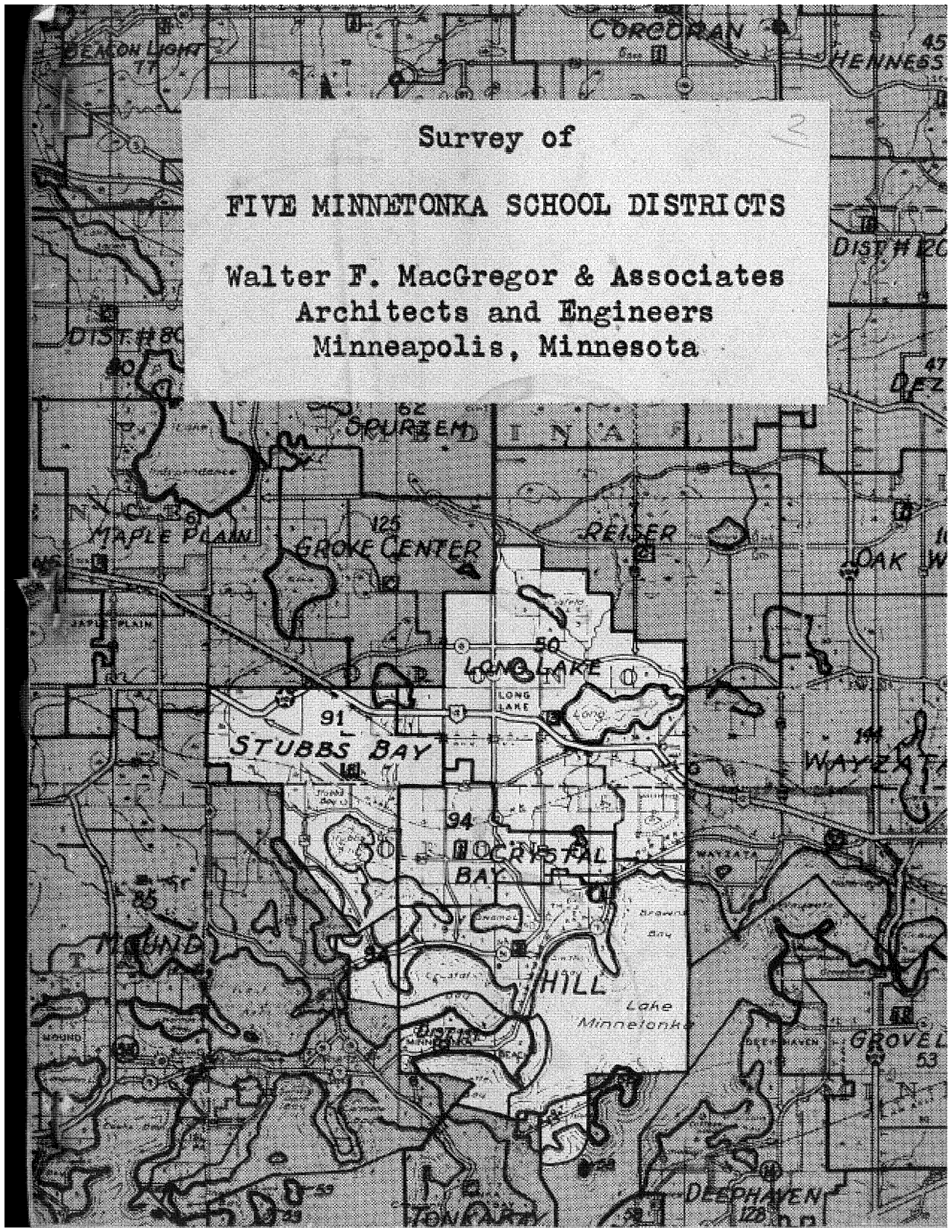


Survey of

FIVE MINNETONKA SCHOOL DISTRICTS

Walter F. MacGregor & Associates
Architects and Engineers
Minneapolis, Minnesota

SURVEY OF

FIVE MINNETONKA SCHOOL DISTRICTS

Members of School Boards
Authorizing this Survey:

Long Lake, No. 50

Clyde S. Robb - Chairman
E. B. Walsh - Treasurer
Mrs. Rowena D. Johnson - Clerk

Stubbs Bay, No. 91

Herbert R. Ross - Chairman
Vernon F. Hehl - Treasurer
Vernon W. Lund - Clerk

Upper Crystal Bay, No. 94

Glen Baker - Chairman
John Ferrin - Treasurer
Charles A. Stiles - Clerk

Minnetonka Beach, No. 137

William E. Butler - Chairman
Mrs. Ethel G. Beckwith - Treasurer
Carroll R. Anderson - Clerk

Hill

Sherman A. Brooks - Chairman
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Emory H. White - Clerk

November, 1947

Prepared By

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THE FIVE DISTRICT SCHOOL BUILDINGS



Hill School



Stubbs Bay



Upper Crystal Bay



Minnetonka Beach



Long Lake

INTRODUCTION

This survey was made for a group of five school districts located on the north shore of Lake Minnetonka, in a suburban area, twelve miles west of the city limits of Minneapolis. They are ungraded elementary districts, operating schools of the rural type, with all grades, or several grades, taught in one room. In four of the districts the grade pupils attend the local elementary school, while the high school pupils of all the districts are transported in school buses to high schools in other districts. One district has closed its elementary school and transports both elementary and high school pupils.

These districts, which we refer to as the Five Districts throughout this report, have been considering a plan to consolidate into one larger district and build their own secondary school. In the words of the contract authorizing the survey, they "intend to ascertain the advisability of erecting a Junior-Senior High School somewhere within the bounds of the Five School Districts". To get the data required as the basic guidance for a decision on this step they commissioned the firm of Walter F. MacGregor and Associates, Architects and Engineers, 1108 Nicollet Avenue, Minneapolis, Minnesota, to make this survey:

Scope and Limitations of the Survey

This survey aims to give the facts related to certain general questions, such as:

1. What type of educational program do the people of the Five Districts desire?

2. Should they continue their present educational systems, or should they consolidate among themselves, or with other districts?

3. How much money do the citizens wish to spend on their educational program, and how much do they think they can spend?

On such matters the factual material contained in this report is submitted only as a starting point for community discussion and decision.

Educational Questions

1. How many pupils of the Junior-Senior grades (grades 7 through 12) are now in the Five Districts? How many will there be in the future, considering the fact that a building must be planned to provide for adequate space for some years ahead?

2. Would there be enough pupils to justify the construction of a good Junior-Senior high school?

3. What type of educational program should the Five Districts offer?

4. How many elementary pupils (kindergarten through 6th grade) are in the Five Districts, and how many will there be in the future?

5. Can the districts continue to educate them in the present elementary buildings? Would it be good educational policy to do so?

6. What type of elementary schooling should the Five Districts contemplate as an educational goal?

7. If the Five Districts should not continue their present elementary program permanently, would they be wise to keep it up temporarily? That is, should they try to use their present elementary buildings for a few years, to spread out their building program?

8. What plans should be made to link the school program with the community? How can the school program be strengthened?

ened by close ties with the varied life of this interesting lakeshore suburban area? How can the community be enriched by the school, in service as a center for community activities, for adult education, etc.?

9. Can the Five Districts keep on as in the past, transporting their high school pupils to other districts, and would this be good policy?

10. Should the districts merge with existing high and graded school districts nearby, instead of joining together and setting up a new school district? Would this provide the best education for the pupils, at the standard of cost which the districts might be willing to pay?

Financial Questions

1. What can the districts afford? As taxing units, what is their ability to pay for education?

2. How much would it cost them to build and run a Junior-Senior high school? What tax rate would they have to pay to meet the bill?

3. Do adjacent districts have room in their buildings to continue to give instructions to the pupils of the Five Districts? Or would the adjacent districts have to build new facilities in case the Five Districts consolidated with them, and how much would this cost?

4. What is the legal bonded debt limit of the Five Districts? How large a bond issue could they float to finance a building? Would it be wise to float bonds up to their limit?

5. How much financial aid would be paid by the State to the Five Districts under the new state aid law (Laws of 1947 - Chapter 633) now going into effect? How would this affect their tax rate?

6. Would it cost the Five Districts less in taxes, or more, to merge with existing districts instead of setting up as a new district?

7. If the Five Districts do build, what good sites are available?

SECTION I

THE COMMUNITY

Location

West of Minneapolis lies Lake Minnetonka, about ten miles long, with many bays and inlets. It has 133 miles of shore line. The Five Districts covered in this survey make up the central portion of the north shore of the lake.

Development as Suburb

Minnetonka has long been a famous resort and summer home area. About ten years ago, approximately in 1937, Minnetonka began a different development as a Minneapolis suburban area considered suitable and desirable for year around residence. Besides the attractions of the lake, the Minnetonka section is as close to the city in driving time as some built-up suburbs closer to town, because highways reach the lake without a long drive through city traffic.

War Set-Back

After 1937 the lake area, which had enjoyed a fairly steady growth before, began to increase in population at a faster rate. However, within a few years the war period slowed the growth. Gas rationing and prohibition of residential building blocked normal development of suburban residences. Many tracts bought in recent years are still lying idle, and will be built on as soon as the owners find it possible to proceed with their construction plans.

Even these serious handicaps did not halt the movement of population to the lake area. Families bought summer cottages, insulated and otherwise winterized them for year around residence, moved in, and enrolled their children in school.

Present Handicaps and Trend

Up to the present time, two years after the war, serious difficulties in the way of residential building have continued. This means that the real growth of the lake as a suburban area still lies ahead. The past and present rates of growth, alone, indicate that the area must plan on serving a much larger population in years to come. But the figures on the rate of growth, appearing on page 18 can be taken only as minimums. They cover the experience of the section during a period when it was held back. A much larger potential growth exists.

Local Industry

Some development of Minnetonka industry is a possibility, and should be mentioned. During the past year, for example, the J. R. Clark woodenware manufacturing company has bought a factory in Spring Park, a village in the Mound district about a mile from the borders of the Five Districts. They are now enlarging it, and plan to operate with about 400 employees. The present trend of manufacturing indicates a movement away from large centers of population and into rural areas.

Type of Community

The Five District community today contains a wide range of types. It has some large estates owned by wealthy people with costly homes and landscaped lawns. There are many summer homes or year around homes on lake shore frontage, ranging from simple summer cottages to elaborate establishments. There are village homes and stores; and farm acreages, with homes ranging from large to modest, on tracts of fifty acres or more, ranging down to ten, five or three acre suburban plots.

In the main, the Minnetonka lake residents are suburban dwellers, working in the city of Minneapolis. Some work in local village stores or garages and others make their entire living from farming.

Future Growth

Future growth can be expected in two types of homes. A certain amount of lake shore frontage is still available. The larger demand today according to real estate men, is for small acreages in the territory somewhat removed from the lake. These are bought by city people who want a home in the country with ample space around it. Real estate men expect the main growth to come as large holdings are broken up into ten and five acre plots for suburban dwellings.

Such development already has proceeded on the eastern end of the lake. It has just begun to move on to the next section, the central part of the north shore, the area of the Five Districts. This condition has over-crowded the schools already and requires the Five Districts to plan for an even greater school load in the future.

A BRIEF DESCRIPTION OF THE SEPARATE DISTRICTS

All these districts are in Hennepin County, Minnesota, and are controlled by school boards elected by the voters of the districts. They are under the general supervision of the Hennepin County Superintendent of Schools.

