



9-1-1997

### Wisconsin Public Education and Property Tax Relief in the 90's

Carolyn Busch

Follow this and additional works at: <https://newprairiepress.org/edconsiderations>



Part of the [Higher Education Commons](#)



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](#).

---

#### Recommended Citation

Busch, Carolyn (1997) "Wisconsin Public Education and Property Tax Relief in the 90's," *Educational Considerations*: Vol. 25: No. 1. <https://doi.org/10.4148/0146-9282.1368>

This Article is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in Educational Considerations by an authorized administrator of New Prairie Press. For more information, please contact [cads@k-state.edu](mailto:cads@k-state.edu).

Taxpayer dismay and unhappiness with increasing property taxes is at the heart of changes to Wisconsin's school finance system.

# Wisconsin Public Education and Property Tax Relief in the 90's

Carolyn Busch  
Karen Kucharz  
Allan Odden

Across the nation, there is an ever-present debate between public education funding and property tax relief. On one hand, world competition demands that a high quality education be provided to all students in grades kindergarten through twelve (K-12), and on the other hand, taxpayers demand lower taxes. This perennial challenge is found in many states, and Wisconsin is certainly no exception. The dominant objective for changing Wisconsin's school finance formula in all three recent Wisconsin biennial legislative sessions has been the identification of new approaches to alleviate high property taxes. Because public school finance and property tax relief are so inextricably linked, minor modifications in either arena invariably generate intense discussion. As Wisconsin lawmakers continue to search for solutions to this problem, the school finance structure is eventually affected. This paper reviews Wisconsin's current public school finance system, as shaped largely by the recent efforts to provide property tax relief to the citizens of Wisconsin.

## Historic Background

The quest for property tax relief has long been a primary focus of legislative attention in Wisconsin. The most significant changes to the public K-12 finance system have occurred in approximately 24 year cycles—1924, 1949, 1973, and most recently, in 1996. Each major revision represented a contemporary solution to what was viewed as a contemporary problem and was often a synthesis of numerous competing policy agendas. It is often said that history repeats itself, and the difficulties facing Wisconsin's finance system in 1996 are, not surprisingly, quite similar to the ones which have faced lawmakers throughout its history (Kingston, 1984).

The basic configuration of the current Wisconsin system has existed, in one form or another, for over 70 years. Beginning in 1924, as part of a plan to ensure "...that each community can furnish with this state aid adequate education

facilities for its children without an excessive local school tax rate," Wisconsin State Superintendent John Callahan proposed an elemental form of tax base equalization (a system in which a school district's aid is inversely proportional to wealth of its property tax base). Prior to the introduction of this plan, the major revenue source for school operations had been the local property tax. Callahan's State Support Program, however, called for the use of state money to remedy the problem inherent in unequally distributed property tax bases and school enrollments—varying ability across the state to generate revenue for public education. His new recommendations included the idea of determining state aid eligibility on a number of district factors—specifically, a district's taxable wealth and the number of elementary teachers employed by the school district. Callahan's ideas were eventually formulated into the Equalization Aid Act of 1927 (Kingston, 1984).

Then in the late 1940s, the Commission on Improvement of the Educational System was created to study the state's role in financing public education. Their final recommendations would form the cornerstone of Wisconsin public school finance for approximately the next 25 years. They included: 1) use of the state's general purpose revenue (mainly individual income tax, general sales and use tax, and the corporate income and franchise tax) to provide school district aids, instead of using a separate appropriation, 2) implementation of an equalization formula which guaranteed a property tax base per student member<sup>1</sup>, rather than per teacher, 3) adjustment of the guarantee relative to changes in property value and school cost, specifically noting that sources other than the property tax should support a greater percentage of the total cost, 4) use of state aid to alleviate excessive tax burden and to encourage improved educational opportunities for children, and 5) re-arrangement of all public school districts into three uniform organizational structures—elementary districts (kindergarten through eighth grades), union high school districts (grades nine through twelve), and K-12 districts. Chapter 121.01 of the current Wisconsin Statutes reflects many of the ideologies set forth in the 1949 legislation:

It is declared to be the policy of this state that education is a state function and that some relief should be afforded from the local general property tax as a source of public school revenue where such tax is excessive, and that other sources of revenue should contribute a larger percentage of the total funds needed. It is further declared that in order to provide reasonable equality of educational opportunity for all the children of this state, the state must guarantee that a basic educational opportunity be available to each pupil, but that the state should be obligated to contribute to the educational program only if the school district provides a program which meets state standards. It is the purpose of the state aid formula....to cause the state to assume a greater proportion of the costs of public education and to relieve the general property of some of its tax burden. (Effective January 1, 1968)

Thus by the mid-1900s, the fundamental building blocks of Wisconsin's current system of funding elementary and secondary education had been well established (Kingston, 1984).

