

Staff Papers Series

P80-25

November 1980

EDUCATIONAL FINANCE IN MINNESOTA:
AN EXAMINATION OF THE FOUNDATION AID PROGRAM

Harry M. Kaiser



Department of Agricultural and Applied Economics

University of Minnesota
Institute of Agriculture, Forestry and Home Economics
St. Paul, Minnesota 55108

EDUCATIONAL FINANCE IN MINNESOTA:
AN EXAMINATION OF THE FOUNDATION AID PROGRAM

by
Harry M. Kaiser

November 1980

Staff papers are published without formal review within the Department
of Agricultural and Applied Economics

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
EVOLUTION OF THE FOUNDATION AID PROGRAM	2
THE CURRENT FOUNDATION AID PROGRAM	17
DESCRIPTION	17
PUPIL UNITS	20
ADDITIONAL LEVIES	23
CATEGORICAL STATE AIDS	25
PUPIL TRANSPORTATION AID	26
SPECIAL EDUCATION AID	27
SECONDARY VOCATIONAL EDUCATION AID	28
POST SECONDARY VOCATIONAL EDUCATION AID	28
SUMMARY	30
BIBLIOGRAPHY OF SELECTED REFERENCES	31

EDUCATIONAL FINANCE IN MINNESOTA:
AN EXAMINATION OF THE FOUNDATION AID PROGRAM

by

Harry M. Kaiser*

Introduction

In October 1971, the Minnesota Legislature passed a series of educational finance and property tax reforms which became known as the Omnibus Tax Act of 1971. The issue of school finance reform dominated the 1970 gubernatorial campaign and after the election, and after a series of regular and special legislative sessions, these reforms became law. The objectives of this study are twofold:

- 1) To examine the evolution of the foundation aid program from its adoption in 1957 to the 1971 reform; and
- 2) To gain insight into the present foundation aid program and some of the provisions that relate to it.

After addressing each of these topics, the paper concludes with a brief summary which reiterates and integrates the important concepts.

* Graduate Research Assistant, Department of Agricultural and Applied Economics, University of Minnesota. The author is indebted to Glenn L. Nelson and Arley D. Walso for comments on earlier drafts of this paper.

Evolution of the Foundation Aid Program

Since 1957, Minnesota has used a foundation aid program to finance public education. This policy was adopted by the state legislature to mitigate the substantial revenue disparities among districts that were present under the pre-1957 programs. This section examines the evolution of the foundation aid program. However, a brief history of Minnesota school finance between 1915 and 1957 will be discussed prior to the analysis. This will provide one with the general atmosphere in Minnesota before the foundation aid program was instituted.

Prior to 1915, state aid to school districts in Minnesota was in the form of a uniform grant.^{1/} These grants were derived via the interest income from the constitutionally earmarked Permanent School Fund (Mueller, et al., p. 3). The bulk of educational revenue was raised by the real property tax. Since the funding formula employed by the state was not designed to equalize educational revenue, gross disparities among school district expenditures were inherent to the system. The fundamental reason for the inequality of district spending was the sizable variation in property valuation throughout the state.

Consequently, in 1915 a new program was instituted which was designed to provide supplemental state aid to poorer districts (those with relatively less property wealth per pupil) in addition to the flat grant provided to all districts. The additional aid was supplied by the state general fund.

^{1/} A uniform grant is a flat grant allotted to each district in the state based solely on average daily attendance (ADA), average daily membership (ADM), or another comparable pupil measure. The grant is neither a function of the district's taxpaying ability, nor a function of the difference in pupil costs within each grade level. The grant may, and typically does, consider the difference in pupil costs at different grade levels.

The new system attempted to raise the level of educational funds available for the poor districts by increasing state support. However, the state revenue was appropriated to all districts irregardless of district need or ability (Mueller,et al., p. 3). As a result of this the most affluent, as well as the poorest districts, received an increase in state aid, while locally raised revenue remained unchanged. Therefore, virtually all the revenue disparities among districts persisted.

In 1947 the legislature devised a funding formula that was intended to have an equalizing affect on educational revenue among districts. Under this scheme, a greater share of educational funds was based on district property wealth. Moreover, these funds were designed to be distributed in inverse proportion to district property wealth (Minnesota Department of Education, pp. 4-5, 1980). However, this program had little success in eliminating the revenue gap. In 1954, the Minnesota Legislature created an Interim Commission to examine the distribution of state aids to education. The University of Minnesota assisted the Commission in their study, and the final report was published in May, 1956. The Commission's conclusion was that every child, regardless of the available resources within his or her district, was entitled to participate equally in the state's program of education (Pryor, p. 3). Consequently, the 1957 Minnesota Legislature adopted a minimum foundation aid program based on a per pupil allowance that was partially paid by the state and partially paid by the local school district. Districts were entitled to choose between the former program, which distributed state aid in the form of a flat grant, or the foundation aid payment depending upon which scheme provided the most revenue. It was generally to the advantage of districts with low property valuation to participate in the foundation aid program. Districts with high property valuations usually fared better with the flat grant system (Pryor, p. 3).

The foundation aid program was designed to accomplish two goals. The first objective was to set a minimum spending level for districts. The minimum level, in theory, was intended to be set so every district would have enough revenue to provide each pupil with an "adequate" education. The program was to be financed by state and local funds, with poor districts receiving proportionately more state aid than wealthy districts. Districts could participate in the program by levying at, or above, the mandated tax rate set by the state (Mazzoni, p. 45). State aid to districts was to be calculated as the difference between the minimum amount deemed adequate by the state and the amount raised locally by the districts at the mandated tax rate.

