the percent of students who meet the poverty or limited English proficiency criteria. Similarly, the problems faced by schools serving Native American students on Indian reservations in Nebraska are so profound that it would make more sense for the state to develop a major support mechanism outside the context of the current state aid program.

The end result of the LB 806 changes is that state aid has made up for lost property tax revenues for most schools with 100 or more high school students, and actually has increased total revenues for the largest schools (see Table 1). However, schools with less than 100 high school students have had a loss in total revenue. Most schools with 100 or more high school students had sufficient revenues in 1999-090 to maintain or increase expenditures at the pre LB 806/LB 1114 levels. Small schools, especially those in the standard and sparse categories, have had to budget expenditures based on reduced revenues (see Table 4).

The state aid policy set by LB 806 rejects school size as a justifiable basis for cost differences and does not subsidize any above average costs just because a school is small. By disallowing those higher costs in the state aid distribution formula, lawmakers were denying the legitimacy of the higher small school costs and, for some, even the right of those schools to exist. The policy presumes that small schools can cut their costs to the statewide per pupil average within their sparseness group without harming educational outcomes or can consolidate with another district to reduce costs to the average level. Another option that a number of small schools have chosen is to locally finance the higher than average costs by higher than average levy rates, including voting to override the levy limits if necessary. The first two options are unrealistic and all of them are inequitable.

The fact is that small school districts have historically paid higher than average property tax rates to support their schools. This is pretty strong evidence that most small school expenditures were not highly inefficient or extravagant. Most rural property owners face a heavy tax burden and would be unlikely to support school boards that operated inefficiently or extravagantly. When forced, any school system can cut its budget, but not necessarily without hurting education. There is no solid evidence that further consolidating school districts would reduce costs per pupil. Even if some cost savings are possible, the state should allow communities to make their own important decision about whether to maintain a community school when the enrollment is very small without the coercion of inadequate state aid.

It is inequitable for small, rural schools to have to cut costs to the extent of harming programs and student outcomes. It is inequitable for small, rural communities to be forced to close their public schools. It is inequitable for property owners in small, rural school districts to have to pay higher rates to maintain a quality, community-based school.

## **Policy Recommendations**

Nebraska's school finance system can be made more adequate and equitable through two essential objectives: base state aid to education on appropriate measures of actual costs and continue to reduce the property tax burden for support of public education. Small schools have been shortchanged primarily because the actual cost of providing a quality education in a small, rural communities has not been considered in estimating school system needs. Property owners in small rural communities have been shortchanged because they have had to maintain higher property tax levies than their more urban counterparts in order to offset the inadequacy of their state aid allotments. Neither of these proposed objectives will be simple to implement. Both could be achieved through a number of alternative routes. The following are initial ideas on ways to revise our school finance system that would not just address the needs of small schools, but would be a better, fairer system for all public schools throughout Nebraska.

### **Base state aid to education on appropriate measures of actual costs.**

- Determine the actual costs of providing educational programs to meet basic accreditation standards and implement required procedures;
- Use the most appropriate unit measure such as classroom units, administrative units, or pupils in estimating specific cost components;
- Identify and measure programmatic costs associated with special needs populations such as low-income and limited English proficiency students;
- Evaluate the impact of school size, geographic location, and other potential factors on various cost components and develop appropriate cost groups as needed;
- Use school expenditure patterns prior to LB 806 and LB 1114 in estimating average costs for size-based groups;
- Incorporate a teacher salary parity mechanism into state aid distribution to enable small and rural schools to recruit and retain high quality teachers;
- Implement a biennial evaluation of the adequacy and equity of state aid distribution.

### **Continue to reduce the property tax burden for support of public education.**

- Ensure that small schools receive an adequate level of state aid to enable them to keep property tax levies at average rates that are comparable to larger districts;

- Gradually reduce the local effort rate used to calculate local property tax resources in the state aid formula to 0.75 per \$100 value, replacing the reduced property tax resources with increased state aid;
- Implement property tax "circuit breakers" for lower-income property owners to reduce their property tax bills and use state aid to education funds to replace the lost revenue to school districts.

## Appendix A

### Methodology Used to Compare School System Need Estimates for School Years 1997-98 and 1999-00

Table 3 of this report presents a comparison of school system per-pupil need estimates by school size for 1999-00 with the need estimate as it would have been calculated under the 1997-98 formula, using 1998-99 enrollment data. The analysis used 1998-99 enrollment data because that is the data year for calculating 1999-00 state aid. This appendix documents the methodology used to prepare that table.

Information and tier group cost data for 1997-98 was based on a Nebraska Department of Education report, "Data Sources for 1997-98 State Aid Calculations: Tax Equity and Educational Opportunities Act." Enrollment data for 1998-99 was obtained from department data files posted on the Nebraska Department of Education website (<http://www.nde.state.ne.us>). Information about the state aid distribution formula for 1999-00 was obtained from a report from the Nebraska Department of Education website. Data was also obtained from the Nebraska Department of Education showing each school system's number of formula students, sparseness group, the weighting and adjustment factors, and the special education allowance used for estimating needs for the 1999-00 school year.

Under the 1997-98 formula, needs were calculated as the per-pupil (formula students) tier group costs (average adjusted general operating expenditures, including special education) by high school size (9 tiers) and grade school size (7 tiers). For this analysis, it was impossible to apply costs from a specific grade school tier to a given school system, because those costs were calculated at the district level rather than the system level used in 1999-00. Instead, the grade school component of the tier group costs was estimated as follows: School systems with less than 70 high school students were assumed to have grade school enrollments in the smallest sized tier group (101 students or less) which had an average cost of \$5667 per-pupil in the 1997-98 formula. The per-pupil grade school cost for all other school systems was based on the weighted average for all other tiers, which was \$4,475. Per-pupil high school costs were based on the high school size tiers for 1997-98 using 1998 fall enrollment data for grades 9 through 12.