In yet another effort to control upward-spiraling property taxes, the 1973-75 legislature revised many aspects of the 1949 finance system. First, the allocation for state school aids was substantially increased. Second, cost controls were imposed on public school districts. The combination of increased aid and cost controls yielded property tax relief. Third, an expanded version of property tax base equalization was implemented. The new version placed a greater emphasis on the willingness of the local taxpayers to tax themselves. The 1973 revisions have been in effect for nearly 25 years and still

---

Carolyn Busch, CPRE, University of Wisconsin-Madison. Karen Kucharz, CPRE, University of Wisconsin-Madison. Allan Odden, CPRE, University of Wisconsin-Madison.

provide the framework for Wisconsin's current equalization formula (Kingston, 1984).

### **Legislation and Events Since 1990**

The school finance concerns of the 90s are integrally connected with the history and ideology which have historically defined the Wisconsin system. It is unmistakable that the two main pillars of policy in Chapter 121.01 are property tax relief and educational opportunity for children, and it is the quest for property tax relief that has driven policy-making in the Wisconsin legislative sessions of the 90s.

The ideology which has, perhaps, provided the greatest impetus for virtually all of the recent legislative action, is the ratio of state support to school cost—percent state share. Historic accounts show that the percentage of total cost supported by sources other than the property tax has been a political touchstone since 1949. Although the exact computation of the percent state share ratio has been the source of some debate over the years, it nonetheless has generally been viewed as a guideline indicating 'adequate' state support. It was not until the 1995–97 biennial session that an exact definition was clearly specified in statute. Furthermore, for the first time in Wisconsin school finance history, the percent state share ratio would explicitly determine the level of state contribution. (In previous years, the ratio was the end product of a politically and economically selected level of state contribution.) Each biennial session in the early 90s advanced ideas which, in concert, provided the backdrop for the major changes of 1996.

The 1991–93 biennial budget proposals contained the first indications of the new direction. In his biennial budget, the governor requested modest increases in state aid—\$50 million for 1991–92 and \$124 million for 1992–93. In reaction to the governor's proposal, Wisconsin's Joint Finance Committee (the primary financial body of the Wisconsin legislature) countered with a proposal for increasing state aid by \$960 million in the first year and an additional \$380 million in the second year—a level of state contribution never witnessed before! (Amounts represented annual increases over the prior year of 51.8% and 15.9%, respectively.) Along with the substantial increase in funding, the Joint Finance Committee included two additional revisions: 1) a change in the aid distribution formula, abandoning the guaranteed tax base (GTB) equalization formula for a foundation formula; and 2) imposition of school district cost controls. Not unlike events in 1973, the legislature's solution to providing property tax relief was to link large increases in aid with cost containment measures. Although the final legislation, Act 39, contained state aid increases of just 5% for both years and did not include the proposed cost controls, these actions foreshadowed the radical measures of the future.

The legislation from the 1993–95 biennial session, Act 16, contained the cost containment measures voted down in the previous session. Taking the form of school district revenue limits, this legislation limited school districts' increases in per-member revenue to the greater of \$190 or the percent increase in the urban consumer price index (CPI-U)<sup>1</sup>. This method gave an advantage to higher spending districts—by applying the CPI-U percentage increase to a larger per-member base spending, the result would be a greater allowable per-member increase. Lower-spending districts were limited to an increase per-member spending of \$190, while some already high-spending districts were allowed to increase per-member spending by over \$350. This detail would later be cited in a circuit court case filed in October, 1995, challenging the constitutionality of the Wisconsin school finance system. Effective in 1995–96, and for all subsequent years, a uniform per-member dollar increase was used by all districts. The imposition of revenue limits was the primary focus of education legislation in the 1993–95 biennial budget.

