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A Feasibility Study of the Proposed Reorganization Between the George Community School District and the Boyden-Hull Community School District in Iowa

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A FEASIBILITY STUDY OF THE PROPOSED REORGANIZATION BETWEEN THE GEORGE COMMUNITY SCHOOL DISTRICT AND THE BOYDEN-HULL COMMUNITY SCHOOL DISTRICT IN IOWA

Presented to the

Graduate Faculty

University of Nebraska

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In Partial Fulfillment

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CHAPTER I

INTRODUCTION

> School district organization has never been regarded as static and permanent-as a sacred entity that should not be changed. Quite to the contrary, it has been looked upon as a governmental device through which people can work together in organizing, supporting, controlling, and operating their schools. When it serves its function well it has been satisfactory. When it has not been able to do the job for which it was created it has been modified.[1]

This position suggests that the examination of a school district to determine its adequacy is a desirable process. Considerable research has been done relative to the problems and characteristics of inadequate school districts.

Michael E. Hickey, Assistant Superintendent of the Seattle Public Schools, in a paper dealing with school district size, identified these five undesirable aspects of inadequate school districts: "inadequacy of curriculum, inability to draw and hold high-quality teachers and administrators, inefficient use of staff, economic inefficiencies in terms of high per-pupil expenditures for quality of program provided, inequality of effort required for support and absence of specialized service."[2]

Charles Faber cites a number of research efforts which show a high relationship between school district enrollment and quality,

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[1] AASA, School District Organization (Washington D.C.: AASA, 1958), p. 21.

[2] Michael E. Hickey, "Optimum School District Size," U.S. Dept. of Health, Education, and Welfare, Office of Education (ERIC Clearinghouse on Educational Administration, University of Oregon, December, 1969), p. 28.

with the larger districts generally ranking higher in quality. The characteristics of inadequacy identified by Faber's review of the literature included the following: shortage of competent staff, lack of specialized services, inefficient utilization of staff, and less comprehensive curricular offerings.[3]

A number of recent developments have resulted in consideration being given to the possibility of reorganization between the George Community School District and the Boyden-Hull Community School District in Iowa. The decision to consider the consolidation was made as a reaction to school board deliberation, relative to the common problems of declining enrollments, needs for additional facilities, and the increasing concern in the districts' abilities to maintain the quality of instructional programs offered.

As the two boards of directors of the respective districts considered individually their current needs, the reorganization of the two systems began to be considered as an alternative solution. The feasibility of such an action needs to be determined after careful consideration of a number of questions which generally precludes school district reorganization.

I. THE PROBLEM

Statement of the problem. The purpose of this study was to determine the feasibility of reorganization between the George Commu-

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[3]Charles F. Faber, "The Size of a School District," Phi Delta Kappan, Vol. 48, No. 1 (September, 1966), pp. 34-35.

nity School District and the Boyden-Hull Community School District in northwest Iowa.

Significance of the study. The organization of a school district can be crucial to the quality of the educational experiences which the district is able to offer. The significance of any study of organizational alternatives is perhaps best represented in this statement of proposed guidelines of the Great Plains School District Organization Project:

> School district organization is a composite of all relevant guidelines considered to be essential to provide comprehensive and equitable educational opportunities for all boys and girls at a high level of quality, with efficiency of organization and economy of operation. This means that the designing of a plan for the organization of education must be custom tailored to all the individualistic and peculiarly significant factors which are characteristics of each and every community or of interrelated communities. It pertains to the educational needs to be met, to the characteristics of the geographic area, to the demographic factors of sparsity/density, to technologically related factors of time/distance, to the economic factors of financial ability and effort in support of educational endeavor, and to the related factors of community structure, community leadership, community mores, and community values.[4]

This study is the result of school board deliberations and a belief that thorough planning should precede any adjustments in the structure of a school system or combination of systems.

II. THE STUDY

Delimitations of the study. This study was limited to an examination of organizational components of the Boyden-Hull and

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[4]The Great Plains School District Organization Project, Guidelines for School Organization-A Project Report (Lincoln, Nebraska: The State Department of Education, July, 1968), pp. 11-12.