The second objective of the program was to compensate for the differentials in property wealth among districts. The rationale for this portion of the program was that district wealth and state aid should be inversely related. In other words, districts with below average property wealth should receive more aid from the state than more affluent districts. Yet the adopted program contained a provision that allowed every district, regardless of ability or need, to receive a uniform grant to be used for educational expenditures. A more specific description of this stipulation, which became known as the minimum pupil unit guarantee, and how it was one of the forces causing the demise of the original foundation aid program will be examined later in this paper. The funding formula that Minnesota employed between 1957 and 1971 distributed state aid in the following manner:

$$\text{State Aid To District} = \left\{ \begin{array}{l} \left(\text{Foundation Aid Level per Pupil} \times \text{Number of Pupils} \right) - \left(\text{Mandated Tax Rate} \times \text{Assessed Property Valuation per Pupil} \right) \\ \text{or} \\ \text{Guaranteed Minimum, if Above is Less Than the Guarantee.} \end{array} \right.$$

The districts were guaranteed a minimum amount per pupil even if they raised the entire foundation aid level locally. By 1971, the minimum pupil unit guarantee was fixed at \$141 (Mazzoni, p. 46).

Mazzoni compared the foundation aid program prior to the 1971 reform to the programs of other states using four criteria: ability, effort, expenditures, and equity. Ability was defined as the personal income per child of school age in 1970. Effort was defined as the local and state revenue receipts for public schools in 1970-1971 as a percent of 1970 personal income. Expenditures were defined as the spending level for public elementary and secondary education per pupil in Average Daily Attendance in 1970-1971. Equity, which is the most ambiguous measure, was based on an equalization score computed by the National Educational Finance Project (NEFP). ^{2/} The results for the Minnesota program are provided in Table 1. In terms of ability, Minnesota ranked 25th which was slightly below the national average (\$15,063). Minnesota ranked 18th in the per pupil expenditures category. The highest ranking that Minnesota achieved was with respect to effort. Only two states were above Minnesota in this category, reflecting the high value placed on education by Minnesota citizens.

However, in terms of equity Minnesota ranked 36th which could be explained, in great part, by the inadequacies that had developed in the foundation aid program. More specifically, the provision of a minimum per pupil unit guarantee was one of the forces that caused the disparity. The minimum pupil unit guarantee for the 1970-71 school year was set at \$141 per pupil. This meant that a district was guaranteed that amount even if it raised revenue above the foundation level. This grant consti-

^{2/} A discussion of the computation of the equalization score, used for measuring equity, appears in Status and Impact of Educational Finance Programs. Gainesville, Florida: National Educational Finance Project, 1971. pp. 133-139.

Table 1

Minnesota's pre-1971 school finance system compared with other states on selected dimensions.

Dimension	Measure	Minnesota (ranked in parentheses)	United States Average	Low State	High State
Ability	Personal income per child of school age, 1970.	\$14,073 (25)	\$15,063	\$8,354 Mississippi	\$19,758 New York
Expenditure	Current expenditures for public elementary and secondary educa- tion per pupils in average daily attendance, 1970-71.	\$878 (18)	\$858	\$523 Alabama	\$1,401 Alaska
Effort	Local and state revenue receipts for public schools in 1970-71 as percent of personal income, 1970.	6.3% (3 tie)	5%	3.8% Alabama	7.7% Alaska
Equity	National School Finance Project equalization scores, 1968-69.	4.433 (36)	5.131	2.295 Connecticut	8.4 Hawaii

Source: (Mazzoni, p. 44).

tuted 48 percent of the program's outlays, while the grants designed to equalize district spending constituted only 33 percent of the program's payments to districts (Mazzoni, pp. 46-47).

The pre-1971 program met its demise in the face of three forces. First, the foundation level failed to keep pace with the increasing costs of education. Second, the program was unsuccessful in equalizing district expenditures. Finally, Minnesotans were demanding property tax relief. Since the program was financed primarily from the property tax, the program had to be revised so that the property tax was not the major source of revenue. The combination of these factors brought about reform in 1971 via the Judicial and Legislative branches of government.

Focusing on the first factor, there were a number of reasons for the sharp increase in educational costs throughout the 1960's. One major force was the dramatic increase in enrollment throughout this period. Consider Table 2. From 1930 to 1950 enrollments in Minnesota decreased by approximately 13 percent. However, enrollments rose by 90 percent from 1950 to 1970. This rapid increase was primarily a result of the post-World War II baby boom. The increase in enrollments caused more schools to be built, more teachers to be hired, more educational equipment to be purchased, and educational costs to increase. Thus, the baby boom explains part of the reason for higher educational costs.

Another force that contributed to higher educational costs was the demand for more services to be supplied by public education. Throughout the late 1950's and 1960's, there was an increase in demand for kindergarten and pre-kindergarten programs by parents. The length of the average school term in the United States increased from 173 days per year in 1929 to 180 days per year in 1972. Educational opportunities for exceptional

Table 2

Minnesota enrollment figures, 1930-1974.

<u>Year</u>	<u>Total Enrollment</u>	<u>Average Daily Attendance</u>
1930	552,000	456,836
1940	512,224	430,971 (1942)
1950	481,612	434,000
1960	682,000	627,000
1962	726,000	666,000
1964	788,000	725,000
1966	833,000	770,000
1968	863,000	800,000
1970	914,000	865,000
1972	913,000	886,000
1974	901,000	816,000

Source: (U.S. Bureau of the Census, Statistical Abstract of the United States: 1932-1976. Washington, D.C.)

and special pupils were recognized during this period. This accounted for a great part of the higher costs. Education of this kind frequently costs two to three times as much as it costs to provide an equivalent education for a "typical" pupil.^{3/} For example, more than one billion dollars is allocated annually in the United States for pupils who are classified as culturally disadvantaged. In 1930, there were almost no special funds available for these students. In addition, this period also saw an increase in demand for greater vocational education opportunities for students. It usually costs 1.5 to 2.5 times as much to provide this service (Johns, Morphet, p. 128). There are many other factors that have contributed to higher educational costs but the ones mentioned are adequate for presenting the fundamental reasons for this trend.