The per-pupil grade school cost was applied to grades 1-6. Kindergarten per-pupil costs were estimated as one half the grade school cost. Per-pupil costs for grades 7 and 8 were based on the unweighted average of the grade school and high school costs. The high school cost applied to grades 9 to 12. The total cost for each grade level group was

computed by multiplying the appropriate per-pupil cost by the estimated enrollment for 1998-99 for that grade level group. High school enrollment was based on the number of grade 9 through 12 students enrolled in the fall of 1998. High school enrollment was subtracted from average daily membership to estimate the number of grade school and junior high students. That number was divided by nine to estimate the number at each grade level and then multiplied by the number of grades in each non-high school group (kindergarten, 1; grade school, 6 and junior high, 2). The total costs for all the grade level groups were summed and divided by average daily membership to estimate the per-pupil needs for the school system under the 1997-98 formula.

For 1999-00, needs include per-pupil costs (average adjusted general operating expenditures) for standard, sparse and very sparse systems, grade-level weighting adjustment, poverty adjustment, limited English proficiency adjustment, Indian land student adjustment, extreme remoteness adjustment, and special education allowance. Not included is the transportation allowance, which is calculated similarly and included in the state aid formula under both models.

The data file that was used for 1999-00 includes the number of formula students meeting each of the adjustment factor criteria. The bases for determining these numbers are described in the Nebraska Department of Education document referenced above. These numbers were applied to the appropriate weighting factors incorporated into the state aid formula established by LB 806. The number of Limited English Proficiency students and the number of Indian Land Students were multiplied by .25 to obtain the number of additional students for these adjustments. The number of formula students in schools classified as extremely remote were multiplied by .125 to obtain the number of additional students for that adjustment. The poverty adjustment was more difficult to calculate because the weights varied for each level of poverty grouped by 5 percentage point intervals (see the Nebraska Department of Education document described above for the actual formula). The grade-level weighting adjustment was obtained from the data file, and is based on the following weights: kindergarten .5; full day kindergarten and grades 1-6, 1.0; grades 7-8, 1.2; grades 9-12, 1.4.

The base cost for 1999-00 presented in Table 3 is calculated from the average per-pupil cost for the sparseness group, although that cost is calculated on a weighted, adjusted pupil basis in the state aid formula. The base cost is presented here on a per-formula-pupil basis, with the weighting and adjustment factors listed as separate components on a per-pupil dollar basis. For this report, the number of additional students calculated for a given factor was multiplied by the per-pupil group cost for that sparseness group to determine the dollar amount specified in Table 3. These factors, however, enter the actual state aid calculations as additional students, calculated according to the specified formulas. The special education allowance was divided by the number of formula students to translate it into per-pupil dollars. This was necessary in order to make the total per-pupil needs for 1999-00 comparable to needs calculated under the 1997-98 formula. The statistics in Table 3 represent the mean average estimated costs for each school system size group based on number of high school students enrolled in the fall the 1998.

## References

*Small Schools, Big Results.* Patricia E. Funk and Jon Bailey, Nebraska Alliance for Rural Education, Lincoln, Nebraska, September 1999.

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## ***About the Nebraska Alliance for Rural Education***

The Nebraska Alliance for Rural Education is a partnership among School at the Center, the Center for Rural Affairs, the Nebraska Rural Development Commission, the Local Government Assistance Program, and the Rural Forum (which includes the Nebraska Farm Bureau Federation, Nebraska Farmer's Union, Nebraska Rural Community Schools Association, Class I's United, Nebraska School Finance Coalition, and Friends of Rural Education). The purpose of the Alliance is to launch a broad based coalition of leading rural, farm and education activists in Nebraska to "build the capacity of rural people to fight for adequate, equitable, and quality rural education and community development as defined and developed by rural people themselves."

The Nebraska Alliance for Rural Education features grassroots organizing, policy research, training for rural activists and school board members, and outreach through the news media. This report is part of a series of research projects aimed at strengthening statewide policy supporting rural education and rural community schools.

The Alliance believes that:

- State policy should be guided by the principle that equal educational opportunity for Nebraska children is a right guaranteed by the Nebraska Constitution under the Equal Protection Clause.
- State education policy should support schools that are community-based and small in scale, and that achieve local, as well as state, goals and standards of quality education.
- State educational financing should recognize cost differences that reflect local circumstances and needs ("fund them as you find them"), promote resource stability and predictability, and utilize an aid distribution formula that is based on the actual cost of doing business and local capacity to pay.

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The author of this report, Patricia E. Funk, Ph.D., is an independent research consultant based in Omaha, Nebraska who specializes in public policy research. She has authored two previous reports in this series on small schools for the Nebraska Alliance for Rural Education (NARE). Other recent research topics include rural poverty, economic self-sufficiency and living wage opportunities in Nebraska. She greatly appreciates the contributions of Jerry Hoffman, Director of NARE, and the following members of NARE in the design of this study and the formulation of its policy recommendations: Matt Blomstedt, Center for Rural Education and Communities at UNL; Jon Bailey and Kim Preston, Center for Rural Affairs; and Chuck Karpf, Jr., School Board Vice-President, Morrill, NE A special thanks to Kim for helping put together data bases and to Matt for sharing his expertise on state aid distribution and his assistance with the data and the methodology.

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