In numerical order by their school district numbers they may be described as follows:

Long Lake, No. 50

This district contains the village of Long Lake, with a population of 260 in 1940, the largest community in the Five Districts. It has a large area of farm acreage, a small part of which has been divided into residential plots. It has some lake property on Long Lake, none on Minnetonka.

The northern half of the district, north of the Village of Long Lake, con-

tains a larger proportion of estates, and plots here have been purchased recently for first class residences. This northern section is served by the Olson Highway or Sixth Avenue North, which offers a convenient route from Minneapolis. The Long Lake school, located in the village, consists of four rooms, with a kindergarten in the basement. For the kindergarten the state pays no aid, as it does not recognize kindergartens in ungraded elementary districts.

Stubbs Bay, No. 91

This district contains shore property on Stubbs Bay of Lake Minnetonka and is only partially built up at present, with a substantial area of rolling acreage territory. It has a two room school for the elementary pupils, and transports the high school students to other school districts.

Upper Crystal Bay, No. 94

This district, with a small amount of lake shore, is made up mainly of the typical acreage area removed from the lake. This is rolling land, wooded hills and grassy clearings, occupied generally in small farm acreages. Upper Crystal Bay operates a one room elementary school and transports the high school students.

Minnetonka Beach, No. 137

This school district comprises all of the Village of Minnetonka Beach, with a population if 1940 of 239. This compares with 112 population in 1930 and 94 in 1920. It is almost entirely lake front property and is largely built up in year around homes, some of them elaborate, or in summer homes and cottages. A few lots are still open for building, and some summer places may be winterized, but in the main, Minnetonka Beach is an established community and is not likely to have any dramatic future growth, as restrictions prevent the breaking up of existing properties into small lots. The district has closed its school building, and transports all pupils, elementary and high, to other districts.

Hill District (No Number)

Hill District has a considerable lake shore line, not filled as solidly as Minnetonka Beach, and it also includes some of the area removed from the lake, containing estates and farm acreages. The district operates the two room Hill School in the Village of Crystal Bay, for elementary pupils, and transports high school students.

SECTION II

SYNOPSIS

This synopsis is planned to give a convenient short report of the findings, leaving out all supporting data. The synopsis should not be interpreted or used as a full statement. The main body of the report will cover the same material in detailed calculations, showing the source of the figures, and how they were used in arriving at the conclusions of this report.

The gist of the findings can be summed up under a few headings:

1. A school program is necessary. The districts would not want to go on indefinitely with ungraded elementary schools, teaching all grades in one room. The present buildings can be used for a few years, but they are not large enough to handle the present enrollment. The districts cannot expect to go on indefinitely sending high school pupils outside the district, because they are a growing expense to the other districts, which do not have to take them. Every year more districts are refusing to accept non-resident high school pupils.

It follows that these Five Districts sooner or later will want to set up their own graded elementary and high school district, or consolidate with an existing one.

2. Educationally, a school district is practical. The Five Districts have enough pupils for a graded elementary and high school district, and they can expect that their area will increase still further in population.

3. Financially, a separate school district would be lowest in taxes. It would cost the Five Districts less in taxes to build and operate their own schools than to merge with either of the two adjoining districts.

Three possibilities are being considered:

(1) A separate Five District group.
(2) Consolidation with Wayzata, or
(3) Consolidation with Mound.

At equal rates of expenditure the three possibilities compare in total school tax, with a full building program:

Five Districts alone..... 63.62 Mills

Wayzata plus Five Districts. ~~84.54~~ 74.94 Mills

Mound plus Five Districts...92.86 Mills

(Wayzata's present rate of expenditure for total maintenance, including instruction, was assumed for all three possibilities in reaching the estimates above.)

School Population

The Five Districts today have enough elementary pupils for a good elementary school, large enough for economical operation. They have enough secondary pupils for a good Junior-Senior high, rather small in size. For the present it would have more overhead cost in proportion than a larger secondary school, and a slightly higher expense per pupil.

In the future, with growth in population, they can expect a secondary school enrollment of economical size.

At present, the enrollment in a Five District consolidation would be:

About the same as Deephaven.
About half as much as Wayzata.
About a third as much as Mound.

Building Cost

We recommend that the Five Districts do not try to carry out a full building program at one time. They should spread out their construction program.

However, in comparing the cost of a separate Five District consolidation versus consolidation with Wayzata or Mound, it makes no difference whether we compare a partial or a complete building program.

We have used a high formula for building cost, to be on the safe side.

If the Five Districts built a full elementary and Junior-Senior High school plant, they would have the following tax for bonds and interest:

Five District Debt
Levy for Construction..... 30.45 Mills

In consolidation with Wayzata or Mound, the levies for bonds and interest would be:

Wayzata with Five Districts, Debt Levy for Construction..... ~~33.88~~ 30.29 Mills

Mound with Five Districts, Debt Levy for Construction..... 35.48 Mills

(The above estimates cover only the levies that the Five Districts would pay. In a consolidation they would not take over any bonded debt already existing in another district. That debt would remain a charge against the area that contracted it.

Operation Cost, or Total Maintenance

This would depend on how much the Five Districts want to pay for teachers and educational costs.

The voters of the Five Districts can form an estimate from the maintenance expenditure rates of three districts nearby. We have left out transportation expense, because it is not included with educational maintenance, in the state aid formula, and is almost fully compensated by a special transportation aid from the state.

Except for transportation, this figure covers all operating expenses, for teachers and janitors salaries, administration, text books, fuel, everything but capital outlay and debt service.

Maintenance Expenditure - 1946-47

Wayzata.....$152.86 per pupil unit

Mound.....115.70 per pupil unit

Deephaven.....137.82 per pupil unit

(Dollars spent per pupil unit in school, including both residents and non-residents.)

Consolidation With Wayzata

If the Five Districts ran their own schools at the Wayzata expenditure rate, $152.86 per pupil unit, they would have the following tax:

Five District Maintenance Tax at $153.86 per Pupil Unit..... 33.17 Mills

Five District Debt
Levy for Construction..... 30.45 Mills

Total, Five Districts..... 63.62 Mills

If the Five Districts consolidated with Wayzata, the tax would be:

Wayzata-Five District Maintenance Tax at $152.86 per Pupil Unit..... ~~50.66~~ 46.65 Mills

Wayzata-Five District Debt Levy..... ~~33.88~~ 30.29 Mills

Total - Wayzata - Five Districts..... ~~84.54~~ 76.94 Mills

Reason For Lower Taxes In Five Districts

It appears that the same standard of maintenance expenditure would cost the Five Districts 50% more in taxes in this consolidation than it would in a separate district. There is less increase in bond levy because Wayzata already has a large part of its plant built.

The reason for the lower tax appears in the valuation figures of the districts. This covers total taxable real and personal property, held by all property owners in the districts:

	Percent of Total
Five District Valuation - $1,225,060.....	45.3 ~~50.6%~~
Wayzata Valuation - $1,481,716 ~~$1,195,265~~.....	54.7 ~~49.4%~~
Total Wayzata-Five Districts - $2,706,776 ~~$2,420,325~~...	100%

In resident pupil units (figured according to the state law) the districts have:

	Percent of Total
Five District Res. Pupil Units - 395	32.2%
Wayzata Res. Pupil Units - 832.7	67.7%
Total, Wayzata-Five Districts - 1227.7	100%

Inspection of these figures shows that the Five Districts would have about one-half the valuation and about one-third of the pupils in such a consolidation. Since they have half the valuation they would pay half the tax bill.

It is possible to predict the outcome of detailed calculations from these figures alone. A district with high property valuation per pupil always has an advantage in paying for education.

If they operated as a separate group, the Five Districts would pay the whole maintenance expense on about 400 pupil units, in round figures.

In consolidation with Wayzata they would pay half the expense on about 1200 pupil units; that equals the whole expense on 600 units. 600 is 50% more than 400. Thus it could be expected that the maintenance tax would be 50% higher in the consolidation.

In practice this is modified, in some cases, by the state aid law. The above mill rate estimates were calculated on the state aid formula, and produce almost the same result in this case.

Economy of Operation

The Five Districts now have about the same enrollment that Deephaven serves. It must be recognized that the Five Districts would have a smaller enrollment than Wayzata for some years to come, until their population increases substantially. They would lose some of the economies of large scale schooling; they would have to spend more dollars per pupil to provide equal educational service. This would cancel out a part of their advantage in high property valuation, but only a part.

Consolidation With Mound

If the Five Districts ran at the Mound expenditure rate, $115.70 per pupil unit, they would have the following tax:

Five District Maintenance Tax at $115.70 per Pupil Unit.....	21.19 Mills
Five District Debt Levy for Construction.....	33.88 Mills
Total, Five Districts	55.07 Mills

If the Five Districts consolidated with Mound, the tax would be:

Mound-Five District Maintenance Tax at $115.70 per Pupil Unit.....	32.25 Mills
Mound-Five District Debt Levy for Construction.....	35.48 Mills
Total, Mound-Five Districts-	67.73 Mills

These calculations show a tax advantage to the Five Districts over a consolidation with other districts.

The Mound consolidation at Mound expense works out as 67.73 mills. That is lower than the figure of 84.54 mills shown for the Wayzata consolidation at Wayzata expense. The lower mill rate for Mound comes entirely from the lower rate of expenditure, and not from a more ample tax base.

If we calculate a Mound-Five District consolidation at the Wayzata expenditure rate of $152.86 per pupil unit, we get:

Mound-Five District
Maintenance Tax at $152.86
per Pupil Unit..... 57.38 Mills

Mound-Five District
Debt Levy for
Construction..... 35.48 Mills

Total, Mound-
Five Districts at Wayzata
Expenditure Rate..... 92.86 Mills

SHOULD THE FIVE DISTRICTS CONTINUE THEIR PRESENT SCHOOL PROGRAM

In general, high school districts throughout the state are turning toward a policy of refusing to take non-resident pupils. Non-residents have become expensive. The main body of the report shows that Wayzata, for example, has to contribute over $60 a pupil, in maintenance alone, to educate each non-resident high school student. Today, as schools become crowded, districts do not choose to bond themselves to build extra space to accommodate non-residents, when the latter contribute nothing toward building cost and only part of their maintenance cost.

This is a general development throughout the state, and in this area. Some nearby districts have given notice that they will not have room for some of the high school pupils from the Five Districts next fall.

Expense of Present Plan

The Five Districts today are running ungraded elementary schools, and no high school, but they do not have a low cost school system. Their tax levies last year compare as follows with the districts nearby, in dollars per resident pupil unit.

For Total Maintenance
Tax Per Resident Pupil Unit

Five Districts
Combined..... $111.44 per pupil unit

Wayzata..... ~~85.91~~ 76.82 per pupil unit

Mound..... 92.79 per pupil unit

Deephaven.....130.59 per pupil unit

For Capital Outlay,
Bonds and Interest
Per Resident Pupil Unit

Five Districts
Combined..... Nothing

Wayzata ~~$16.35~~ 24.24 per pupil unit

Mound 22.42 per pupil unit

Deephaven 55.02 per pupil unit

Total School Tax
(Total of Two Tables Above)
Per Resident Pupil Unit

Five Districts
Combined.....$111.14 per pupil unit

Wayzata..... ~~82.26~~ 101.06 per pupil unit

Mound..... 115.21 per pupil unit

Deephaven..... 185.60 per pupil unit

The Five Districts levy more dollars per pupil than Wayzata; about the same as Mound; less than Deephaven. Their rural ungraded system is not low in cost. They have the lowest school tax in mills, because of a good tax base, not because of an inexpensive system.