^{3/} The term "typical" in a program that recognizes cost differentials implies a weight equal to one.

The foundation aid program did not keep pace with the increases in costs. Table 3 provides a comparison of the foundation aid and median maintenance costs in Minnesota high school districts from 1963 to 1971. By 1971 the differential was \$332 per ADA pupil. Very few districts spent less than the \$404 foundation level base and no districts taxed below the 20 EARC mills minimum (Mazzoni, p. 46). The formula was drastically

Table 3

Foundation aid level and median maintenance cost
per ADA between 1963 and 1971.

School Year	Foundation Aid Level	Median Main- tenance Cost per ADA	Difference
1963-64	\$309	\$359	\$50
1964-65	315	378	63
1965-66	321	407	86
1966-67	324	454	130
1967-68	345	483	138
1968-69	355	546	191
1969-70	365	604	239
1970-71	404	736	332

Source: (Mazzoni, p. 46.)

outdated and in need of reform. The state legislature faced pressure from school districts to revise the formula so as to bring it up to date with costs.

The second force that put pressure on the legislature to reform the foundation aid program came from the judiciary. The program's constitutional validity was challenged by a United States district court in 1971. Following the landmark decision in California (Serrano vs. Priest) the

foundation formula became suspect.^{4/} In Van Dusartz vs. Hatfield (October 12, 1971) a U.S. District Court invalidated Minnesota's school finance system on grounds that it violated the Equal Protection clause of the Fourteenth Amendment. United States District Judge Miles Lord pointed out in Van Dusartz how the program discriminated against poor districts. The funding formula attempted to aid all districts by guaranteeing districts \$404 per pupil (formula allowance) if their tax rate was at least 20 mills. Therefore is a district taxed at 20 mills and did not raise \$404 per pupil the state paid for the difference. If a district taxed at 20 mills and raised over the formula allowance it was allowed to use the excess for educational expenditures. In addition, the formula provided a uniform grant of \$141 per pupil for every district irregardless of wealth (minimum pupil unit guarantee). This grant only aided those districts that raised over the formula allowance because the \$141 minimum pupil unit guarantee was included as part of the equalizing aid given to those districts raising less than the formula allowance.^{5/} Hence, if the grant was abolished it would only hurt the districts that raised over the formula allowance.

In Judge Miles Lord's words:

^{4/} In Serrano vs. Priest the Supreme Court of California invalidated California's school funding formula because it violated the Fourteenth Amendment. The Court reasoned that the funding formula denied equal protection to some children because it produced substantial disparities among school district expenditures. The Constitutional principle derived in Serrano is that the quality of public education may not be "a function of the wealth of ... (a pupil's) parents and neighbors".

^{5/} For example, a district that could raise \$300 per pupil by taxing at 20 mills would receive \$37 for their minimum pupil unit guarantee. $\$141 - (\$404 - \$300) = \37 per pupil.

"To sum up the basic structure, the rich districts may and do enjoy both lower tax rates and higher spending. A district with \$20,000 assessed valuation per pupil and a 40 mill tax rate on local property would be able to spend \$941 per pupil; to match that level of spending the district with \$5,000 taxable wealth per pupil would have to tax itself at more than three times that rate, or 127.4 mills." (Mazzoni, p. 49).

Consequently, the foundation aid program was declared unconstitutional because its basic structure favored rich districts by allowing them to tax at lower rates and enjoy higher revenues. However, the plaintiffs dropped their suit because the legislature was in special session drafting a new finance plan (Collins and Johnson, p. 160). The Minnesota legislature was also faced with a major problem on the revenue raising side. Property tax relief was demanded by Minnesotans and it was this factor that dominated the educational finance reform in 1971.

For the 1970-71 school year, approximately 36 percent of all state tax receipts were allocated for educational expenditures (Mazzoni, p. 50). Disaggregating the revenue by the source of state and local taxes for 1971, the property tax constituted 46.3 percent of total tax revenue; the corporate and individual income taxes (state) constituted 22.1 percent of total tax revenue; the sales and gross receipts constituted 24.9 percent of total tax revenue; licenses constituted 4.4 percent of total tax revenue; and the severances, inheritance and gift, and others constituted 2.3 percent of total tax revenue (Mueller, et al., p. 5). The property tax was the dominant source for funding the foundation aid program. During the 1960's the property tax increased drastically.

As early as 1967, the legislature attempted to correct this problem by passing the Tax Reform and Relief Act of 1967. This act established the first state sales tax in Minnesota. All retail sales were subject to a 3 percent sales tax. However, in an attempt to make the tax more progressive, the act exempted essential purchases such as food, clothing, and

shelter (Brandl and Diddams, p. 5). The revenue raised by the new tax went to the Property Tax Relief Fund. Local governments were given funds from this source for the purpose of property tax relief.

This act permitted the state to abolish the state property tax commencing in 1968. Some types of personal property, such as livestock, farm machinery, and business inventories were exempted by the 1967 act. Tax losses to districts were calculated in terms of a percentage of their levy and this percentage was used to determine the amount of reimbursement from the Property Tax Relief Fund (Brandl and Diddams, p. 6). However, the percentage was fixed at the 1966 level regardless of changes in location and values of exempted property and the amount of the reimbursement increased as the local levy increased. The act also established a "homestead credit" provision which enabled homeowners to receive a 35 percent rebate on real estate taxes with a maximum of \$250 (Mazzoni, p. 52). The state reimbursed the taxing district by the amount of the credit. In addition, senior citizens with incomes below \$3,500 were entitled to receive credits on their income tax. To provide relief to renters, the act gave renters up to \$45 through income tax credits (Brandl and Diddams, p. 6).