George districts and considerations of the probable results of the proposed reorganization efforts. Realizing that the structure of a school district is a complex entity, the following areas were selected as most germane to the purpose of this study: estimated school enrollment projections and effects of declines; district sizes and confines, present and proposed; fiscal resources and financing patterns; physical facilities with probable effects of reorganization; and transportation patterns, present and proposed.

Procedures of the study. The procedures which were employed in examining the plausibility of combining the Boyden-Hull and George schools primarily consisted of gathering information and making comparisons between the two districts and the proposed reorganized district. The first and perhaps most important area of consideration dealt with school district enrollments and trends relative to growth and/or decline.

An examination of the two districts' enrollments over a ten-year period provided a basis for determining the advantages and/or disadvantages of joining the two systems. This data was considered in relation to standards presented in the literature reviewed in a previous chapter. A closely related issue, district size and geographical restrictions, with its implications for economy of time and proximity to facilities, was considered, both separately and with regard to transportation requirements.

The current property valuation and valuation per pupil figures, as well as cost per pupil data, were presented for the districts in question and expanded to coincide with the fiscal potential of the proposed reorganized district.

The final section of the study examined the present physical facilities of the two districts and considered the alternatives for utilization of these facilities as a reorganized district. In addition, this section presented the probable needs for additional facilities in the event that reorganization plans were adopted.

III. DEFINITIONS OF TERMS

Administrative district. An "administrative district" shall be construed as a specific area under the direction of a single school board with the responsibility for providing educational services for all students residing within that area.

Attendance center. An "attendance center" shall be defined as the subdivision of an administrative school district, comprising the area and population served by a school building.

Board of directors. The term "board of directors" has been used to describe those elected officials with the legal responsibility of directing the business of a school district.

Consolidation. The term "consolidation" has been used in referring to the combining of two or more attendance centers.

School board. The term "school board" has been used interchangeably throughout the study with the term "board of directors".

School district reorganization. Throughout the study, the term "school district reorganization" shall refer to the total combining of

two or more separate school districts to form a single district with one board of directors.

School system. For the purpose of this study, the term "school system" refers simply to a school district or an administrative district.

CHAPTER II

REVIEW OF THE LITERATURE

The preponderance of literature dealing with school district reorganization and criteria for optimum school district size (enrollment) appears to have originated during the late 1940's to late 1960's. This was undoubtedly due to the high level of interest in school district reorganization during that period. Evidence of this is the number of states enacting reorganization legislation from the middle to late 1940's.

A study conducted by C.O. Fitzwater for the U.S. Office of Education in 1957 indicated that thirteen states began programs of school district reorganization in the period from 1945 to 1949.[5] Standards for school district organization also were developed at the national level, including minimum standards from a 1935 U.S. Office of Education study and those from a 1948 National Commission on School District Reorganization.[6]

Among the more notable recent studies of school district organization which have considered recommendations for school district size is the Great Plains School District Organization Project of the late 1960's. William Inman, in a position paper developed for the project, reviewed the educational organization literature dealing with administrative district size recommendations, and also indicated district size recommendations from a number of states.

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[5]C.O. Fitzwater, School District Reorganization-Policies and Procedures, U.S. Department of Health, Education, and Welfare, Office of Education (Washington: Government Printing Office, 1957), p. 11.

[6]AASA, op. cit., p. 131.

Table I, taken from Mr. Inman's study, represents the recommendations for administrative district size by several authorities in the area of school organization. The enrollments suggested by these writers range from 1200 pupils minimum to 15,000 pupils unless intermediate services were available.

TABLE I

ADMINISTRATIVE DISTRICT ENROLLMENT RECOMMENDATIONS BY AUTHORITIES IN THE FIELD OF SCHOOL ORGANIZATION[7]

AUTHORITY	ENROLLMENT RECOMMENDATION
Edgar L. Morphet	1,200-1,500 minimum 4,000-5,000 better 10,000 common good minimum
C.C. Carpenter	1,250 minimum
Ronald Campbell	2,000 minimum
Calvin Grieder	Range of 2,000-3,000 pupils
C.O. Fitzwater	5,000 pupils for reasonable cost program
William P. McClure	5,000-6,000 pupils
Howard Dawson	9,800-12,000
Harlan Beem	11,000 pupils for complete program
Virgil Blanke	10,000-15,000 pupils unless intermediate services are available

[7]William R. Schroeder, Great Plains School District Organization Project (Lincoln, Nebraska: Great Plains School District Organization Project, June, 1968), p. 43.