The taxes shown per resident pupil unit illustrate the cost of non-resident pupils.

Deephaven does not spend the most money per pupil-unit in school, including both residents and non-residents. (See earlier paragraph on Maintenance Expenditures; Deephaven stands about

midway between Mound and Wayzata). Yet Deephaven collects the highest tax per resident pupil unit. More than half the Deephaven high school pupils are non-residents; this is the highest proportion in any of the districts. Clearly the non-residents do not bring in enough state aid and tuition to cover their full cost. Similarly, Deephaven collects the highest tax per resident pupil unit for construction bonds. In part, this follows from the fact that Deephaven has just floated a bond issue for an addition, while Wayzata and Mound are still in the stage of planning their new construction. But we also must take into account that the whole construction cost falls on resident taxes, while over half the high school facilities are built for non-residents.

New High School Tuition Tax

After this year the Five Districts will pay an additional school tax under the new state aid law, if they do not set up a high school district. This will be county-wide high school tuition tax, which will amount to 9 mills in Hennepin County this year. Districts which maintain their own secondary school are exempt from this tax. The tuition tax does not go directly to the districts taking the pupils, but is spread out county wide.

This 9 mill tax will cost the Five Districts $11,026. For the 121 high school pupils in the Five Districts (as of last year) this will amount to $91 per pupil. Without a high school the Five Districts will lose the state aid of $50 a pupil unit ($75 per high school pupil) for these same students.

Thus the Five Districts would be paying about $166 per high school pupil ($91 plus $75) without a high school.

This would be the case even if satisfactory arrangements could be made with some district which had room for the pupils as non-residents, as in the past.

To this must be added the fact that the Five Districts now pay a high price per pupil for an ungraded elementary system, and the further fact that their elementary schools now are overcrowded, some are obsolete, and they will need to do some building in the future in any case.

These facts bear out the opinion of the Five District citizens that they need a school program for the near future.

Area for Consolidation

In view of the fact that we were engaged to make a report for the Five Districts only, we have proceeded with our survey, showing the Five District potentials in all matters, and showing that, with the exception of sufficient land area, the Five Districts can join forces for an economical school system. We have analysed neighboring districts only to estimate their advantage or disadvantage for the Five Districts. If only the Five Districts merged they could operate as does Deephaven, which is not a consolidated district. However, the transportation aid in a consolidated district is a substantial financial benefit. We find it would be to the advantage of the Five Districts to add at least one more district to qualify for consolidated status.

Two districts to the north, Grove Center, No. 125, and Reiser, No. 7, would fit well into a consolidation. These districts, or either one of them, would add enough area. They stand on about the same level as the Five Districts in taxable valuation per pupil. In fact, there would be a slight tax advantage, amounting to a fourth of a mill on maintenance, by including them. (Details on page 22.)

The tables of figures in this report would give approximately the same results if Grove Center and Reiser were included.

Recommendations

The Five Districts now have no high school facilities, and no assured prospect of using high school facilities in other districts. They have an

overflow in their elementary buildings.

We recommend:

That the Five Districts add either Grove Center or Reiser, or both, and form a consolidated district.

That they build only a Junior-Senior High school now.

That they plan the Junior-Senior High for easy expansion, to add rooms for sixth grade students if the elementary overflow becomes more acute.

That they plan to build a separate elementary building, adjoining the high school, at a later time when construction conditions are better.

That they continue to use their present elementary buildings in the meantime.

That they levy a tax for a Building Fund, to accumulate money for the elementary building, thus lowering their eventual bond issue and interest payments.

Cost of Recommended Program

We have used estimates of building cost, which we feel are accurate as of this time. At the high figure, we estimate the tax cost of the above program as follows:

Bonds and interest (For Junior-Senior High School.....	16.1 Mills
Maintenance (of entire school system, elementary and high school).....	33.17Mills
Building Fund (For future elementary building).....	8. Mills
Total School Tax.....	57.27Mills

How to Consolidate

If the Five Districts decide to consolidate, the following steps would be necessary.

1. Obtain the approval of the Hennepin County School Survey Committee, which was established according to the 1947 law. This committee in Hennepin County, as in most other counties, will make a survey during the next two years, looking toward school district reorganization. The committee has been elected by a county-wide meeting of school board members. To prevent interference with the county survey program, the State Board of Education has instructed the State Department of Education to decline to consider applications for consolidation which do not come with the approval of the County Survey Committee in any county which is conducting a survey.

2. Obtain the approval of the State Commissioner of Education. This approval has always been necessary under the law.

3. Call a special election on consolidation, by petition signed by at least 25 percent of the resident freeholders of each districts.

The steps above outline the procedure under the regular consolidation law. If the Five Districts choose to wait until the County School Survey committee has reported, a consolidation would follow a different procedure. Elections will be held without the necessity of a petition in unite where the County Survey Committee recommends reorganization.

SECTION III

LAST YEAR'S SCHOOL LOAD

Table 1 shows the total school population of the Five Districts last year, 1946-47, and gives the detailed figures, by grades, for each district.

Table 1. Enrollment by Grades in Five Districts, June, 1947.

District	Grade 1	2	3	4	5	6	7	8	Total Elem.	9	10	11	12	Total High	Total Grades 1 Thru 12
50 Long Lake 4 Rooms	20	15	15	18	16	13	6	9	112	15	10	14	8	47	159
91 Stubbs Bay 2 Rooms	7	10	6	11	8	1	9	8	60	6	9	1	3	19	79
94 Upper Crystal Bay 1 Room	3	8	7	4	4	6	1	5	38	7	6	6	2	21	59
137 Minnetonka Beach Closed	4	3	5	4	3	2	2	3	26	5	3	3	5	16	42
Hill 2 Rooms	7	10	3	6	6	8	3	3	46	6	6	2	4	18	64
Total, Five Districts	41	46	36	43	37	30	21	28	282	39	34	26	22	121	403

Total, Junior-Senior High Grades (7 through 12) 170

Total, Elementary (1 thru 6) 233

(Source: Hennepin County Superintendent's Annual Report to State Department of Education, and enrollment records of high school districts where students attend.)

Thus, the Five Districts last year had 403 pupils. The figures by grades indicate how the elementary pupils were grouped in rooms. The high school students attended in other districts, as did the elementary pupils from Minnetonka Beach.

If the Five Districts had run a consolidated elementary school and Junior-Senior High School last year, they would have had 233 in elementary grades and 170 in Junior-Senior High.

Or, if the Five Districts had had an eight year elementary and a four year high school last year, they would have had 282 elementary pupils and 121 senior high pupils.

Last year the Five Districts had 51 kindergarten age children on the school census, and this agrees closely with the actual proportion of the school population attending kindergartens in surrounding districts. Adding these 51 as an estimate for kindergarten would give the consolidated Five Districts, a total of 454 school children, from kindergarten through high school.

FUTURE SCHOOL LOAD

This section is based on an analysis of enrollment for the past ten years, from which a prediction of future enrollment was made, grade by grade. The results, given here in condensed form, can be used for estimating the school load of the Five Districts for some years in the future.

These are minimum estimates, since they are based largely on the trend during war and post-war years, when home building was difficult or impossible. The expected trend toward building in this suburban area should give larger enrollments within a few years.

We believe that these minimum figures should be increased by at least fifteen percent to show the likely school enrollment for the next period.

Experience within the next few years will show the actual amount of correction that should be used in applying these predicted trends.

The number of children from zero years (under one year) through five years old is taken from the annual school census. The older children are shown by school grades rather than ages.

Below the age and grade groups we have indicated year of birth, a useful figure for interpreting trends.

Five years ago the school census showed 190 children in the pre-school group, ages 0 through 5. These children were born between the years 1936 and 1940.

By last year, 1946-47, the pre-school group had increased nearly 40%, to a total of 260 children. They were born between 1941 and 1946, and represent the high birth rate of the war years. Throughout the nation, the advance guard of the war babies has reached kindergarten age this year. They will be entering elementary school, class by class, for the next six years. This increased enrollment, already in sight, has created the demand for additional elementary facilities everywhere.

Five years from now, the present pre-school children will be in the elementary grades, and the third portion of the chart shows the resulting increase in elementary enrollment.

The first part of the chart, five years ago, shows a valley in the second and third grades, the children born in 1933 and 1934. These represent the low birth rate of the depression years. By 1946-47, the second part of the chart, that valley stood at the seventh grade, just entering Junior High school grades.

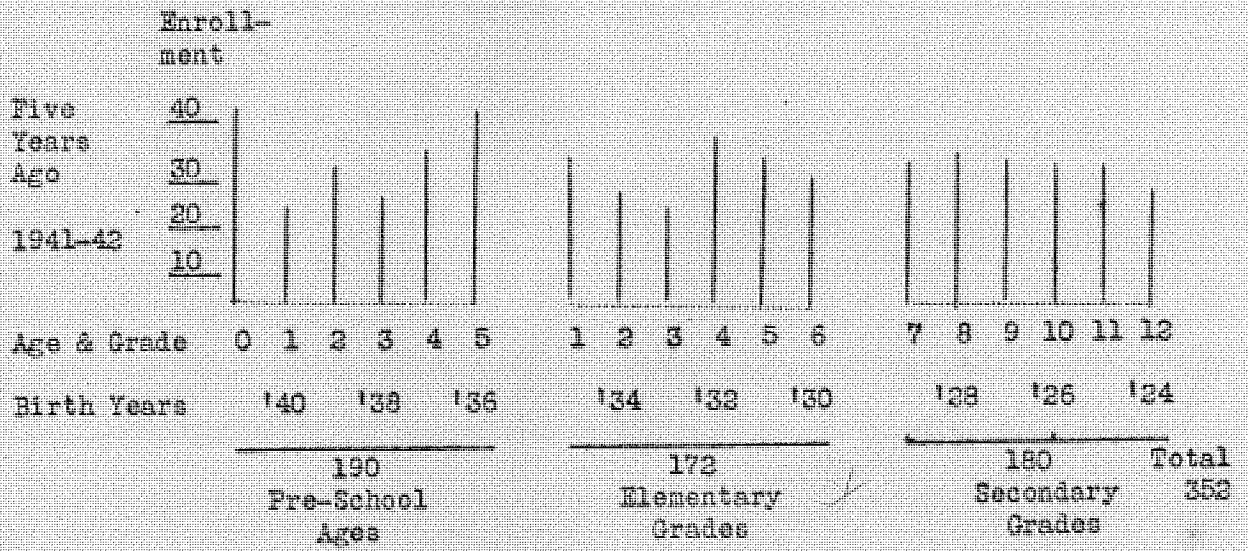
These smaller classes will move through the secondary school during the next five years. The children born in 1934 make up the senior class that will be graduating in 1952, as shown in the third part of the chart.