There were many criticisms of the Tax Reform and Relief Act of 1967. The homestead credit stipulation was criticized by some for giving too little relief to renters and low income families. The exempted property reimbursement provision was criticized by some because it was fixed at the 1966 level and ignored changes in location and value of the property. The per capita aids concept was also criticized because it distributed funds to districts on the basis of per census child, which is an individual between 6 and 16 years of age and is counted even if he or she is not enrolled in school (Brandl and Diddams, pp. 5 and 7). Therefore, it was

argued that this basis for distributing additional aid to school districts harmed the equalization aspects of the minimum foundation aid program.

These criticisms were debated in the 1970 gubernatorial election. The Tax Reform and Relief Act of 1967 was not successful in preventing property taxes from rising. Between 1966 and 1971, gross property taxes rose at an annual rate of 15 percent. School property taxes increases some 83 percent between 1968 and 1971 (Mazzoni, p. 51). By 1970 public discontent with high property taxes was at its maximum. The property taxes had risen with the high costs of education. The foundation aid program was in drastic need of reform and faced growing opposition from three camps: those who recognized that the program was outdated, those who challenged the legality of the program, and those who wanted a revamping of the revenue raising side granting relief to the property taxpayers.

In 1971, during a special session of the legislature, a series of educational reforms was passed that became known as the Omnibus Tax Act.^{6/} The act addressed the fundamental problem with the program: the foundation aid formula. However, the new program was a modification of the old rather than an adoption of a new system. In other words, the foundation aid formula was modified and preserved. The major emphasis of the reform was to equalize district expenditures at the statewide average and thereby change the formula from a minimum foundation program to an "average" foundation program. The new formula allowance was set at \$600 per pupil for 1971-72 and \$750 per pupil for 1972-73. The mandatory mill rate was set at 30 mills for both years. In addition, state aid to districts was significantly

^{6/} See Mazzoni for a discussion of the political events that took place with respect to the final passage of the Omnibus Tax Act.

increased to an estimated 65 percent of operating costs for the 1972-73 school year (Mazzoni, p. 69). In addition, the following changes were instituted by the act:^{7/}

1. The pupil unit measure was changed from Average Daily Attendance (ADA) to Average Daily Membership (ADM). The weighting for pupils in Average Daily Membership (WADM) counted kindergarten as 0.5 ADM, elementary as 1.0 ADM, and secondary as 1.4 ADM.
2. A "catch up" clause was instituted to allow low spending districts a six year period to bring their expenditures up to the foundation level.
3. A grandfather or excess maintenance levy was included so that high spending districts would not have to reduce their expenditures instantaneously. The original grandfather levy was to be reduced by 2½ percent of the original amount annually over forty years.
4. A provision was made that allowed districts to levy an additional tax above the basic maintenance levy. This levy, which is known as the referendum levy, could be used if the citizens of a district approved it via a special election. There was no limit established on the levy and it was not equalized.
5. The minimum pupil unit guarantee was set at \$215 and was phased out two years later.
6. Additional aid was provided for districts with children from AFDC families. Districts received an additional 0.5 pupil unit for each AFDC pupil.
7. Districts experiencing declining enrollment were allowed to use two year averages of their pupil units in order to muffle their decrease in aid.
8. Districts with increasing enrollments were allowed supplemental pupil weighting in the form of fast growth pupil units.
9. A "hold harmless" provision was included to guarantee districts from receiving less in 1971-72 than they received in 1970-71. The clause pertained to foundation aid and agricultural property payment.
10. An "ag differential" credit was provided to compensate for reductions in agricultural property valuations (Mazzoni, pp. 69-70, Mueller, pp. 3-4, and Carruth, pp. 4-5).

^{7/} Many of the changes listed below are described in detail in the next section.

The Omnibus Tax Act was basically a concession to property taxpayers. According to Mazzoni, "the popular demand for curbing property taxation was both the impetus for reform and the essential backdrop against which legislative bargaining was undertaken." Thus, the act was more oriented towards property tax relief than equalization of school district expenditures. Yet the Omnibus Tax Act was also hailed as a "fiscal milestone" or the "Minnesota miracle" by the Advisory Commission on Intergovernmental Relations. The reform brought the program up to pace with educational costs. Table 4 provides a comparison of foundation aid level and median maintenance cost before and after the 1971 reform. The difference between the foundation aid level and median maintenance cost was drastically

Table 4

Foundation aid level and median maintenance cost
per ADA between 1963 and 1974.

School Year	Foundation Aid Level	Median Maintenance Cost per ADA	Difference
1963-64	\$309	\$359	\$50
1964-65	315	378	63
1965-66	321	407	86
1966-67	324	454	130
1967-68	345	483	138
1968-69	355	546	191
1969-70	365	604	239
1970-71	404	736	332
1971-72	600	663	63
1972-73	750	804	54
1973-74	788	823	45

Source: (Mueller, et al., p. 3 and Mazzoni, p. 46.)