The most significant changes to Wisconsin's school finance system in the 90's, however, occurred with the passing of Act 27, a product of the 1995 legislative session. Act 27 contained major changes which affected two general aid programs. First, technical aspects of the school finance system were altered: equalization moved from a two tiered GTB with minimum aid for districts not covered by the GTB to a three tiered GTB with minimum aid eliminated. Second, the state was to provide two-thirds of school costs beginning in the 1996–97 school year. As mentioned previously, this percentage was to singularly determine the required level of state contribution. Through either general and categorical state aid or the school levy property tax credit, two-thirds of the sum of state aid and school tax levies was now to be provided by the state. The total dollar amount of additional funds required to achieve this proportion of state aid in the 1996–97 school year was approximately \$960 million—an increase of \$808 million for general and categorical aid, plus an increase of \$150 million for the school levy tax credit (the school levy tax credit is described in more detail below). Applying similar computational logic to prior years' data, the percent state share was 48% in 1992–93, 48.7% in 1993–94, 51.0% in 1994–95, and 52.9% in 1995–96. An increase to 66.7% was, indeed, significant, and, due to revenue limits, would be used largely for property tax relief.

Recognizing the recent attention to property tax relief rather than education priorities, a group of districts, parents, and students joined in a suit against the state finance system. Filed in October 1995, their complaint stated that the system of financing public schools was unconstitutional—that educational opportunity depended on the district in which a student resided. In addition, the plaintiffs argued that the current system does not distribute revenue based on student need, and that because less wealthy districts cannot, due to limited resources, provide adequate programming to their special need students, these students are denied equal educational opportunity. The suit, although in the making for a number of years, was filed after the revisions of the 1995–97 biennial budget became law. As of this writing, the case has been accepted by the Wisconsin court system, and the trial is anticipated to begin shortly.

### **Wisconsin's Current School Finance System**

#### **The Organization of Public Education**

Educational services for Wisconsin's K–12 students are provided by a combination of various entities. In the 1996–97 school year, Wisconsin had 368 K–12 districts, 47 elementary (K–8) districts, and 10 union high school (UHS) districts, all fiscally independent from other levels of government with the capacity to raise revenues locally. Additionally, there were 12 cooperative educational service agencies (CESAs) which provided programs and services to districts in exchange for financial support. Only two Wisconsin districts did not participate in CESA programs. Five counties had handicapped children's education boards (CHCEBs) which provided services to handicapped students. Finally, there were two state-administered special schools, one each for deaf and blind students.

#### **System Overview**

Property taxes are the single source of local district tax revenues in Wisconsin. Along with local property taxes, state general and categorical aid, property tax relief programs, and the recently-added school district revenue limits form the core of Wisconsin's current financial system. Of the five core components, categorical state aid programs, local property tax, and property tax relief programs have retained their basic structure and have remained relatively stable since 1990.

### Categorical State Aid

The state of Wisconsin supports approximately 40 categorical aid programs. In 1996–97, 80% of the total categorical funding was distributed in the form of handicap and transportation aid.

#### Handicap Aid

Special education programs are available to resident children ages 3 through 21 who are determined to have exceptional education needs. Handicap child counts comprise almost 12% of the Wisconsin school population. Local school districts are the primary providers of special education programs, either "in house" or through consortium agreements. However, CESAs and CHCEBs also provide special education programs.

Handicap education aid is distributed by a percentage cost-reimbursement formula. School districts, CESAs, and CHCEBs are reimbursed for a percentage of approved salary, fringe benefits, and transportation costs. Statutorily, salaries and fringe benefit costs for special education teachers are reimbursed at 63%, costs for special education transportation are reimbursed at 63%, salaries and benefit costs for school psychologists and social workers are reimbursed at 51%, and board, lodging, and transportation costs for nonresident children are reimbursed at 100%. State handicap aid totals range from \$246.7 million in the 1990–91 school year to \$275.5 million in the 1996–97 school year, but generally covered only 44 to 58% of allowable costs.

#### Transportation Aid

The state pays a flat amount per transported student, which varies according to the distance that each student is transported to school. Public and private school children participate in the program. Total transportation aid has remained constant at \$17.7 million since the 1990–91 school year.

### Local Property Tax

Although the amount of property tax has varied through time, the basic structure of local property tax collection has remained unchanged.

### Property Tax Relief Programs

Wisconsin has two major property tax credit programs which aid in the reduction of property tax liability—the School Levy Tax Credit and the Lottery Property Tax Credit.