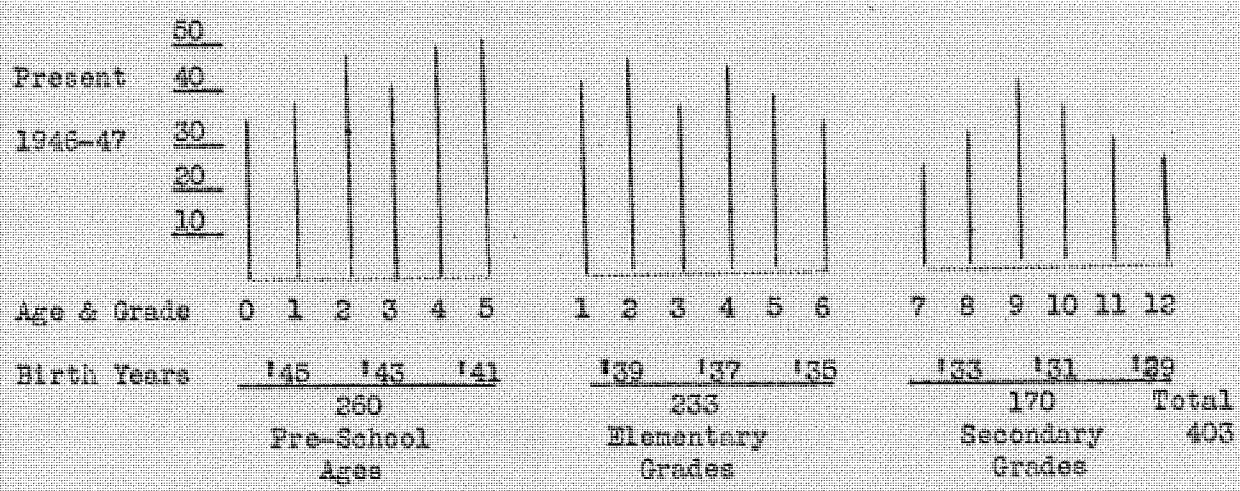
In general, during the next few years the large wartime birth rate will be crowding the elementary schools, while smaller classes from the depression years will be moving into and through the high school grades. That is the national pattern. However, elementary children now in school in the Five Districts will cause a substantial increase in high school load within five years. The main increase will come in the Junior High grades (7th, 8th and 9th). The Senior High grades (10th, 11th, and 12th) will probably go down a little until 1951-52, after which they will begin to grow again.

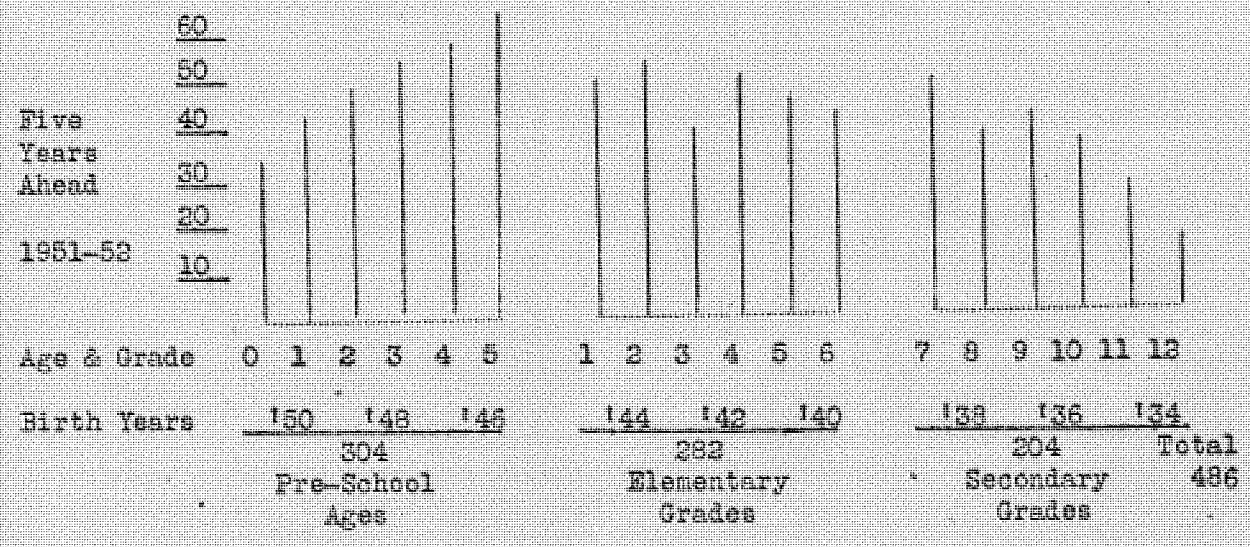
Experts on population trends are advising school administrators that the present high birth rate will continue for some years to come. They base this prediction on the fact that the marriage rate has been unusually high since the war, and high marriage rates are always followed by high birth rates. School systems are planning accordingly.

The table which follows the charts gives annual enrollment figures by school divisions for the past ten years, and the indicated trend for the years ahead.

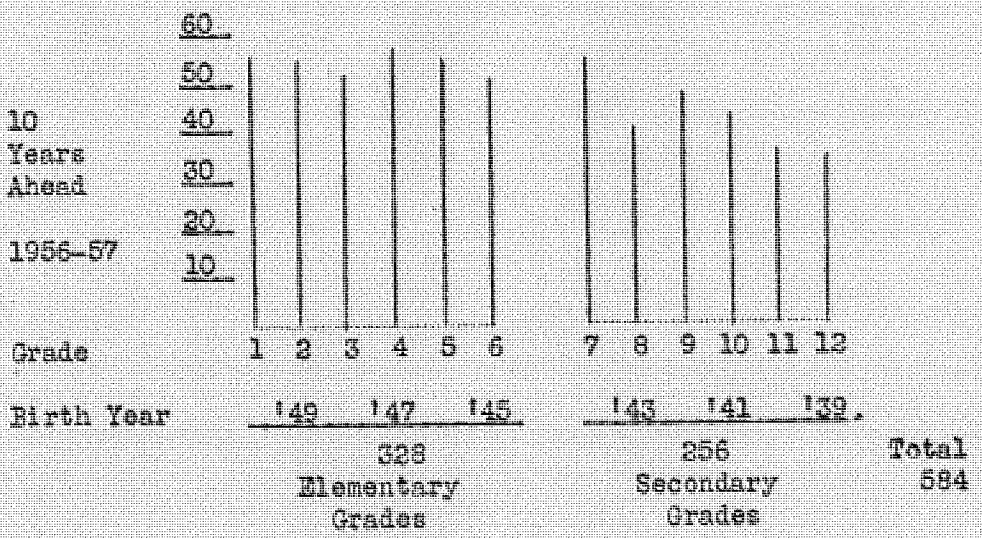
ENROLLMENT FORECAST BY GRADES
Five Year Intervals

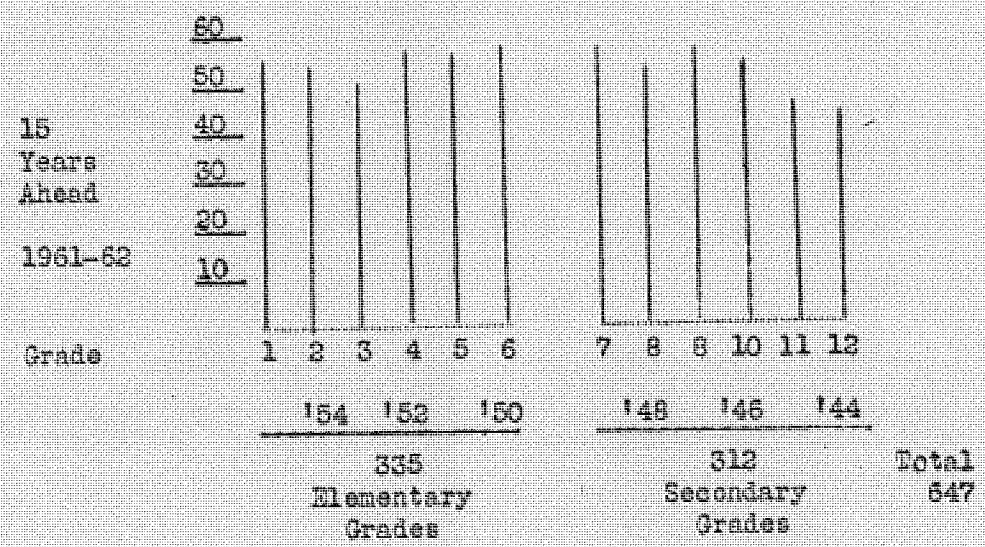






ENROLLMENT FORECAST, CONTINUED





YEARLY TABLE OF ENROLLMENT, 1937-38, THROUGH 1946-47

AND FORECAST AFTER 1946-47, BY GRADE GROUPS

(We recommend that the forecast figures be increased 15% to correct for changed trend in home building, with probable acceleration of population growth in the area.)

Year	Elementary Grades 1-6	Junior High Grades 7-8-9	Senior High Grades 10-11-12	Junior Senior High Grades 7-12	Total Grades 1-12
1937-38	196	92	58	150	346
1938-39	175	93	62	155	330
1939-40	163	93	77	170	333
1940-41	167	100	76	176	343
1941-42	172	96	84	180	352
1942-43	188	85	65	150	338
1943-44	172	83	63	146	318
1944-45	202	94	70	164	366
1945-46	206	99	66	165	371
1946-47	233	88	82	170	403
1947-48	249	79	91	170	419
1948-49	261	87	89	176	437
1949-50	261	108	74	182	443
1950-51	278	117	67	184	462
1951-52	282	129	75	204	486
1952-53	293	139	92	231	514
1953-54	304	135	100	235	539
1954-55	311	135	109	244	555
1955-56	326	135	109	244	570
1956-57	328	144	112	256	584
1957-58	335	147	113	260	595
1958-59	335	164	112	276	611
1959-60	335	166	121	287	622
1960-61	335	171	128	299	634
1961-62	335	171	141	312	647

WHAT TYPE OF SCHOOL SHOULD THE FIVE DISTRICTS BUILD?

This survey is not the place for a complete educational plan. But a general aim is necessary to guide even a financial survey. The educational program plays a large part in building cost. A district can build a school at lowest cost by just putting up rooms to house the pupils, while they listen to the teacher. It costs more to build larger rooms for activity space, for movable desk arrangements, to provide for using motion pictures, phonograph records, and other modern teaching aids.

The Five Districts stand high in the scale in ability to finance education. They are able to afford a superior educational program, and we have made financial estimates with that aim in view.

On the following page we have included some illustrations from Space for Teaching, a book on school planning issued by the Agricultural and Mechanical College of Texas. They show one aspect of the effect of new teaching techniques on the design of schools.

The illustration, "How Curriculum Changes Affect the Classroom" compares the traditional unchanging school room with a modern classroom, which can be re-arranged for work in small groups, for recitations with circular seating, for large activity projects, etc.

The room plans, "Activity Space," show space requirements. Formal desks and chairs take 10 square feet of floor space per pupil; a circle takes 16 square feet per pupil; cots for naps in kindergarten or first grade take 18 square feet per pupil, etc.

The Minnetonka area offers a foundation for school activities far better than many city neighborhoods. A wide program of living classroom projects, school activities, handicrafts, clubs, etc., can start from community life and resources, from nature study, boating, agriculture, and the variety of community resources in this suburban territory.