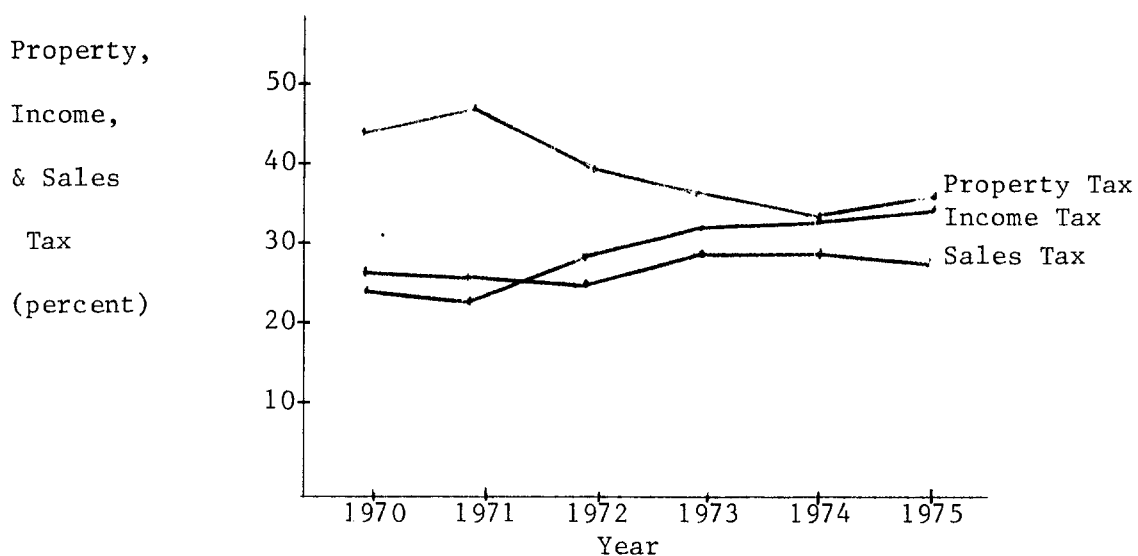
reduced the year following the reform(\$332 to \$63).

The changes brought about by the Omnibus Act were basically centered around refining the equalization aid formula. Since 1971 the major source of educational revenue has shifted from the local property tax to statewide taxes on income and sales. Graph 1 clearly exemplifies the resulting

shift of emphasis on statewide taxes from the property tax post-1971. Also, improvements in state aid for transportation and special education programs have been made. The main structure of the program has remained with the exception of the above reforms.

Graph 1

Property, Income, and Sales Taxes For Years 1970-1975



	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Property Tax	43.9	46.3	39.3	35.2	32.9	34.1
Income Tax	23.6	22.1	27.5	30.3	32.8	33.2
Sales Tax	25.5	24.9	26.4	27.5	27.5	26.1

Source: (Mueller, et al., p. 5.)

The Current Foundation Aid Program

The purpose of this section is to examine the current foundation aid program in Minnesota. More specifically, the determination of aid for districts with varying wealth will be exemplified. Also, a discussion of the various categorical grants will follow. The reader should gain a general understanding of the technical aspects of the foundation program after reading this section.

Description

The foundation aid program (sometimes called minimum foundation program) is the most widely used educational funding formula in the United States. The formula was developed by George Strayer and Robert Haig in the 1920's to correct financial inequities among school districts (Boroson, et al., p. IV-2). Under the program, the state establishes a minimum foundation level that each district should have in order to supply each pupil with an "adequate" education. A local district may participate by levying the minimum tax rate, which is set by the state. If a district taxes at the set rate and falls short of the foundation level, the state makes up the difference. If a district taxes at the set rate and raises over the amount specified by the foundation level, the district does not receive foundation aid. The formula for determining state foundation aid is the following:

$$\text{State Foundation Aid} = \left(\begin{array}{l} \text{Formula} \\ \text{Allowance} \end{array} \times \begin{array}{l} \text{Number of} \\ \text{Pupil Units} \end{array} \right) - \left(\begin{array}{l} \text{Basic} \\ \text{Maintenance} \\ \text{Mill Rate} \end{array} \times \begin{array}{l} \text{Adjusted Assessed} \\ \text{Property Valua-} \\ \text{tion (EARC)} \end{array} \right)$$

The Legislature appropriates the necessary funds each biennium to finance the state's share of the foundation aid formula. In October of each year, local districts levy at least the mandated tax rate and raise their portion of the formula. For the 1979-80 school year the specified

tax rate was 27 mills and this will be reduced to 23 mills for the 1980-81 school year (Hopeman, p. 7).^{8/}

To illustrate the effect of the formula on districts with varying wealth, consider the following three districts: District A with an EARC adjusted property value of \$7,500,000; District B with an EARC adjusted property value of \$15,000,000; and District C with an EARC adjusted property value of \$30,000,000. For comparative purposes, assume that all three districts have 1,000 pupil units. Table 5 demonstrates how the funding formula allocates state aid to each district.

Table 5

Determination of state aid to the three districts
by the foundation formula.

	(Formula Allowance	x Number of Pupil Units	- (28 mills x Adjusted Value)	= State Aid
District A	(1,095	x 1,000)	- (0.028 x 7,500,000)	= 885,000
District B	(1,095	x 1,000)	- (0.028 x 15,000,000)	= 675,000
District C	(1,095	x 1,000)	- (0.028 x 30,000,000)	= 225,000
Note: If a district had an adjusted value greater than or equal to \$39,107,143 it would receive no state aid.				

The district with the lowest adjusted property value (District A) receives the most state aid; and the district with the highest adjusted property value (District C) receives the least state aid. Table 6 provides a comparison of the districts with respect to state and local contributions to educational finance. In this hypothetical example since all

^{8/} The appropriations for the 1980 and 1981 fiscal years were \$637,540,900 and \$653,680,100 respectively.

three districts tax at the same rate (28 mills) and have equal total revenue per pupil for education, the system is said to be fiscally neutral.

Table 6

Adjusted property values, local tax effort, local revenue, state revenue, percent of state aid, percent of local aid, and total educational revenue for Districts A, B, and C.

	<u>District A</u>	<u>District B</u>	<u>District C</u>
Adjusted Valuation	\$7,500,000	\$15,000,000	\$30,000,000
Local Property Tax Effort	28 mills	28 mills	28 mills
Local Revenue Contributions	\$210,000	\$420,000	\$840,000
State Aid Contributions	\$885,000	\$675,000	\$255,000
Percent State Aid	80.8	61.6	23.3
Percent Local Revenue	19.2	38.4	76.7
Total Revenue Available	\$1,095,000	\$1,095,000	\$1,095,000

Source: (Minnesota House of Representatives Education Committee, example 3.)