Table II reports the enrollment recommendations for administrative districts from a number of states. The range of suggested enrollments in this study was from 1,000 pupils minimum to 30,000 pupils maximum. As shown in the table, a majority of states indicate minimum enrollment recommendations which are closely aligned with the lesser of the recommendations of the authorities in Table I.

TABLE II

ADMINISTRATIVE DISTRICT ENROLLMENT

RECOMMENDATIONS FROM VARIOUS STATES[8]

STATE	ENROLLMENT RECOMMENDATION
Indiana	1,000
Washington	1,000
Kansas	1,200
Maine	1,200
Pennsylvania	1,600 pupils mandated 4,000 pupils recommended
Michigan	2,000
New York	No specific size of district, but attendance units suggested indicated about a 2,000 pupil district size.
Vermont	2,000 to 6,000
California	2,000 minimum 10,000 pupils recommended
Connecticut	Minimum of 5,000 ADM in regional school districts
Georgia	10,000- pupils minimum 15,000-20,000 pupils is better

(Continued)

TABLE II (continued)

STATE	ENROLLMENT RECOMMENDATION
Idaho (Superintendent's Assn.)	10,000-15,000 optimum 1,600 minimum 25,000-30,000 maximum

Michael Hickey presented a summary of optimum size recommendations which were grouped according to the criteria upon which they were based. In the category of general quality, the enrollment recommendations ranged from 1,500 pupils minimum by Conant (1969) to 50,000 pupils by Benson (1965). On the basis of quality and economy, the optimum sizes suggested were 5,000 pupils minimum by Fitzwater (1958) to 10,000-20,000 pupils by Faber (1966). The recommendations given simply for an administrative district ranged from 10,000 pupils by the AASA (1959) to 50,000 pupils by IAR-Columbia University (1961). The National Commission on School District Reorganization (1948) recommended an enrollment of 10,000 pupils for maximum effectiveness.[9]

Several studies have contributed proposed standards for specific resources or functions of school districts which have definite implications for their patterns of organization. Among the guidelines which resulted from the Great Plains Project was the following one on transportation time: "Transportation time should not exceed one hour, one way, for approximately 90% of the transported pupils, and for profes-

[8] Ibid., p. 44.

[9] Michael E. Hickey, "Optimum School District Size," U.S. Dept. of Health, Education, and Welfare, Office of Education (ERIC Clearinghouse on Educational Administration, University of Oregon, December, 1969), p. 30.

sional personnel from the central office to the most distant attendance center or administrative district."[10]

Another recommendation for travel limitations for school children appeared in an American Association of School Administrators Yearbook. The standards suggested were for travel time limits on buses (one way) of one half hour for elementary students and one hour for secondary students. The same publication indicated that organizational plans should include the goal of requiring transportation of the fewest children.[11]

Charles Faber's comments in the September 1966 issue of the Phi Delta Kappan are indicative of the apparent hesitance of people to describe an adequate financial base for schools in numerical terms. According to Mr. Faber, the difficulty in establishing a general standard for adequate financial support is due to the varying finance practices from state to state. He suggests that this diversity in financing patterns also poses a problem in developing a formula for economic efficiency based on district size.[12]

The summary of state recommendations reviewed by C.O. Fitzwater was slightly more specific in providing criteria for developing financially adequate reorganized school districts. The recommendations generally dealt with avoiding high and low property valuation per pupil

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[10]The Great Plains School District Organization Project, Guidelines for School Organization-A Project Report (Lincoln, Nebraska: The State Department of Education, July, 1968), p. 5.

[11]AASA, School District Organization (Washington D.C.: AASA, 1958), p. 130.

[12]Charles F. Faber, "The Size of a School District," Phi Delta Kappan, Vol. 48, No. 1 (September, 1966), pp. 33-35.

areas in establishing districts, with equalizing tax bases, and with assuring adequate financial ability for reorganized districts.[13]

A number of sources have attempted to show the interrelatedness of school district reorganization and school finance systems. Many were quick to point out that the reorganization of small, inadequate districts was not generally a means of cutting overall school expenditures or reducing taxes but an attempt to derive maximum educational benefits from available resources. According to Fitzwater, a reorganized administrative unit of adequate size, in addition to providing an expanded base of financial support, generally improves the adaptation of the finance program to the educational needs of the community or area.[14]

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[13]C.O. Fitzwater, School District Reorganization-Policies and Procedures, U.S. Dept. of Health, Education, and Welfare, Office of Education (Washington: Government Printing Office, 1957), p. 54.