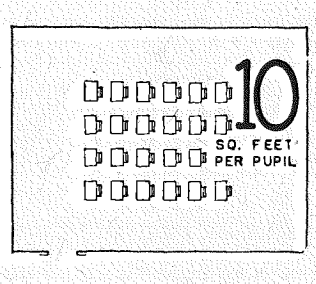
The school should serve as a community center for adult meetings, activities, and adult education. The school auditorium, meeting rooms, motion picture and sound equipment, and kitchens should be planned with this in view.

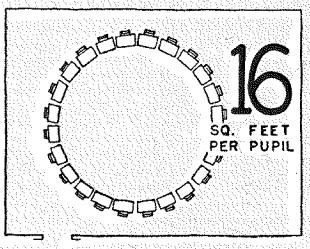
The Junior High school plan has been preferred by educators for many years because they recognize that 7th and 8th graders do not belong in elementary school. They have reached the age when they become more active and aggressive. They benefit by moving ahead in their own group. It is better for the younger children to carry on their own activities and school work, without the older pupils to take the lead away from them.

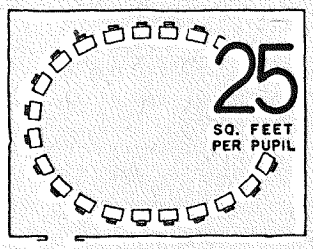
The preferred arrangement for the Five Districts would be one central school site, to which all children could be brought by bus. The area is covered by a network of good roads, and the distances are short enough for good bus transportation.

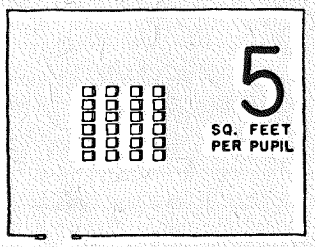
The school site should have two buildings, a Junior-Senior high and an elementary school. The two buildings could be served by the same heating plant, and use some facilities in common, but they should have separate playgrounds.

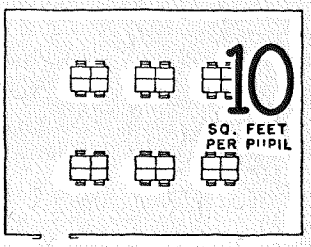
ACTIVITY SPACE

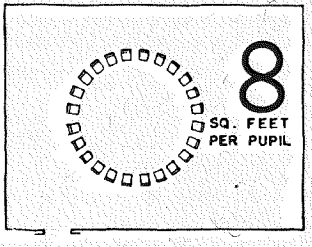




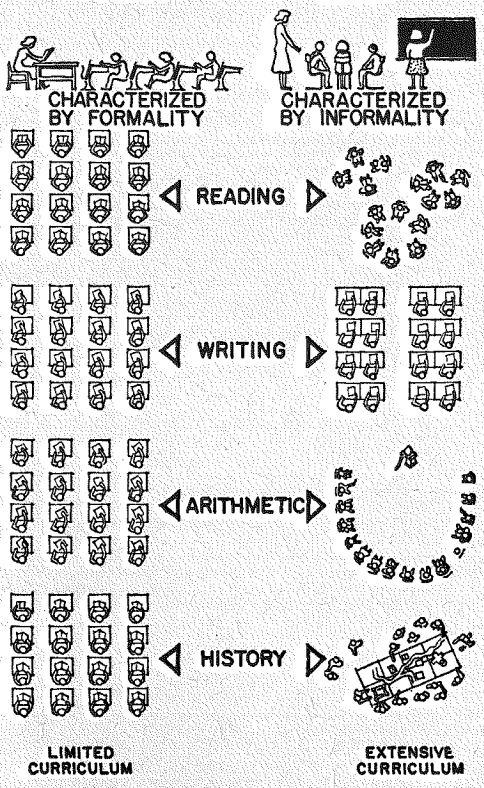




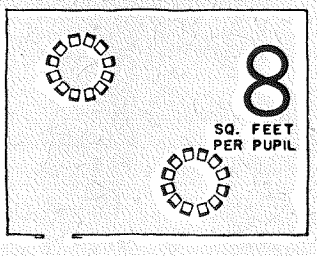


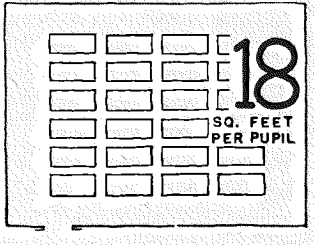


HOW CURRICULUM CHANGES AFFECT THE CLASSROOM



Traditional classrooms with stationary seats cannot be adapted to new teaching techniques. The "activity program" means exactly what the name implies—active children. At times the classroom must be cleared for large projects. At other times the classroom is arranged so that the children may work in small groups.





BUILDING COST ESTIMATES

In this survey we have followed the policy of estimating the highest probable cost of school buildings. A more definite estimate, based on cubic footage, could be made only after preliminary plans were drawn for a specific building.

The first step in the construction of a school building is to have plans and specifications drawn up by an architect. Then the school district advertises for bids from contractors, and gives the contract to the lowest responsible bidder. The amount of the lowest bid governs the cost.

At present bids are running high. The highest bid that we know of in recent times in this area amounted to $1000 per pupil for an elementary building. This was for a rather elaborate elementary school, with gymnasium, auditorium, special facilities, etc. But to be on the safe side we have used $1100 per pupil as our estimate of what contractors' bids might be.

If the Architect draws the plans with due regard for economy, and cuts corners where it can be done without sacrificing educational efficiency or sound construction, it should be possible to build a good school for less than this amount. We do not consider it to be the figure that the building ought to cost, and we are not submitting it as an architect's estimate.

On the other hand, it must be recognized that nobody can foretell future conditions in building construction. If building costs should go still higher, an economical design might cost this much or more.

A Junior-Senior high school would cost more per pupil than an elementary school. A secondary school must have shops for manual arts, laboratories for chemistry, physics and biology, a home economics room, a good gymnasium, possibly planned as a combined gymnasium-auditorium, etc. Again staying on the safe side, we are using a figure of $1600 a pupil for estimating the cost of a Junior-Senior high school.

The Five Districts now have no place for high school students and an overflow in the existing grade buildings.

The Five Districts need to provide for about 300 elementary and 200 Junior-Senior High pupils. Both elementary and high schools should be designed for easy expansion, to allow for probable population growth.

The whole school plant, if built at one time, might cost:

300 elementary at $1100.....	$330,000
Site, Athletic Field, etc.	50,000
200 secondary at $1600.....	$320,000
	$700,000

These figures do not take into consideration the monies which might be obtained from the disposal of existing grade school buildings.

A bond issue of $700 thousand would require a tax of 4.35 mills per hundred thousand, or 30.45 mills total.

Adding a Five District tax for maintenance at the Wayzata expenditure rate, 33.17 mills, gives an estimated total school tax for the Five Districts of 63.62 mills.

This figure can be reduced in several ways. One is economical design and planning, since these costs are based on a high estimate.

Building the Junior-Senior high school now would solve the high school problem, and relieve the overflow in the grades by taking out 7th and 8th graders, while using the present grade school buildings to house the elementary grades for a few years. Later, room could be added in the central building to accommodate sixth graders if the elementary load became too great.

The Junior-Senior high alone might cost:

200 secondary at $1600	$320,000
Site, Athletic field, etc.	50,000
Total	$370,000

The tax would be:

Bonds and interest (3.7 times 4.35 mills).....	16.1 Mills
Maintenance.....	33.17 "
Total	49.27 "

If the Five Districts adopt the latter plan they would be wise to add a levy for a Building Fund, to accumulate money for the future elementary building. This would cut down the levy for building later, and reduce the interest payments. School districts are allowed by state law to levy up to 8 mills for Building Fund purposes. Such a levy in the Five Districts would bring in approximately $10,000 a year.

If the Five Districts levied the maximum for a Building Fund and operated a Junior-Senior High school and their present elementary buildings, their tax would be:

Bonds and interest	16.1 Mills
Maintenance	33.17 "
Building Fund	8. "
Total	57.27 "

AREA REQUIRED FOR CONSOLIDATION

Under Minnesota statutes (122.19) districts must total 18 sections of land area to qualify for consolidation. Otherwise they can merge, but do not qualify for transportation aid.

The areas of the Five Districts, from the County Auditor's plat , are:

50 Long Lake	6.40 sections
91 Stubbs Bay	3.53 sections
94 Upper Crystal Bay	2.28 sections
137 Minnetonka Beach	0.46 sections
Hill	2.12 sections
Total	14.79 sections

Either of two districts to the north, Grove Center No. 135, and Reiser No. 7, would add enough area to make 18 sections. The two districts together have 33.3 pupil units, and stand slightly higher in valuation per pupil unit than the Five Districts:

Reiser, No. 7

Area: 5.344 Sections
Valuation: $70,336
Pupil Units:
Elementary: 3.4
High School: 17.9
Total 21.3
Valuation per Resident Pupil Unit: $3302

Grove Center, No. 135

Area: 3.90 Sections
Valuation: $43,038
Pupil Units:
Elementary: 6.4
High School: 5.6
Total 12.0
Valuation per Resident Pupil Unit: $3586

By the formula in this survey, adding Grove Center and Reiser would bring the maintenance levy down from 33.17 mills to 32.93 mills, a reduction of one-fourth of a mill. This makes no allowance for the benefit of state aid for transportation, which would bring a further economy.

SECTION VII

FIVE DISTRICT TAX RATES

The Five Districts at present are separate school systems, each with its own tax levy and mill rate.

The levies for 1946 (collected in 1947) were:

Long Lake 50	$14,007.99	54.30 Mills
Stubbs Bay 91	7,497.03	60.40 Mills
Upper Crystal Bay 94	6,695.19	50.70 Mills
Minnetonka Beach 137	6,002.65	19.10 Mills
Hill	9,003.52	22.70 Mills
Total tax and average mill rate	$43,206.42	35.27 Mills

The average mill rate is the rate that would have resulted if the total tax had been spread over the consolidated valuation of all the Five Districts.

These rates are lower than nearby districts, principally because of high valuation in the Five Districts. Taxes for 1946-47 in nearby high and graded districts were:

Wayzata:
Total levy - ~~$68,516.11~~ $5,000.00.
Overall mill rate - 57.32 mills.
Spread as follows:
Non-agricultural - 58.80 mills.
Agricultural - 54.60 mills.

Mound:
Total levy - $147,750.09.
Overall mill rate - 115.21 mills.
Spread as follows:
Non-agricultural - 129.00 mills.
Agricultural - 70.70 mills.

Deephaven:
Total levy - $61,025.31
Overall mill rate - 108.62 mills.
Spread as follows:
Non-agricultural - 112.00 mills.
Agricultural - 72.20 mills.

Agricultural and Non-Agricultural School Taxes

Taxes in the Five Districts are levied in an overall rate, the same on agricultural and non-agricultural property, because they are ungraded rural school districts. In a high and graded district taxes are levied in two separate rates, with agricultural land sometimes paying a smaller tax.

If the Five Districts consolidate and form a high and graded district, they, too, will have two tax rates, one perhaps higher than the overall rate on non-agricultural property, while the agricultural tax might be lower than the overall rate.

The county auditor does not have figures to show in advance what the proportions would be between agricultural and non-agricultural valuation in the Five Districts. Therefore we have put all calculations in the form of one overall tax rate, and have figured comparative taxes for nearby districts on the same basis, in this survey, as one uniform rate.