However, districts are allowed to tax above the set rate. The difference between the minimum and the actual tax rate is called "local leeway" and it plays an integral part of the program's rationale. It is argued that local option encourages innovation and change by the districts to improve the educational system (Boroson, *et al.*, p. IV-3). Local leeway is not estimated by the funding formula. In other words, the minimum tax rate, not the actual higher tax rate, is used to calculate the state's portion of educational aid. If District C raises its tax rate to 35 mills its total revenue increases to \$1,305,000 with the same amount of state aid, \$255,000, but local revenue increases from \$840,000 to \$1,050,000. This provision allows districts to have some flexibility in deciding the level of revenue to raise for education. In fact, in Minnesota, districts are allowed to set their tax rates as high as they desire via the referendum levy which will be described later in this paper.

Pupil Units

The type of pupil units within the district is important for determining the level of aid the district will receive. There are four types of pupil units defined by the state legislature: (1) Weighted Average Daily Membership (WADM) pupil units, (2) support pupil units, (3) fast growth pupil units, and (4) AFDC pupil units. Table 7 provides a breakdown of pupil units by category for the 1979-80 school year. The weighted ADM pupil units comprised 90.3 percent of all pupil units, while the remaining three accounted for 9.7 percent of the total units.

Table 7

Category of pupil units and their respective percentages.

Type of Pupil Unit	Number of Pupil Units	Percentage of Pupil Units
Weighted Average Daily Membership	906,214	90.3
Support	53,741	5.4
Fast Growth	816	0.1
AFDC	<u>42,425</u>	<u>4.2</u>
Total	1,003,196	100.00

Source: (Minnesota Department of Education, p. 12)

The weighted ADM pupil units are based on the average number of students in membership during the entire school year. The weights vary with respect to the grade category the pupil units are in. However, the weights are equal for each pupil within a certain grade category. The grade levels are divided into three categories which are: (1) kindergarten (half day) with each pupil unit receiving a weight of 0.5; (2) elementary (grades 1-6) with each pupil unit receiving a weight of 1.0; (3) secondary (grades 7-12) with each pupil unit receiving a weight of 1.4.

Support pupil units are extra units that are provided to districts if their ADM has declined from the previous year. The rationale for support pupil units is based on the fact that decreases in costs do not follow decreases in enrollments. In other words, a reduction in costs usually lags behind a reduction in ADM. Districts with declining enrollments receive the greater of:

- (1) the average of the past four year enrollments (the fourth year being the current year) minus the current year enrollment; or
- (2) 60 percent of the net decline in pupil units from the past to the current school year.

For example, if a district had 1,850 pupil units for the 1977-78 school year, 1,800 pupil units in the 1978-79 school year, 1,700 pupil units in the 1979-80 school year, and 1,600 pupil units in the 1980-81 school year, it would receive support units equal to the greater of:

$$(1) \frac{1,850 + 1,800 + 1,700 + 1,600}{4} - 1,600 = 137.5$$

or

$$(2) 0.6 \times (1,700 - 1,600) = 60$$

In this example the district would receive an extra 137.5 pupil units for the calculation of state aid.

Fast growth pupil units are provided for districts experiencing rapid growth in enrollment. These extra units are provided so that the increased costs associated with a higher enrollment are accounted for. A fast growth district will receive the following additional pupil units if its ADM increases by at least two percent from the previous year:

<u>Percent Increase in ADM Units</u>	<u>Fast Growth Units per Increased Units</u>
Equal to 2.0%	0.2
Greater than 2.0% but less than 3.0%	0.3
Greater than 3.0% but less than 4.0%	0.4
Greater than 4.0%	0.5

Source: (Mueller, et al., p. 10.)

AFDC pupil units are provided because it is argued that there are higher costs involved with educating disadvantaged students. For each AFDC student the district receives an additional 0.5 pupil unit. This is sometimes called "Regular" AFDC adjustment in pupil units. In addition, districts that have a concentration of AFDC pupils which exceeds six percent of their total enrollment receive 0.1 pupil unit per AFDC student extra for each percent of concentration greater than 5 percent with a maximum limit of 0.6 extra pupil units. This is sometimes called AFDC "concentration" adjustment in pupil units. The maximum limit is 1.1 additional pupil units per AFDC pupil when a district has a concentration greater than 11 percent. This is summarized in Table 8. Assume that a district has 500 pupils and 50 are AFDC pupils.

Table 8

Additional pupil units allotted to districts for "Regular" and "Concentration" AFDC pupil unit adjustment.

AFDC	Additional Pupil Units That Districts Receive For Regular and Concentration AFDC
<u>Regular AFDC Adjustment</u>	
Districts with N amount of AFDC pupils receive	N times 0.5 additional pupil units
<u>AFDC Concentration Adjustment</u>	
Districts with a concentration of AFDC pupils:	
greater than 6% but less than 7% receive . . .	0.1 extra pupil units per AFDC pupil in addition to their "regular" AFDC adjustment
greater than 7% but less than 8% receive . . .	0.2 extra pupil units
greater than 8% but less than 9% receive . . .	0.3 extra pupil units
greater than 9% but less than 10% receive . . .	0.4 extra pupil units
greater than 10% but less than 11% receive . . .	0.5 extra pupil units
greater than 11% receive	0.6 extra pupil units

The district would receive 50 times 0.5 or 25 additional pupil units for the regular AFDC adjustment. Also, since the concentration of AFDC pupils is 10 percent, the district receives 0.5 extra pupil units per AFDC pupil. In total, the district has $500 + 25 + (0.5 \times 25)$ or 537.5 pupil units.

Total pupil units are the sum of all four categories of adjustments. This pupil measure is used in the foundation aid formula to compute state aid to districts. The district's total educational revenue is equal to the total pupil units times the foundation level (sometimes called the formula allowance).