[14]Ibid., p. 87.

CHAPTER III

THE STUDY

The Boyden-Hull Community School District and the George Community School District adjoin each other and lie in both Lyon and Sioux counties in northwest Iowa. In 1976 both districts operated attendance centers for children in grades kindergarten through twelve. The systems were a result of rather widespread reorganization activity in Iowa during the mid-1950's.

The Boyden-Hull Community School District was created by merging the independent districts of Boyden, Iowa and Hull, Iowa with several rural independent districts in 1956. Most of the one hundred and five square miles of the school district lie in Sioux county, with a small area in southern-most Lyon county. The Boyden-Hull schools serve a population of approximately 3,900 people.

The George Community School District was formed in 1959, through the combining of the George Independent District with several surrounding rural independent districts. The George district is one hundred and twelve square miles in area and its boundaries lie in Lyon county with the exception of a few sections in northern Sioux county. The population of the district is approximately 2,500 people.

I. SCHOOL ENROLLMENTS, PROJECTIONS, AND IMPLICATIONS OF DECLINES

Enrollments in the George and Boyden-Hull districts have declined almost steadily since 1972. Table III shows the actual K-12 enrollments

for the Boyden-Hull district from the 1967-68 school year through the current school year.

TABLE III

BOYDEN-HULL COMMUNITY SCHOOL ENROLLMENTS

1967-68 to 1976-77

	GRADE													
YEAR	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
1967-68	62	55	65	55	45	55	54	58	75	65	67	71	54	781
1968-69	57	63	48	58	54	42	55	55	59	82	64	67	68	772
1969-70	50	58	60	46	61	56	46	57	55	66	83	63	66	767
1970-71	41	46	53	62	47	59	57	48	56	60	65	83	63	740
1971-72	57	43	52	57	67	48	60	58	46	61	58	60	84	751
1972-73	52	54	42	47	55	63	46	60	54	48	62	55	54	692
1973-74	43	51	52	40	47	53	64	47	58	58	47	60	53	673
1974-75	48	43	48	53	41	50	58	62	46	62	55	46	56	668
1975-76	57	48	43	48	54	43	52	59	62	48	58	53	44	669
1976-77	51	53	49	41	46	51	43	48	57	62	52	60	54	667

The figures presented in Table III represent a 14.6% decline during the period from 1967-68 to 1976-77. The average yearly rate of decline in the Boyden-Hull school system during the same period was 12.6 students per year. A study of the data in Table III reveals that the primary reason for enrollment declines in the Boyden-Hull District

during the period covered was the decrease in kindergarten class size during the years of decline.

Table IV includes enrollment data for the George Community Schools from 1967-68 through the current year. These figures represent a 15.9% decline in enrollment during the period from 1967-68 to 1976-77 and an average yearly rate of decline of 11.8 students per year during that same period. These declines, as in the Boyden-Hull school, were generally the result of declines in kindergarten class size.

TABLE IV

GEORGE COMMUNITY SCHOOL ENROLLMENTS

1967-68 to 1976-77

	GRADE													
YEAR	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
1967-68	49	55	54	46	45	59	57	51	49	57	49	57	46	674
1968-69	55	44	56	56	50	44	57	56	52	46	55	48	54	673
1969-70	43	52	40	57	58	48	45	60	56	52	46	51	46	654
1970-71	45	40	51	37	55	55	45	47	60	56	55	45	53	644
1971-72	57	42	43	55	39	59	56	49	47	60	54	54	43	658
1972-73	29	48	41	45	54	38	59	56	46	48	57	53	48	622
1973-74	38	26	47	40	44	54	39	59	56	49	50	57	57	616
1974-75	32	35	27	45	38	46	54	39	61	55	50	47	55	584
1975-76	34	36	34	29	46	40	47	54	40	62	54	51	47	574
1976-77	33	37	34	32	32	47	44	49	57	41	58	55	48	567

Using the data presented in Tables III and IV, along with the current census figures, it was possible to project enrollments for the George and Boyden-Hull districts through the 1981-82 school year. For the purpose of this study, the weighted cohort-survival ratio was utilized as the technique for projecting future enrollments.