#### School Levy Tax Credit

The school levy tax credit was created in 1985 and revised in 1991 by Wisconsin Act 39. It is a "below-the-line" property tax relief program, appearing on the taxpayers' bill as a reduction in gross taxes owed. This credit is paid to each municipality, and is used to reduce the school taxes of all property owners in the municipality. The amount of school levy tax credit received by a municipality is based on its share of a three-year average of the total statewide school levy. Each municipality determines a credit rate to be applied to individual tax bills by dividing the total credit by the total taxable property in the municipality.

#### Lottery Property Tax Credit

Created in 1991, Wisconsin Act 39, the lottery property tax credit also is a "below-the-line" property tax relief program, appearing on the taxpayers' bill as a reduction in gross taxes owed. The credit equals the amount of school tax levy on a specified amount of residential property value. In 1995, for example, the credit was equal to the school tax levy up to first \$8,200 of residential property. Since 1990, the specified amount has ranged from \$5,900 to \$8,200. However, only

property which is identified as a taxpayer's principle dwelling is eligible for this credit, which caused a group of non-residents who own vacation property in Wisconsin to challenge the constitutionality of this credit program. They argued that the credit was a violation of the state constitution's uniformity clause which requires equal treatment of all property for tax purposes. In November 1996, a Wisconsin circuit court judge ruled in favor of the non-residents. Payment of this credit has been suspended, and it is anticipated that in the future the credit will be provided for all residential property owned by Wisconsin and non-Wisconsin residents.

### General Aid

General aid is state aid which may be used by local school districts to support general school operations—its use is not limited to any specific program, purpose, or target population. Rather, it is to be used at the district's discretion. Although the term "general school aid" usually refers to aid distributed through an equalization formula, Wisconsin has dispensed aid through as many as five general aid programs from the years 1990–97. In the 1996–97 school year, general aid was distributed through three general aid programs—special adjustment, integration, and equalization.

#### Special Adjustment

Special adjustment aid is paid to districts experiencing large losses in general aid eligibility from the previous year. Act 16 repealed a provision which required a district's value per member to be less than 135% of the state average value per member. In the 1996–97 school year, the state provided additional aid to all districts losing more than 85% of their previous year's total. Since 1990, the hold-harmless percentage has ranged from 85 to 90.

#### Integration Aid

Integration aid is often classified as a categorical aid. However, by definition, Wisconsin considers it a general aid—it is funded from the general equalization aid appropriation, and there are no requirements that restrict its use. Integration aid is provided as an incentive to voluntarily improve the racial balance within and between districts. There are two different formulas which fund student transfers. *Intradistrict* aid is available to school districts that transfer students between attendance areas *within* the district. *Interdistrict* aid is available to school districts that transfer students *between* districts. For each *intradistrict* transfer, a district received an additional 32.5% of its per-member equalization aid payment. For each *interdistrict* transfer, the district of attendance received aid in the amount of its average resident per-member cost. An additional 20% in aid was received if the total number of transfers from other districts exceeded 5% of resident membership. These two formulas stayed relatively constant until the 1996–97 school year when the additional 20% was repealed and the additional 32.5% was reduced to 25%.

#### Equalization Aid

Since 1949, and until 1996–97, Wisconsin used some form of a GTB school finance system to fund the operations of its public schools (Rossmiller, 1990). The fundamental policy goal of a GTB is to rectify the structural flaw of local school district financing for schools: unequal access to a local property tax base. The GTB lowers the tax price of educational services for districts with low property values (Odden & Picus, 1992). State aid serves to reduce local property tax rates and, thus reduces the tax price for educational services. In essence, the GTB serves as a sliding scale for state financing of education. Districts with low property values receive relatively more state aid while districts with high property values receive less or no

equalization aid (depending on the level of the state guarantee).

With a substantial increase in state aid for education, Wisconsin's GTB began in 1973 with some significant adjustments in 1976 (e.g., the elimination of state recapture of local revenues) (Rossmiller, 1990) and 1995 (the shift from a two- to three-tiered GTB) (Busch, et al, 1996). The three-tiered GTB began implementation in the 1996-97 state aid year. Each of the three tiers will be discussed in detail below.