It is likely that the Five Districts would show only a small spread, if any, between agricultural and non-agricultural taxes for two reasons:

First: Taxes are uniform on both classes of property for bonds and interest, and for building fund. The difference in rate comes only in the maintenance portion of the levy. Bonds and building fund would make up a large proportion of the Five District levy.

Second: The law provides that the school tax for maintenance in a high and graded district on agricultural property can be no more than 10% over the average mill rate for maintenance in ungraded school districts in the county. School costs and levies in ungraded districts have gone up in recent years. As the average has gone up, the mill rates on agriculturdl and non-agricultural property have been coming closer together in all districts. The charts on the next page illustrate this trend through the past ten years.

A Five District consolidation would have high valuation and a low mill rate. It is possible that the Five District maintenance mill rate would be low enough to leave no difference between taxes on agricultural and non-agricultural property.

Tax Charts

The following charts picture the trend in the mill rates in nearby high and graded districts, compared with the Five Districts for the past ten years. Five District taxes have been lower, as would be expected from their high valuations. The effect of rising educational costs has been felt in all districts, and to much the same extent.

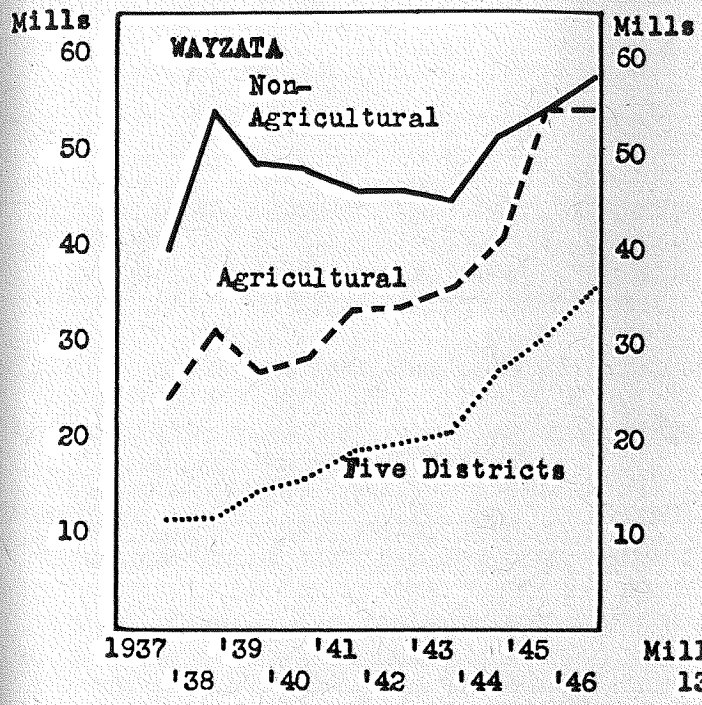
SCHOOL TAX LEVY, IN MILLS FOR THREE NEARBY DISTRICTS COMPARED WITH "FIVE DISTRICTS"

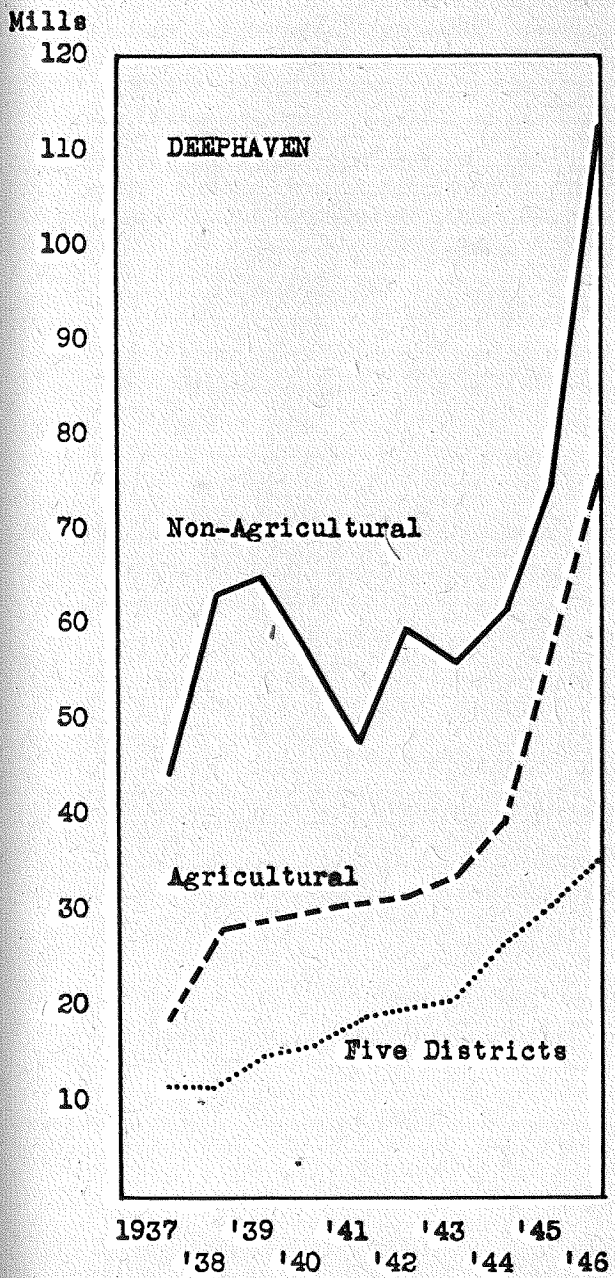
1937 to 1946
By year of levy

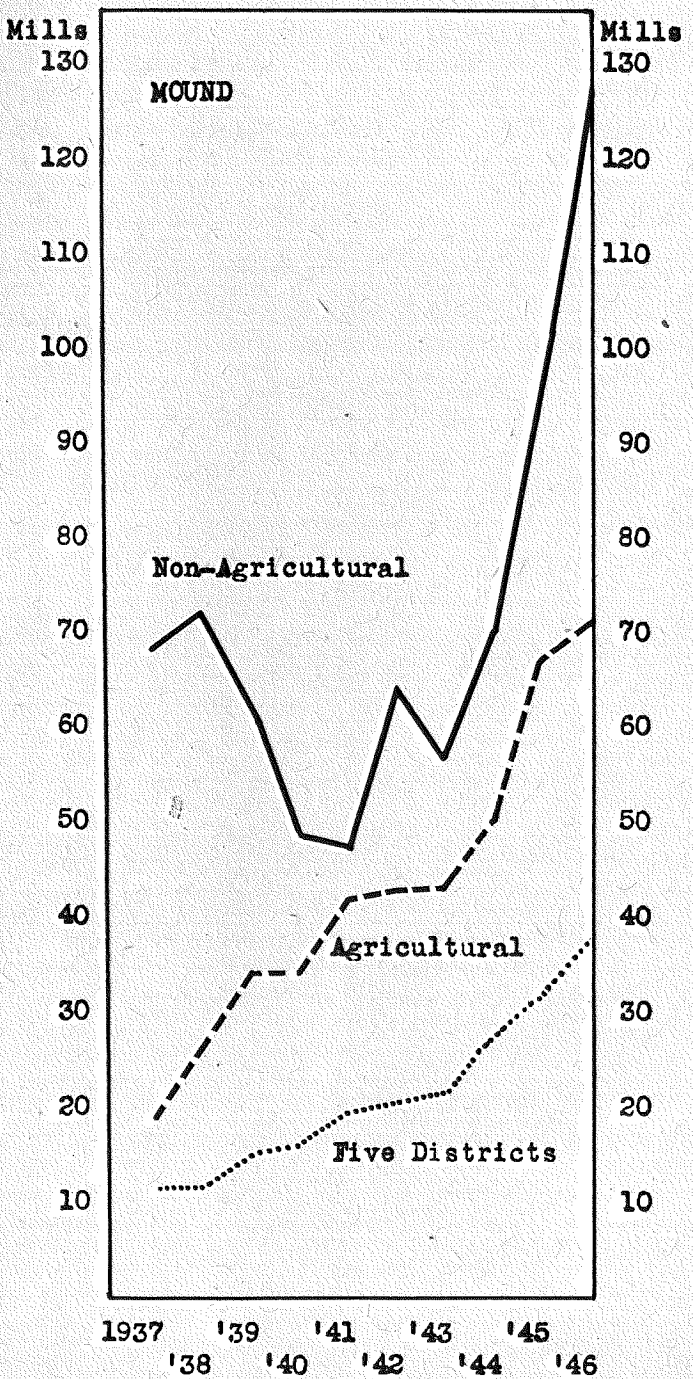
Solid: Non-Agricultural rate

Dashes: Agricultural rate

Dots: "Five Districts"







SECTION VIII

ABILITY TO PAY FOR EDUCATION

The theory of the new Minnesota state aid law is that every school district should make a minimum local effort by levying a 30 mill tax for school operation. In a district with $2000 of assessed property value per pupil unit such a tax would produce $60 a pupil unit.

The state will pay a basic state aid of $50 per pupil unit to every school district (provided it meets a few minimum standards necessary for proper education). This amount, added to the $60 from local taxes, will provide a total of $110 per year per pupil unit. This amount is considered a minimum standard for school operation.

Most districts have less than $2000 per pupil unit in taxable property. To such districts the state pays graduated equalization aid, to make up the difference between the local tax income and $60 a pupil unit.

Thus, in effect, the state guarantees that every district levying at least 30 mills will be able to spend $110 a pupil unit for schooling, no matter how low the district's property valuation may be.

The new Minnesota state aid law classifies all school districts according to their ability to raise money from local taxes. The yardstick used is the amount of local taxable valuation per pupil (or, more accurately, per pupil unit). A detailed explanation of this yardstick appears after the following table. In brief, districts are classed on a scale ranging up to $2000 assessed valuation per pupil.

Assessed Value Of District Per Resident Pupil Unit in Average Daily Attendance	Equalization Aid Per Resident Pupil Unit In Average Daily Attendance	To Be Produce By Local Taxation Per Resident Pupil Unit in Average Daily Attendance
$2,000 or over.....	-	$60
1,900 to 2,000	$ 3	57
1,800 to 1,900	6	54
1,700 to 1,800	9	51
1,600 to 1,700	12	48
1,500 to 1,600	15	45
1,400 to 1,500	18	42
1,300 to 1,400	21	39
1,200 to 1,300	24	36
1,100 to 1,200	27	33
1,000 to 1,100	30	30
900 to 1,000	33	27
800 to 900	36	24
700 to 800	39	21
600 to 700	42	18
500 to 600	45	15
400 to 500	48	12
300 to 400	51	9
200 to 300	54	6
100 to 200	57	3
Less than $100	60	-

Financial Rank of Districts

Districts with $1000 valuation per pupil unit are near the average in financial rank for high school districts in this state. Besides the basic state aid of $50 a pupil unit, they are paid special equalization aid of $30 a pupil unit.

Districts with $2000 or more assessed value per pupil unit are counted as the most prosperous group. They get only the basic state aid of $50 a pupil unit and no equalization aid.

Advantage of High Valuation

A school district with high assessed real estate and personal property value gets less special state aid but it is better off than the districts with low value and more aid. The state aid is planned to make up in part, but not entirely, for the disadvantage of low taxable property. A district with high valuation and little aid can spend more for schools, on a lower tax rate, than a district with low valuation, even though the latter gets more aid.

Any amount above $2000 a pupil unit is clear gain to a district, because the state aid does not decrease beyond that point.