The cohort-survival ratio uses the average ratio of students from grade to successive grade. The average grade-to-grade ratios are then multiplied by current grade enrollments to obtain future enrollments. The weighted cohort-survival ratio employs an additional technique to weight the ratios obtained. In this case, a technique has been employed which involves the consideration of the last projection in the next projection and the deletion of the oldest ratio with the addition of the ratio used in the projection. Hence, each year of historical data was weighted differently for each projection.

Table V represents a projection of the enrollments for the George and Boyden-Hull school districts from the 1977-78 school year through the 1981-82 school year, employing the technique previously described. These projections generally reflect a continued decline in enrollments for the two school districts and a considerably greater projected rate of decline for the George district than for the Boyden-Hull district.

The projections in Table V represent an average yearly decline of 21.4 students for the George district and 8.8 students for the Boyden-Hull district. As shown in Table V, the only break in the projected enrollment declines for the two districts was the slight increase in enrollment projected for the Boyden-Hull schools from the 1980-81 school year to the 1981-82 school year.

TABLE V

ENROLLMENT PROJECTIONS FOR THE GEORGE COMMUNITY SCHOOLS AND THE BOYDEN-HULL COMMUNITY SCHOOLS (1977-78 to 1981-82) USING WEIGHTED COHORT SURVIVAL RATIOS

GEORGE COMMUNITY SCHOOLS

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
1977-78	37	31	37	34	33	32	47	45	49	57	41	57	54	554
1978-79	28	35	31	37	34	33	32	48	45	50	57	40	56	526
1979-80	29	27	35	31	37	34	33	33	48	46	50	56	39	498
1980-81	27	28	27	35	31	38	35	34	33	49	45	49	55	486
1981-82	30	26	28	27	35	31	39	36	34	34	48	44	48	460

BOYDEN-HULL COMMUNITY SCHOOLS

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
1977-78	52	50	52	48	41	46	52	43	47	61	61	51	58	662
1978-79	35	51	49	51	49	41	47	52	42	50	60	60	50	637
1979-80	48	34	50	48	52	49	42	47	50	45	49	58	58	630
1980-81	47	47	34	49	48	52	50	42	46	53	44	48	56	616
1981-82	67	46	46	33	49	48	53	50	41	49	52	43	46	623

Barring unforeseen changes in community structure or in community population and mobility patterns, the enrollment projections presented heretofore should represent a reasonably accurate estimate of future enrollments. One factor which could well affect the projected enrollments is the rate of parochial school enrollment, particularly in the Boyden-Hull district.

There was some evidence of an increasing rate of attendance in parochial schools for families residing in the Boyden-Hull district. According to the results of screening by school officials of the parents with pre-school children, residing in the Boyden-Hull school district, the projected kindergarten enrollments in Table V may be too high due to an increase in the rate of parochial school enrollment. While the method of projection generally takes into account the loss of enrollees for any number of reasons, there was no way for the technique to predict increased private and parochial school enrollment rates for the future.

Table VI represents what the enrollments of a combined George-Boyden-Hull district would have been from 1967-68 to 1976-77 and a projection of enrollments for that same combined district through 1981-82. According to the data in Table VI, the trend in enrollment for a reorganized district would be for a continuation of the decline and at a greater rate than in the ten years used in deriving the ratios.

The projected enrollments for 1977-78 to 1981-82 in Table VI represent an average decline of approximately thirty students per year through the 1981-82 school year, an average percentage decline of slightly more than 2.5% per year. The enrollments projected in Table VI represent a decline of more than 10.5% for the five years covered.