The first and second tiers of the three tiered GTB<sup>2</sup> are based on four components: 1) the district per member equalized property value; 2) the district per member shared costs<sup>3</sup>; 3) the state first tier guaranteed property value per member; and 4) the state per member primary shared cost ceiling. Implicit in these four parts is the district enrollment. Up to the state cost ceilings contained within the first two tiers, districts tax themselves as if their tax base were equal to the relevant tier and the state provides the difference. The third, or tertiary, tier is based on three elements: 1) the district per member equalized property value; 2) the district per member shared costs exceeding the second tier cost ceiling; and 3) the state second tier guaranteed property value per member (which is set in statute at the statewide average per member property value). There is no cost ceiling for the tertiary tier. Critical attributes of each of the tiers are contained in Table 1.

The first tier of the three-tiered GTB essentially provides tax relief for all districts—even the state's most property wealthy districts receive some level of funding under the first tier of the GTB and this funding may not be altered by either of the other two GTB tiers. In 1996-97, no Wisconsin school district had property value over \$2 million per member and no school district had shared costs per member under \$1,000. Thus, all school districts received equalization aid to the fullest extent under the first tier of the GTB.

In 1996-97, the second tier allowed school districts to tax themselves up to the secondary cost ceiling as if their property value were \$569,584 per member. This guarantee reflects a

very high GTB relative to actual property values in Wisconsin. In fact, after sorting school district per member equalized property value from lowest to highest and cumulating the percent of students in districts, the state second tier covered about 98% of students in the state. Importantly, because the recapture of local revenues was ruled unconstitutional in *Buse v. Smith* (1976), a district with property values over the state second tier guaranteed property value could tax itself at its actual tax rate, rather than the higher tax rate that would be required if it taxed itself at the state guarantee.

While the second tier GTB was high in 1996-97, the secondary cost ceiling reflected roughly the median (i.e., the 50th percentile) per member shared costs throughout the state. Thus, in comparison to the first tier, not all districts advantaged themselves fully up to the secondary cost ceiling. This has been true in Wisconsin for many years (Busch, et al, 1996; Busch & Odden, 1996; Odden, et al, 1996) and, in 1996-97, school districts were bound by a state revenue cap which restricted annual per member spending increases (including, but not limited to shared costs) to \$206 per member. Thus, the revenue caps may have affected the ability of district to avail themselves fully of the secondary cost ceiling. However, there was a low revenue exemption for relatively low spending school districts. Under this exemption, school districts spending under \$5600 per member could exceed their revenue cap up to \$5600 per member in the 1996-97 aid year. In addition, school districts could take proposed increases above their revenue caps to their voters. If approved, the new revenue amounts remained the base for annual increases. There were no limits to the referendum that districts could take to their voters.

The tertiary tier was somewhat more complex. Districts spending over the secondary cost ceiling and with equalized per member property values under the state tertiary tier could tax themselves as if their per member property values were at the tertiary tier. Like all other tiers, the state made up the difference and, obviously, these districts received additional state

	Guaranteed Tax Base per Member	Shared Cost Ceiling per Member
First Tier	2,000,000	1,000
Second Tier	569,584	5,936
Tertiary Tier	232,954	none

District	District Characteristics Per Member		State Aid Per Member			Local Revenues Per Member & Tax Rate	
	Equalized Property Value	Shared Costs	First Tier	Second Tier	Tertiary Tier	Revenues	Tax Rate <sup>4</sup>
Albany	173,137	6,081	913	3,436	37	1,695	9.79
Brown Deer	462,511	7,685	769	928	(928)	6,917	14.95
Elmbrook	607,955	7,228	696	0	0	6,532	10.74

Table 3

Wisconsin's GTB Profile in Select State Aid Years				
GTB Levels, Shared Cost Ceilings, Minimum Aid & Percentile Rankings				
	1990-91	1992-93	1994-95	1996-97
<b>1st Tier GTB</b>	298,195	303,691	357,856	2,000,000
Percentile Ranking	93%	90%	94%	100%
<b>2nd Tier GTB</b>	185,906	202,009	216,455	569,584
Percentile Ranking	73%	72%	72%	98%
<b>3rd Tier GTB</b>	n/a	n/a	n/a	232,954
Percentile Ranking				62%
<b>Maximum Shared Cost Ceiling</b>	4,660	5,233	5,617	5,936
Percentile Ranking	72%	66%	58%	50%
<b>Number of Minimum Aid Districts</b>	48	53	51	n/a

aid under the tertiary tier. However, for districts spending above the secondary cost ceiling with equalized per member property values above the tertiary tier, but under the second tier, state aid was reduced up to the level of total state aid under the second tier. *Buse v. Smith* found that recapture of local revenues was unconstitutional, however, when the formula was subsequently revised by the legislature, recapture of state aid to local district was considered suitable.