The Five Districts range in rank from good to very high in ability to finance education. Table 3 compares the Five Districts with their neighbors by this yardstick.

Table 3. Taxable Valuation per Resident Pupil Unit in Five Districts and Adjacent High and Graded Districts.

District	Valuation of Real and Personal Property	Resident Pupil Units in ADA 1946-47	Valuation Per Resident Pupil Unit	Amount Per Pupil That 30 Mill Levy Would Produce
50 Long Lake	$ 257,974	152.5	$1692	$50.76
91 Stubbs Bay	124,123	74.8	1659	49.77
94 Upper Crystal Bay	132,055	61.1	2161	64.83
137 Minnetonka Beach	314,277	38.9	8079	242.37
Hill	396,631	60.4	6567	197.01
Five Districts Total	$1,225,060	387.7	3160	94.80
Five Districts Plus Kind. Est.	1,225,060	395	3101	93.03
Deephaven	561,819	328.8	1709	51.27
Wayzata	~~1,196,865~~ 1,451,716	832.7	~~1435~~ 1774	~~43.05~~ 53.37
Mound	1,255,490	1282.5	979	29.37

(Source: Records of Hennepin County Auditor and State Department of Education)

The practical meaning of this yardstick shows most clearly in the right hand column, the amount per pupil unit, which a thirty mill levy would produce. This shows, for instance that a thirty mill levy in Deephaven would bring in $51.27 in local tax income per pupil per year. The same levy in the Five Districts, if they were consolidated in a group, would bring in $93.02 per pupil unit per year, including estimated kindergarten attendance in the count of pupil units.

Or, to put it another way, Deephaven would get $51.27 per pupil unit from a thirty mill levy. The Five Districts could raise the same amount, $51.27 per pupil unit, with about half the mill rate, or 16.53 mills. Comparison with the other two districts would be even more favorable to the Five Districts.

It is clear that the Five Districts stand high in ability to finance a school program, compared with the state as a whole, or with surrounding schools.

The State Aid Formula

In the new Minnesota law, (Laws of 1947 - Chapter 633) each elementary pupil is counted as one pupil unit. Secondary pupils, in junior or senior high school, are estimated as costing half again as much as elementary pupils, so that each secondary pupil is counted as one and a half pupil units. Kindergarten pupils are given aid at one-fourth the elementary rate, so that each kindergartener counts as one-fourth of a pupil unit.

School enrollment is the total number of pupils on the records, no matter how much they attend during the year. The state aid is paid, not on enrollment, but on children actually in school, or "Average Daily Attendance". Generally, this is about ten per cent below enrollment.

Only resident pupils, from the home district are counted in this formula. Non-resident pupils, transported from other districts, are paid for in another way.

The aid is paid on "number of resident pupil units in average daily attendance". This is calculated on the basis of:

One-fourth of the kindergarten pupils in average daily attendance.

- plus -

The actual number of elementary pupils in average daily attendance.

- plus -

One and a half times the number of secondary pupils in average daily attendance.

Adding these together gives us the total eligible for state aid.

Sixth and seventh graders count as elementary when in an elementary school. If they are in junior high, they count as secondary school pupils, (one and a half pupil units). Hence a district gains in state aid by having a junior high school or junior-senior high school.

State Aid Example

A theoretical budget of state aid and local taxes would work out as shown in Table 4A, using Mound, Wayzata, the combined Five Districts, and imaginary $1000 and $2000 districts as examples:

Table 4A. State Aid Example, 30 Mill Tax and Aid.

District	Valuation Per Resident Pupil Unit	Proceeds of Local 30 Mill Tax per Pupil-Unit	Equalization Aid Per Pupil Unit	Basic Aid to All Districts per Pupil Unit	Total Proceeds, 30 Mill Tax and Aid
Mound	$ 979.00	$29.37	$33.00	$50.00	$112.37
$1000 District	1000.00	30.00	30.00	50.00	110.00
Wayzata	~~1435.00~~ 1774.00	~~43.05~~ 53.37	~~18.00~~ 12.00	50.00	~~111.05~~ 111.37
$2000 District	2000.00	60.00	0	50.00	110.00
Five Districts	3101.00	93.03	0	50.00	143.03

Table 4A shows that the school income of Wayzata (including proceeds from the thirty mill tax, the basic state aid and the equalization state aid) is ~~$111.05~~ $111.37. The state law equalizes the handicap of small tax valuation up to the $2000 level. About that level the advantage in valuation clearly benefits the district because the basic aid remains. Thus with $50 basic aid the Five Districts could raise the minimum budget by taxing only 19.35 mills instead of 30 mills.

In practice a high valuation has more advantage because few school districts can operate on $110 per pupil. For maintenance alone Wayzata spent $152.86 per pupil unit last year, exclusive of transportation of pupils.

This includes all teachers salaries and other running expenses, but not payments on bonds or improvements to buildings.

If we take this as an example of actual expense, the equalization is seen to be less, and the advantage of high valuation is even greater:

Table 4B. Total Maintenance Mill Rate.

District	Valuation Per Resident Pupil Unit	Total Proceeds of 30 Mill Tax	Difference Between Column 2 & Wayzata Expense - $152.86 Per Pupil Unit	Tax On Local Valuation To Raise The Difference, in Mills	Total Maintenance, Mill Rate (30 Mills Plus Column 4).
Mound	$ 979.00	$112.37	$40.49	41.36	71.36
$1000 District	1000.00	110.00	42.86	42.86	72.86
Wayzata	~~1435.00~~ 1779.00	~~111.05~~ 110.37	~~41.81~~ 37.49	~~29.14~~ 21.07	~~59.14~~ 57.07
$2000 District	2000.00	110.00	42.86	21.43	51.43
Five Districts (Plus Kind. Est.	3101.00	143.03	9.83	3.17	33.17
Mound at Mound Expense $115.70 Per Pupil Unit	$ 979.00	$112.37	($115.70 Minus Col. 2) $3.33	3.40	33.40

Aid in Relation to Non-Resident Pupils

The foregoing paragraphs explain the operation of the state aid system as it applies to resident pupils but, since non-resident pupils present additional problems, the following paragraphs explain the operation of the state aid system in relation to non-resident pupils.

For non-resident pupils, the law provides that the home district plus state aid, and a county-wide tuition levy, will pay the whole minimum budget. We can continue to use Wayzata as an illustration. Wayzata takes 149 high school pupils and 7 elementary pupils as non-residents from surrounding districts. In ADA it has 200.9 non-resident pupil units. Basic state aid plus tuition from their home districts pays Wayzata $110 for each non-resident pupil unit.

Wayzata spends $152.86 per year on each pupil unit. Thus Wayzata contributes $42.86 per year for each non-resident pupil unit it accepts.

A high school pupil is one and a half units, so Wayzata contributes $64.29 a year for each non-resident high school pupil in average daily attendance.

Changing Attitude Toward Non-Residents

Up to a few years ago, school costs were lower. Non-resident pupils were an extra expense even then, but not so heavy as today. High schools had space to spare. Many high schools thought it wise to take non-residents, to build up their schools and offer a broader program of subjects.

Today practically all high schools are overloaded, and they find that non-residents have become a heavy tax burden. Soon they will have to sell bonds and add to the burden to build space for them. A crowded high school district has the power to refuse to take non-residents, and more and more of them are refusing. For the future, small districts cannot expect to farm out their high school students. They will have to join a high school district or build their own high school.

Effect of Possible Consolidations

The section on school population showed that the Five Districts have students enough for a good, economical elementary school.

They now have enough pupils for a small Junior-Senior high. They could offer a good program, but at a rather high cost per pupil in a secondary school of that size. In the future, with population growth, they probably will have pupils enough for a reasonably economical Junior-Senior high.

Can they give the best education, at lowest cost, by consolidating with an existing district, or by setting up a new one?

The effect of possible consolidations is worked out step by step in the following series of short tables. The related tables of each series are numbered alike, 5A, 5B, 5C, etc.

The basic figures, total valuation and valuation per resident pupil unit, were given in Table 3, which also gave the proceeds of a thirty mill levy for each district.

There are three consolidations under discussion: 1. A Five District consolidation; 2. Wayzata plus the Five Districts; 3. Mound plus the Five Districts. Table 5A shows the proceeds of a thirty mill tax levy for all three possibilities.

Table 5A. Proceeds of 30 Mill Levy, Possible Consolidations.

	Valuation of Real and Personal Property	Resident Pupil Units In ADA 1946-47	Valuation Per Resident Pupil Unit	Amount Per Pupil That 30 Mill Levy Would Produce
Five Districts Plus Kind. Est.	$1,225,060	395	$3101	$93.03
Wayzata with Five Districts	2,704,774 ~~$2,420,325~~	1227.7	2205 ~~$1971~~	66.15 ~~$59.13~~
Mound with Five Districts	$2,480,550	1677.5	$1479	$44.37

The foregoing table shows that the Five Districts in a group have substantially more tax resources per pupil than any other consolidation. If they joined with Mound even a 62 mill levy in the combined district would produce less per pupil than a thirty mill levy would in the Five Districts. If they joined with Wayzata a ~~47~~ 52 mill levy would produce less than 30 mills in the Five Districts.

Table 5B. Total 30 Mill Tax and Aid, Five Districts and Possible Consolidations

District	Valuation Per Resident Pupil Unit	Proceeds of Local 30 Mill Tax per Pupil Unit	Equalization Aid per Pupil Unit	Basic Aid to All Districts per Pupil-Unit	Total Proceeds, 30 Mill Tax and Aid
Five Districts	$3101	$93.03	0	50	$143.03
Wayzata with Five Districts	~~2405~~ ~~$1971~~	~~66.15~~ ~~59.13~~	~~0~~ ~~-8~~	50	~~116.15~~ ~~110.13~~
Mound with Five Districts	$1479	44.37	18	50	112.37

Table 5B shows the tax advantage of the Five Districts assuming the minimum standard, a thirty mill tax, in all cases. This would allow the minimum standard budget, approximately $110 per pupil unit, in consolidation with either Wayzata or Mound, since the equalization aid is planned to produce the result. The Five District consolidation stands in the best financial position, although it would get no equalization aid.

Table 5C shows the next step, the tax for maintenance at more than the minimum standard. The top portion shows the maintenance tax if we assume the Wayzata standard of expenditure, $152.86 per pupil unit. The Five Districts could run at this standard by levying 33.17 mills for maintenance. In consolidation with Wayzata, the same standard would require ~~50.05~~ mills. In consolidation with Mound it would require 57.38 mills.

The bottom portion shows the result of operation at the Mound rate of expenditure, $115.70 per pupil unit. In consolidation with Mound this would require 32.25 mills. The Five Districts in their own group would require 21.19 mills.

Table 5C. Total Maintenance Mill Rate, Possible Consolidations.

	Valuation Per Resident Pupil Unit	Total Proceeds of 30 Mill Tax and Aid	Difference Between Column 2 & Wayzata Expense - $152.86 Per Pupil-Unit	Tax On Local Valuation To Raise The Difference in Mills	Total Maintenance, Mill Rate (30 Mills Plus Column 4).
Five Districts Plus Kind. Est.	$3101	$143.03	$ 9.83	3.17	33.17
Wayzats with Five Districts	~~1971~~ 2205	~~112.13~~ 116.15	~~40.73~~ 36.71	~~20.66~~ 16.65	~~50.66~~ 46.65
Mound with Five Districts	1479	112.37	40.49	27.38	57.38
			$115.70 Minus Col. 2		
Mound with Five Districts at Mound, Expense $115.70 per Pupil Unit	$1479	$112.37	$3.33	2.25	32.25
		Proceeds of 21.19 Mill Tax and Aid			
Five Districts Plus Kind. Est. at Mound Expense	$3101	$115.70	0	0	21.19

The tables in this section show only the estimated taxes for total maintenance, or total expense for instruction and operation of a school system.