TABLE VI

COMBINED ENROLLMENTS - GEORGE COMMUNITY SCHOOLS AND BOYDEN-HULL COMMUNITY SCHOOLS - (1967-68 to 1976-77) WITH PROJECTIONS FOR 1977-78 to 1981-82

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
1967-68	111	110	119	101	90	114	111	109	124	122	116	128	100	1455
1968-69	112	107	104	114	104	86	112	111	111	128	119	115	122	1445
1969-70	93	110	100	103	119	104	91	117	111	118	129	114	112	1421
1970-71	86	86	104	99	102	114	102	95	116	116	120	128	116	1384
1971-72	114	85	95	112	106	107	116	107	93	121	112	114	127	1409
1972-73	81	102	83	92	109	101	105	116	100	96	119	108	102	1314
1973-74	81	77	99	80	91	107	103	106	114	107	97	117	110	1289
1974-75	80	78	75	98	79	96	112	101	107	117	105	93	111	1252
1975-76	91	84	77	77	100	83	99	113	102	110	112	104	91	1243
1976-77	84	90	83	73	78	98	87	97	114	103	110	115	102	1235
PROJECTIONS														
	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
1977-78	89	81	88	82	74	78	100	88	96	118	102	108	112	1216
1978-79	63	86	80	87	83	74	80	101	87	100	117	100	105	1163
1979-80	77	61	85	79	88	83	75	81	100	90	99	115	98	1131
1980-81	74	75	61	84	80	89	85	76	80	104	89	97	112	1106
1981-82	97	72	74	60	84	80	91	85	75	83	103	87	94	1085

The accelerated rate of enrollment decline projected in Table VI is consistent with the prediction of a report on Iowa school finance made by the National Conference of State Legislatures. According to the report, the possibility for stabilization in enrollment was not likely until at least 1985.[15]

Declining enrollments had affected the two districts in question in various ways. School officials in both districts reported having made recent staff reductions as a direct result of enrollment declines. In addition, the districts were each currently struggling with problems relative to class sizes at the elementary level which were at least related to the problem of enrollment declines. Perhaps a more important consideration was the affect of enrollment declines upon the programs and services offered by the two school systems.

Officials for the Boyden-Hull school system indicated that enrollment declines had not diminished the quality and scope of programs or services offered to date. A recent reduction in force in the George district due to enrollment decline had resulted in the elimination of a primary level transitional classroom which was a part of the total remedial program at the elementary level. While the potential effect of future declines on programs and services offered was not clear, administrators in both districts indicated a probable need for more staff reductions and/or reassignments, should enrollment declines continue.

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[15]National Conference of State Legislatures, NCSL Preliminary Report on Iowa Finance (Des Moines, Iowa: January 5-6, 1976), Section IV, p. 1.

Though the problems of staff reductions and reassignment were significant, the impact of the declining enrollments upon the finances of the two districts was perhaps a more crucial issue.

Recently collected data on enrollment declines indicate that the districts in the state with the most severely declining enrollment problems generally have greater fiscal capacity to cope with these problems. These districts tend to be wealthier, have lower school tax rates, and exhibit higher educational expenditures than other districts in the state.[16]

Although the George and Boyden-Hull districts may well be examples of districts with adequate capacity to finance the effects of enrollment declines, it was becoming increasingly evident that they were gradually being forced to reduce the size of their teaching staffs and possibly to reduce the scale and scope of non-instructional services. Despite the state's current inclination to partially subsidize the costs of declining enrollments, through its legislated budget formula, the financing capacity of the two districts was certain to be affected by future enrollments, which are declining. This problem would be magnified, should the state decide to exclude high wealth and expenditure districts from the subsidization provisions of the enrollment decline law.

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[16] Ibid., Section IV, p. 2-4.