In order to add some depth to the description of Wisconsin's school finance equalization program above, Table 2 provides examples from three school districts in Wisconsin.

As reflected in Table 2, Albany School District received state aid under all three tiers in the 1996-97 aid year. As a result, their tax rate was only 9.79 mills  $[(1695/173,137) \times 1000]$  compared to the 35.12 mills  $[(6081/173,137) \times 1000]$  that would be required locally if no state guarantee were provided. Alternatively, Brown Deer School District received state aid under both the first and second tiers, but lost the second tier state aid under the tertiary tier. In this case, for every additional dollar raised above the secondary cost ceiling, Brown Deer lost a dollar of state aid and Brown Deer residents made up the difference from local property taxes. Thus, Brown Deer's tax rate was 14.95—only 1.67 mills less than would be required of Brown Deer if no state aid were provided under any tier. Elmbrook provides the final example. It is a school district that received no state aid under either the second or tertiary tiers in 1996-97. No aid for spending above the secondary cost ceiling was re-captured from the second tier because Elmbrook's equalized property value per member exceeded the second tier and, accordingly, no state aid was provided under the second tier. These districts highlight how a GTB—regardless of the number of tiers—provides state aid on a sliding scale based on districts' property values. In addition, the three districts in Table 2 illustrate how the second and tertiary tiers work, albeit sometimes against each other!

Given that the three-tiered GTB has been in operation only one year and this paper covers several biennial budgets, it is important to discuss the previous two-tiered GTB. Table 3 presents information on Wisconsin's GTBs in select years. Until 1996-97, Wisconsin's equalization program was a two-tiered GTB. The two-tiered GTB worked identically to the second and tertiary tiers of the current three-tiered GTB. As reflected in Table 3, similar to the second tier of the three-tiered GTB, the first tier of the two-tiered GTB historically provided a relatively rich tax base up to a given cost ceiling—a GTB consistently covering over 90% of Wisconsin students in the 1990s. In addition, districts with property values between the first and second tier of the two tiered GTB and spending above the cost ceiling,

state aid was recaptured up to the total level of state aid provided under the equalization program.

Prior to 1996-97, minimum aid was provided to districts with very low or no equalization aid (including districts receiving negative aid under the second tier) and it ranged from \$175 to \$400 per member, depending on a distribution formula that included district tax rate and 1980 household income. Table 3 notes the number of districts receiving minimum aid in the years presented.

Consistent with statute, Wisconsin's largest state aid program—the equalization program (either two or three-tiered)—provides state aid for school districts' educational programs through a system that emphasizes property tax relief. In other words, the main public policy emphasis of Wisconsin's equalization program is taxpayer equity of local tax bases and not equity in funding per member or equal tax rates across school districts (Legislative Fiscal Bureau, 1993). The system allows, even assumes, that districts will have varying costs, but attempts to alleviate tax burden by equalizing tax bases. Thus, district spending decisions, at least up to the shared cost ceiling, presumably are not hindered by relatively poor tax bases. The objective of tax base equity begs questions regarding the spending equity of the system. Relevant analysis are provided in the following section.

### Equity Analysis

Equity analysis provides an important description of a state's "health" regarding school finance. Conventional horizontal equity and equal opportunity statistics originated by Berne and Stiefel (1984) are used in this analysis. Horizontal equity measures the extent to which all members of a group are treated equally. To measure horizontal equity, the equalization program is used because the shared costs equalized in the GTB represents what districts spend on the regular instructional program (less any encroachments from under-aided categorical programs). These are assumed to be the main costs associated with providing the basic educational program, rather than special education, bilingual-bicultural education or other specialized programs designed for a particular district or group of students. Vertical equity is a more difficult concept to measure (Berne & Stiefel, 1984). Vertical equity addresses the fact that some students require additional services in order to appropriately meet their educational needs. In other words, vertical equity works from the assumption that some groups should be treated differently in order to provide them with adequate services. A detailed analysis of vertical equity in the Wisconsin system can be found elsewhere (Busch, et al, 1996). In addition, given Wisconsin's GTB focus on tax base