Additional Levies

The basic maintenance revenue is equal to the sum of the basic maintenance levy and the foundation aid. Each district participating in the program would have equal revenue per pupil unit if this was the only levy allowed. However, as Donald I. Pryor points out, complete equalization of revenue per pupil was politically infeasible in Minnesota. In his words:

A reform of the magnitude of the 1971 Act could not be applied uniformly over all the state's widely divergent school districts without causing major disruptions. To bring about complete dollar equalization at the level of the highest expenditure district would have cost beyond the Legislature's ability or willingness to finance. It would also have resulted in very low expenditure districts having resources available beyond their ability to spend within reason ... Adjustments were, therefore, necessary at each end of the expenditure continuum.

These adjustments became provisions in the 1971 Act. The first was directed towards high spending districts. The provision allowed districts that had adjusted maintenance costs (AMC) that exceeded the state average (\$663 per pupil unit) in 1970-71 to levy an additional amount to make up

the difference in costs.^{9/} Thus, if a district had expenditures of \$863 in 1970-71 it could levy enough additional local taxes each year to provide the \$200 per pupil unit difference. This excess or "grandfather" levy provides high spending districts additional revenue per pupil unit above the foundation level. The grandfather levy was basically a concession to the high spending districts because they felt most constrained by the Omnibus Act (Pryor, p. 9).

The second provision was directed toward low spending districts. The provision allowed districts that had AMC below \$663 a period of time to increase their revenue level. In 1973-74, these districts were granted additional foundation aid equal to $\frac{1}{6}$ of the difference between their spending level and the statewide median per pupil expenditure level for that year. Each succeeding year an additional $\frac{1}{6}$ of the difference is added to the foundation aid so that by the end of the sixth year these low spending districts will have approximately the same expenditure level as the state median (Pryor, pp. 9-10).

In addition to these two provisions there are a number of other optional levies that districts may qualify for. In 1979 payable 1980, districts may qualify for a discretionary levy if the following conditions exist: 1) the district has levied its maximum basic maintenance referendum, grandfather, and replacement levies; and 2) after proposing the discretionary levy it is not reversed by a referendum sought by 5 percent of the voters. Districts that are "off the formula" (i.e., do not participate in the foundation aid program) are authorized to levy \$27.50 per actual and AFDC pupil unit for 1979 payable 1980 and 0.001 of the equalizing factor per

^{9/} In 1970-71 182 out of 436 school districts had AMC greater than \$663 per pupil unit.

pupil unit in subsequent years.^{10/} Districts participating in the program are allowed to levy one-half mill in 1979 payable 1980 and one mill in subsequent years. In order to ensure that all districts receive the same amount of revenue per pupil unit from the discretionary levy, the state will pay districts the difference between their authorized levy and the amount raised by the additional mills levied. If a district decides to reduce its discretionary levy it may only reduce it by one-half mill each year (Hopeman, p. 12).

Another optional levy is the referendum levy. If a majority of voters decide in a special election to authorize a permanent increase in the maintenance levy it may do so. However, the authorized increase may be subject to a specified number of years and may be revoked by another special election (Hopeman, p. 13). One interesting feature of the referendum levy is that it is not equalized. Consequently, there is an incentive for the more affluent districts to authorize such levies while there is less of an incentive for poorer districts to do so because rich districts are able to raise more revenue for a given tax rate than less affluent districts.^{11/}

Categorical State Aids

In addition to the foundation aid program, Minnesota distributes state revenue to school districts to support specific programs and services. The programs that account for the majority of the categorical aids in

^{10/} The equalizing factor is the maximum amount of adjusted assessed valuation per pupil unit that a district may have without going "off the formula". If a district's adjusted assessed valuation per pupil unit was equal to the equalizing factor, the district would raise all the educational revenue itself and would receive no state aid.

^{11/} There are a number of additional levies that will not be discussed in this paper. For a general description of these levies, see Hopeman, pages 11-14.

Minnesota are pupil transportation, special education, secondary vocational education, and post secondary vocational education. The state also provides aids to school districts for adult continuing education, emergency aid, school lunch aid, community education, Council on Quality Education, and several other miscellaneous aids (Mueller, et al., p. 11). The four major categorical aids will be discussed.

Pupil Transportation Aid

School boards must provide transportation or board and lodging for all pupils living two or more miles from school. In addition, school boards are required to provide equal transportation for children in non-public schools. Transportation aid for each district is computed using statistical methods (i.e., linear regression). The independent variables used to predict the actual cost of transportation include: the number of full time equivalent pupils (FTE) transported in the district, the square miles of the district, average daily membership, and bus depreciation (Hopeman, p. 38). The formula is used to find the predicted cost per FTE for each district for the second prior school year. The amount determined is then inflated by 17 percent and is used to determine the district's aid entitlement for the current year. If the aid entitlement is greater than the district's actual expenditure per FTE, then the aid entitlement per FTE equals the predicted cost minus:

- 1) 10 percent of the first \$10 of the difference between predicted and current actual expenditure;
- 2) 20 percent of the next \$20, and
- 3) 40 percent of the next \$20, and
- 4) 60 percent of the next \$20, and
- 5) 75 percent of the difference which exceeds \$100 (Hopeman, p. 39).

If the aid entitlement is less than the district's actual expenditure per FTE, then its aid entitlement per FTE equals the predicted cost plus the same percentages of the difference between the actual and predicted expenditures listed above. The state pays to each school district the aid entitlement per FTE times the number of FTE's transported that year minus one mill times EARC valuation.