In every case the Five District consolidation shows a substantial advantage over other possibilities, and always for the same reason--a more ample tax base per pupil, in the form of high valuation in taxable property.

The total school tax would be this maintenance levy plus a levy for capital outlay, bonds and interest. The latter applies to school building cost which is not given any state aid. The probable building levies are calculated separately in the following section.

Estimates of total school taxes, maintenance plus bonds and interest, have been given already in the synopsis

Consolidation of Minnetonka Beach and Hill With Wayzata

We have been asked to estimate the results of this consolidation of two of the districts with Wayzata, as compared with a Five District consolidation. The following series of three tables gives the calculation, in the same steps used previously. The basic figures are taken from Table 3, as before.

These three tables, 6A, 6B, and 6C, also serve to illustrate how any other consolidation under consideration could be estimated.

Table 6A. Wayzata, Minnetonka Beach and Hill, 30 Mill Levy.

	Valuation of Real and Personal Property	Resident Pupil Units In ADA 1946-47	Valuation Per Resident Pupil Unit	Amount Per Pupil That 30 Mill Levy Would Produce
Minnetonka Beach	$314,277	38.9	$8079	$242.37
Hill	396,631	60.4	6567	197.01
Wayzata	~~1,195,265~~ 1,481,716	832.7	~~1435~~ 1779	~~43.05~~ 53.37
Wayzata, Beach and Hill	~~$1,906,173~~ 2,192,624	932.0	~~$2045~~ 2353	~~$ 61.35~~ 70.59

Table 6B. Wayzata, Minnetonka Beach and Hill, Compared with Five Districts, 30 Mill Tax and Aid.

	Valuation Per Resident Pupil Unit	Proceeds of Local 30 Mill Tax Per Pupil Unit	Equalization Aid Per Pupil-Unit	Basic Aid To All Districts per Pupil Unit	Total Proceeds 30 Mill Tax and Aid
Wayzata, Minnetonka Beach & Hill	~~$2045~~ 2353	~~$61.35~~ 70.59	0	$50.00	~~$111.35~~ 120.59
Five Districts Incl. Kind. Est.	$3101	93.03	0	50.00	143.03

Table 6C. Wayzata, Minnetonka Beach and Hill, Compared with Five Districts, Total Maintenance Mill Rate.

	Valuation Per Resident Pupil Unit	Total Proceeds of 30 Mill Tax and Aid	Difference Between Column 2 & Wayzata Expense - $152.86 Per Pupil Unit	Tax On Local Valuation To Raise The Difference, in Mills	Total Maintenance, Mill Rate (30 Mills Plus Column 4).
Wayzata, Beach & Hill	~~$2045~~ 2353	~~$111.35~~ 120.59	~~$41.51~~ 32.27	~~20.30~~ 13.71	~~60.30~~ 43.71
Five Districts Incl. Kind. Est.	3101	143.03	9.83	3.17	33.17

Summary:

Minnetonka Beach and Hill with Wayzata ..... ~~60.30~~ 43.71 Mills Maintenance Tax

Minnetonka Beach and Hill in Five Districts..... 33.17 Mills Maintenance Tax

BONDED DEBT LEVIES IN POSSIBLE CONSOLIDATIONS

To compare the cost of consolidations, we must estimate the new building required for the Five Districts. Then we must estimate the new building that can be expected in the school systems of Wayzata and Mound. Putting these figures together we can arrive at the probable amount of new construction in the consolidations that are under consideration.

When school districts consolidate any existing debt remains a charge against the area which originally assumed it until it is paid off. If the Five Districts went into a consolidation with either Wayzata or Mound, they would pay taxes only for new buildings. All the Five Districts now are debt free.

To simplify the figures, no attempt has been made to spread the building over several years. We have applied one formula to cover the building needs now in sight.

Summary

The formula gives the following tax rates for bonds and interest:

Five Districts..... 29.44 Mills

Wayzata with the Five Districts..... ~~33.88~~ 30.29 Mills

Mound with the Five Districts..... 35.48 Mills

The following sections give the data for these estimates:

Bonded Debt for Five Districts

Within the next few years the Five Districts will need to provide space for about 300 elementary pupils, (grades 1-6) and about 200 secondary pupils (roughly 125 Junior High, grades 7-9, and 75 Senior High, grades 10-12).

We leave out any estimated cost of school sites, since new sites might not be needed in case of consolidation.

Using our arbitrary formula, which is a high estimate, we get the following total building cost:

300 elementary at $1100.....$330,000

200 secondary at $1600.....$320,000

Total.....$650,000

Thirty year serial bonds would call for a levy of $5,333.33 the first year, for amortization of principal and payment of interest. This would go down slightly from year to year. The levy is illustrated in the table at the end of this section.

Thirty year serial bonds would call for a levy, the first year, of 4.35 mills per hundred thousand, for principal and interest, so this construction program, if undertaken all at once, would require a Five District levy, for bonds and interest of 6.5 times 4.35, or 29.44 mills. (30.45 mills with site.)

Bond Levy With Wayzata

According to rough estimates, Wayzata may need to build for 225 elementary pupils, and from 400 to 500 secondary. Since some secondary pupils now in Wayzata are from the Five Districts, we take the lower figure, 400.

225 elementary at $1100.....$247,500

400 secondary at $1600.....$640,000

Total.....$887,500

(The above estimate is pure formula, for the purpose of our estimate, and does not represent figures from Wayzata. It has not been compared with any Wayzata estimate of building cost.)

Consolidated building cost would be:

Five Districts.....$650,000

Wayzata.....$887,500

Total..$1,537,500

A thirty year bond issue would cost $5,333.33 per hundred thousand the first year for principal and interest. For the above issue it would cost 15.375 times that, or $82,000 a year.

The consolidated valuation of Five Districts and Wayzata is ~~$2,480,365~~. A levy of $82,000 would amount to ~~33.08~~ 30.29 mills on that valuation.

Bond Levy With Mound

According to rough estimates, Mound may need to build for 1000 elementary pupils soon. Mound now has elementary pupils in rooms that can be used for high school space. Mound plans to do all construction for the elementary grades, and take care of high school requirements by removing the elementary pupils, thus eliminating construction of a high school building.

1000 elementary at $1100 $1,100,000

(As before, this is pure formula, not an estimate from Mound.)

Under Mound's plan the whole 500 grade and high pupils from the Five Districts could be absorbed without high school construction. The consolidation would call for adding 500 to the Mound estimate of building:

1500 elementary at $1100.....$1,650,000

At $5,333.33 per hundred thousand, this would require a levy, the first year, of $88,000.

The consolidated valuation of Mound and the Five Districts would be $2,480,550. The resulting tax for bonds and interest would be 35.48 mills.

Legal Limit for Bonded Debt

School districts are allowed to issue bonds up to 20% of their total valuation, including valuation of moneys and credits. The Five District valuation is:

Real and
Personal Property.....$1,225,060

Moneys and Credits (1942)....$6,021,098

Total....$7,246,158

Bonded debt limit, 20%
of total.....$1,449,213

Legally, the Five Districts have power to issue nearly a million and a half dollars in bonds. It would be most unwise to issue bonds on this basis, because the districts have an unusually large proportion of moneys and credits valuation.

Moneys and credits (stocks, bonds, money in the bank, financial property in general) paid only a 3 mill tax even when the tax was in force. It never was a large factor in paying off bonds, although it counted as valuation in the bonded debt limit. Since 1942 it pays no tax at all, but the legislature authorized keeping the 1942 assessment on the books for bonded debt limit purposes.

If the Five Districts use only part of their moneys and credits valuation as a basis for bonds they will be on the same footing as other districts that use all they have. The Five Districts should keep the debt load within a reasonable mill rate, which will be far below the debt limit.

30 YEAR RETIREMENT TABLE FOR SERIAL BONDS, PER $100,000

Years After Issue	Total Annual Payment	Principal	Interest at 2%	Balance Outstanding	Five District Mill Rate On $1,225,060 Valuation
				$100,000.00	
1	$5333.33	$3333.33	$2000.00	96,666.67	4.35
2	5266.67	3333.33	1933.33	93,333.33	4.30
3	5200.00	3333.33	1866.67	90,000.00	4.24
4	5133.33	3333.33	1800.00	86,666.67	4.19
5	5066.66	3333.33	1733.33	83,333.33	4.14
10	4733.33	3333.33	1400.00	66,666.67	3.86
15	4400.00	3333.33	1066.66	50,000.00	3.59
20	4066.67	3333.33	733.33	33,333.33	3.32
25	3733.33	3333.33	400.00	16,666.67	3.05
30	3400.00	3333.33	66.67	0	2.78

20 YEAR RETIREMENT TABLE FOR SERIAL BONDS, PER $100,000

Years After Issue	Total Annual Payment	Principal	Interest at 2%	Balance Outstanding	Five District Mill Rate On $1,225,060 Valuation
				$100,000.00	
1	$7000	$5000	$2000	95,000.00	5.71
2	6900	5000	1900	90,000.00	5.63
3	6800	5000	1800	85,000.00	5.55
4	6700	5000	1700	80,000.00	5.47
5	6600	5000	1600	75,000.00	5.39
10	6100	5000	1100	50,000.00	4.98
15	5600	5000	600	25,000.00	4.57
20	5100	5000	100	0	4.16

SECTION X

PRESENT SCHOOL BUILDINGS AND POSSIBLE SITES

Four schools in the Five Districts are in adequate condition and can be used for some years to come although they are overcrowded. In the fifth district, Minnetonka Beach, the school now is closed and it is not planned to use the building for school purposes in the future.

The following is a condensed report. We have made a thorough inspection, and have complete data available for school officers.

Long Lake

The Long Lake School has four rooms, of good size, with a small kindergarten room (12 by 18 feet) in the basement. It is a brick structure, about 30 years old, with two classrooms built later, generally in good condition, except for certain floors. The gym, which is inadequate, is used for assemblies. It will serve for an indefinite period.

Stubbs Bay

This is a two room tile structure, built in 1912, sound and in good condition. It has no assembly room, but assemblies are held in a community house nearby. It has a good heating plant, new oil burner. Can be used for an indefinite period.

Hill School

This is a two room frame structure, with stucco added over siding, about 55 years old, with an assembly on second floor. Floors are in good condition, with adequate joists. Heating plant OK. Roof about 15 years old but seems in good condition. The building can be kept in use for a few years.

Upper Crystal Bay

A frame school, which we estimate at about 30 years old, with one class room, 23 by 26 feet. Inside walls show some cracks, floors solid. Heating plant OK. Is overcrowded now, although higher elementary grades are attending in other districts because of lack of space. Building can continue in use for a small enrollment for the next few years.

Sites for Future Five District School

Several good sites are available, and have been under consideration by school board members in the Five Districts. We have inspected them and have data on their suitability. The final selection should depend in part on the prices at which sites can be obtained; therefore we are not making a specific recommendation.