	1990-91	1992-93	1994-95	1996-97
Number of Districts	381	380	379	378
Number of Members	759,462	791,864	823,363	848,603
<b>Equity Statistics for Shared Costs per Member:</b>				
Average	4,541	5,151	5,664	6,106
Median	4,417	5,002	5,520	5,943
Minimum	3,373	3,586	4,312	4,476
Maximum	6,638	7,871	8,264	9,065
Range	3,265	4,285	3,952	4,589
5th Percentile	3,944	4,426	4,957	5,435
95th Percentile	5,437	6,073	6,708	7,384
Federal Range Ratio	37.9%	37.2%	35.3%	35.9%
Coefficient of Variation	10.6%	10.5%	10.3%	10.0%
McLoone Index	0.95	0.95	0.95	0.95
<b>Fiscal Neutrality Statistics for Shared Costs per Member:</b>				
<b>Property Value</b>				
Correlation Coefficient	0.62	0.63	0.63	0.62
Elasticity	0.16	0.15	0.15	0.14
<b>Tax Rate</b>				
Correlation Coefficient	0.65	0.53	0.64	0.91
Elasticity	0.58	0.45	0.53	0.49

equity, fiscal neutrality is assessed here to test the relationship between spending and property wealth.

Straight-forward, descriptive, statistical computations can illuminate levels of dispersion in a finance system, measuring horizontal equity. The expenditure data analyzed are the per-member shared costs associated with equalization aid. Because the state's 10 high school and 47 elementary school districts lie within coterminous land parcels, data for each elementary district were merged into their corresponding high school districts, thus simulating K-12 districts.

Table 4 contains the results for Wisconsin's school finance system for select state aid years throughout the 1990s. The statewide average shared cost per member steadily increased from \$4,541 in 1990-91 to \$6,106 in 1996-97. The statewide median shared cost also increased throughout the years examined culminating in \$5,943 in 1996-97. For all years, when jointly considered, the mean and median values reflect a slight skewness to the left, indicating that more than half of the distribution of district spending was below the statewide average.

Per-member expenditure minimums and maximums rose steadily throughout the years reviewed resulting in ranges of spending from a low in 1990-91 of \$3,373 to a high of \$9,065 in 1996-97. In all years examined, the highest spending Wisconsin district spent roughly twice as much as the lowest spending district. An alternative measure, the Federal Range Ratio, provides a descriptive statistic that is less influenced by extreme values found in the minimum and maximum spending districts within a state. The Federal Range Ratio is the difference in per member spending between the 95th and 5th percentile districts, divided by the per member spending of the 5th percentile district. It represents the percent amount more that the 95th percentile districts spent above the 5th percentile spending district. In Wisconsin, the Federal Range Ratio did not exceed 38% for any of the years examined. Put simply, the Federal Range Ratio indicates that districts that spent at the 95th percentile per member, spent between 35.3 and

37.9% more than districts that spent at the 5th percentile per member. This ratio is not nearly as extreme as that found when examining the minimum and maximum spending districts and is a more fair representation of the majority of Wisconsin districts.

The coefficient of variation, which indicates the percent deviation in district per-member expenditures around the statewide average, was consistently near 10%. The coefficient of variation is the standard deviation divided by the mean. As such, the coefficient of variation includes all school districts' per member shared costs and measures the level of dispersion in spending for two-thirds of Wisconsin's districts. Thus, the majority (2/3rds) of Wisconsin school districts spent within 10% of the statewide per member shared cost average. This represents a high level of similarity in district expenditure levels. Odden and Picus (1992) have suggested a value of 10% or less as desirable and Wisconsin just meets this standard.

The McLoone Index measures equity in the lower half of the distribution by expressing actual below-the-median district expenditures as a percent of what total expenditures would be if all districts were spending at the statewide median level. In all years examined, Wisconsin scored high at 0.95 in all years examined; which exceeds Odden and Picus' (1992) recommendation of 0.90.