Special Education Aid

Local school districts are required by law to provide special instruction and services for handicapped pupils (ages 4-21). These special services are provided for pupils who are speech impaired, mentally retarded, physically handicapped, emotionally disturbed, hearing and vision impaired, learning disabled, and pupils with behavioral problems (Mueller, et al., p. 11). In addition, districts must provide special education to children enrolled in non-public schools on a shared time basis. Of the total costs involved with special education, the state pays the following:

- 1) the greater of:
 - a) 69% of the salaries of essential special education personnel, up to a maximum of \$12,000 per full time person, plus 5% of the salaries of essential personnel to recognize the indirect costs of special education; or
 - b) 70% of the salaries of essential special education personnel.
- 2) 50% of expenditures for special supplies and equipment for educating handicapped children, up to \$50 per child served;
- 3) 60% of the difference between the amount of the contract and the foundation aid formula allowance of the district for any pupils provided special education by contract with an agency other than a school district;
- 4) 60% of the difference between the tuition charged home school districts for the education of handicapped children placed in certain kinds of residential facilities, and the foundation aid formula allowance for each child so placed.

- 5) 100% of the cost of educating handicapped children who have no home district because their parents' rights have been terminated or their parent or guardian lives outside the state, less the foundation aid formula allowance and any other aid earned on behalf of such a child (Hopeman, pp. 36-7).

The total appropriations for the 1980 and 1981 fiscal years for special education are \$86,528,350 and \$90,205,700, respectively.

Secondary Vocational Education Aid

School districts are required to organize vocational education programs in compliance with the state board guidelines in order to qualify for aid from the state. Funding for secondary vocational education is used primarily for teacher salaries, necessary travel costs, and necessary equipment for instruction (Mueller, et al., p. 11).

The state pays for 50 percent of the essential licensed personnel salary, 50 percent of necessary equipment, and 50 percent of necessary travel between instructional locations for instructor travel. In addition, the state pays for 40 percent of any services that are bought from another agency that isn't associated with the school district (Minnesota House of Representatives Education Committee, example 12, and Hopeman, p. 33).

Post Secondary Vocational Education Aid

In Minnesota, there are 33 area vocational-technical institutes (AVTI's). The state pays districts the difference computed by the following formula:

$$\text{State aid} = \$2,240 \text{ per FTE} - \left(\begin{array}{l} \text{Amount Raised} \\ \text{by } \$2 \text{ per Day} \\ \text{Tuition} \end{array} + \begin{array}{l} \text{Amount of} \\ \text{Federal} \\ \text{Aid} \end{array} \right)$$

In addition, the state pays the categorical aid for high-cost programs and capital expenditure aid to replace and repair equipment (Minnesota House of Representatives Education Committee, example 14). These aids are distributed by the Department of Education via a public hearing.

Courses in post secondary education are free for students up to age 21. For students that are older than 21, tuition is set at \$2 a day for Minnesota residents and \$5 a day for non-residents (Mueller, et al., p. 12).

Summary

While the intent of this report is to provide the reader with a basic understanding of Minnesota's school finance system, the underlying study was not a detailed and comprehensive analysis of the school finance system. Rather, it focused on the major developments that shaped the program into its present form and examined the primary components of the foundation aid program.

There were three forces that brought about the 1971 reform: failure of the program to keep pace with educational costs, pressure from the judicial branch of Minnesota government, and property taxpayer unrest. The last factor provided the primary impetus for the Omnibus Tax Act.

Since 1971 the major source of educational revenue has shifted from the local property tax to statewide taxes on income and consumption. Modifications have since been made with respect to pupil transportation and special education. However, the basic program, although revised, has remained intact.

Still, with reform after reform, there will always be problems with educational finance. The future of Minnesota's educational finance system will depend upon the people of Minnesota. Innovation is increased when the people are more informed about how the system operates. Hopefully, this study has contributed to a better informed citizenry.

Bibliography of Selected References

- Boroson, Melinda, Richard Coley, Margaret Goertz, Peter Jargowsky, James Lehman, Jay Moskowitz, Jon Narducci, and Judy Sinkin. "School Finance Equalization Management System". Educational Policy Research Institute of Educational Testing Service, Princeton: Educational Testing Service, 1977, 1978.
- Brandl, John W. and Donald P. Diddams. "Property Tax Rebates in Minnesota: A Case Concerning the 1977 Session of the Minnesota House of Representatives". Hubert H. Humphrey Institute of Public Affairs. University of Minnesota, Minneapolis.
- Carruth, Gayden Fisher. Minnesota's Foundation Program: Projected Effects of the Distribution of Selected Maintenance Revenues Upon Fiscal Equity, For Fiscal Years 1980-1983. Published Ph.D. Dissertation, University of Minnesota, 1980.
- Collins, Judith and Marvin Johnson. "Fiscal Equity and School Aid Formulas: The Wisconsin and Minnesota Experiences". North Central Journal of Agricultural Economics. 2(1980), pp. 159-166.
- Hopeman, Alan R. and Barbara M. Diamond. "School Finance in Minnesota". State of Minnesota House of Representatives Research Department, St. Paul, 1980.
- Johns, Roe L. and Edgar L. Morphet. The Economics and Financing of Education: A Systems Approach. Englewood Cliffs: Prentice Hall, 1975.
- Mazzoni, Tim L., Jr. "State Policy Making for the Public Schools of Minnesota". Prepared for the Educational Governance Project, Columbus: Ohio State University, 1974.
- Minnesota House of Representatives Education Committee. "Financing Education: Minnesota 1978-97". St. Paul, 1978.
- Minnesota Department of Education. "The ABC's of Minnesota School Finance: Paying for the Public Schools in 1979-80 and 1980-81". St. Paul, 1980.
- Mueller, Van D., Michael J. Lovett, and Gary P. Farland. "Paying for the Public Schools: The ABC's of Minnesota School Finance". Minnesota State Department of Education, St. Paul, 1978.
- Pryor, Donald I. The Effects of Selected Variables on the Resource Allocations of Minnesota School Districts for the Period 1969-70 Through 1975-76. Unpublished Ph.D. Dissertation, University of Minnesota, 1977.