Finally, fiscal neutrality statistics also appear in the lower half of Table 4. The correlation between per-member spending and property value throughout the seven year period was generally .63. Coupled with low elasticity results (consistently near .15), this indicates that although correlation was high, the magnitude of the relationship was small—that is, every 1% change in wealth would produce only about a .15% change in revenue. Correlations between per-member spending and tax rates and elasticities were quite high, indicating the important link between these two variables. Based on the policy intent of a GTB—that is, districts which spend at the same level will tax at

the same rate—it is expected that there would be a high degree of sensitivity between tax rates and spending. This was especially true in the 1996–97 aid year, as virtually all districts received equalization aid.

The high marks for equity in Wisconsin's school finance system derived from the strong GTB program, and the level of the secondary (previously, the primary) cost ceiling. Whether employing the two-tiered GTB or three-tiered GTB, Wisconsin equalized spending based on a relatively rich tax base that covered the vast majority of districts and students in the state. This allowed all districts to function as if they had a tax base of close to, though not the richest, district in the state, albeit consistently within the top 10%. Further, throughout the 1990s, districts with relatively low per member property wealth were able to top off their cost ceilings with the second tier, under the two-tiered GTB, and the tertiary tier, under the three-tiered GTB. Although the Wisconsin school finance system is not perfect, it earns high marks for producing fiscal equity for districts serving the educational needs of students and providing property tax relief for Wisconsin taxpayers.

### Summary

Wisconsin school finance has been the center of considerable debate in the 1990s. Whether legislative consideration to move to a foundation program or executive proposals to alter the GTB, Wisconsin school finance continues to be a hot policy topic within Wisconsin state government. Most certainly, this continued interest in school finance is inextricably linked to how schools are locally funded in Wisconsin: the property tax. Clearly, taxpayer dismay and unhappiness with increasing property taxes is at the heart of changes to Wisconsin's school finance system. Indeed, each successive budget cycle in Wisconsin moved along the course of property tax relief through the state school finance system, eventually culminating in the three tiered GTB. In the midst of providing property tax relief, the basic GTB structure remains intact and allows school districts to exceed their revenue limits with a majority vote in districtwide elections. Even so, new debates over Wisconsin school finance are likely inevitable as school districts feel the pinch of denied referenda, the state strives to continue to meet its two-thirds funding obligation, and taxpayers face the reality of property bills that never decline as much as hoped.

### References

1. Berne, Robert and Leanna Stiefel. (1984). *The Measurement of Equity in School Finance*. Baltimore, MD: John Hopkins University Press.

2. Busch, Carolyn and Allan Odden (with the assistance of Brad Brokaw). (1995). *Alternative Plans for Reforming Wisconsin School Finance and Providing Property Tax Relief*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, California.
3. Busch, Carolyn, Karen Kucharz, and Allan Odden. (1996). *Recognizing Additional Educational Student Need in Wisconsin: A Re-examination of Equity and Equity Analysis*. Paper presented at the annual meeting of the American Educational Research Association, New York, New York.
4. Kingston, Alan W. (1984). *A History of Wisconsin's General State Aid Formula For Elementary and High School Districts*. Madison, WI: Wisconsin Department of Public Instruction.
5. Legislative Fiscal Bureau. (1993). *Elementary and Secondary School Aids: Information Paper #27*. Madison, WI: Author.
6. Odden, Allan, Carolyn Busch, and Linda Hertert. (1995). The Intricacies of Reforming School Finance and Property Tax Relief in Wisconsin. *Journal of Education Finance*, 21(3), 321–342.
7. Odden, Allan R. and Lawrence O. Picus. (1992). *School Finance: A Policy Perspective*. New York: McGraw-Hill.
8. Rossmiller, Richard A. (1990). *As Nearly Uniform as Practicable: A Historical Review of Wisconsin's Equalized Aid Formula*. Madison, WI: Wisconsin Association of School District Administrators.

### Endnotes

1. Equalization valuation is assessed valuation altered by an adjustment factor. The adjustment is designed to cause each type of property to have comparable value, regardless of local assessment practices.
2. All tiers of the GTB are higher for the state's high school and elementary school districts, three times higher and one and a half times higher, respectively.
3. Shared costs are all district operating expenditures, including debt service and excluding state categorical aid.
4. The tax rate figures used throughout this paper are not necessarily districts' actual tax rate which include other factors, such as community services. Rather, the tax rates used here are based on districts' total local revenues from shared costs (the equalization program), divided by the districts' total equalized property values, multiplied by 1000 in order to get districts millage rate.