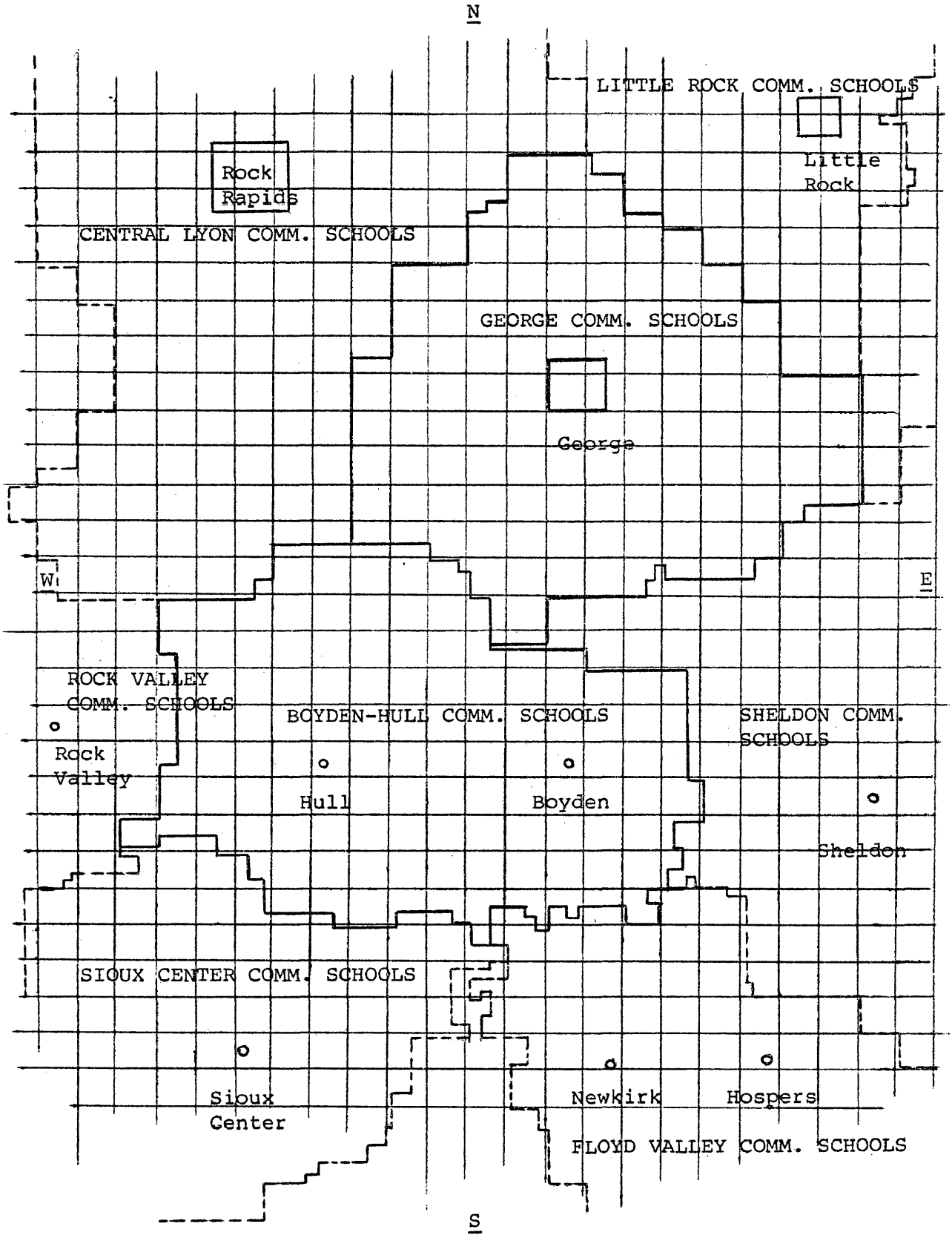
II. DISTRICT SIZES AND BOUNDARIES; TRANSPORTATION REQUIREMENTS - PRESENT AND PROJECTED

A consolidated school district comprised of the present George Community School District and the Boyden-Hull Community School District would occupy about 217 square miles in Lyon and Sioux counties and would serve approximately 6400 people. The districts presently share a common boundary of six and one-fourth miles in the southwest corner of the George district and the northeast corner of the Boyden-Hull district. The boundaries for each district are quite irregular, due to the reorganization patterns when the districts were formed.

Illustration #1 shows the George and Boyden-Hull school districts as well as the immediately adjacent districts drawn to a scale of one mile to the quarter inch. The illustration has been overlaid with a one-fourth inch grid to facilitate conceptualization of distances and district sizes.

At the time of the study, students of the Boyden-Hull district were required to travel as far as fifteen miles to reach appropriate school facilities, while school sites were located a maximum of ten miles from the residences of students of the George district. The extent to which the proposed reorganization would affect the distances of patrons from appropriate school facilities would depend upon the utilization of current attendance sites and decisions concerning additional building.

ILLUSTRATION 1



As both the George and Boyden-Hull districts were basically rural in nature, the transportation requirements for each were considerable. Table VII represents the current transportation data for the two districts. The data was current through the 1976-77 school year, except for the figures reported as transportation costs per pupil, which were derived from transportation expenditures and enrollments for the 1975-76 school year.

TABLE VII

CURRENT TRANSPORTATION DATA FOR THE

GEORGE AND BOYDEN-HULL SCHOOL DISTRICTS

	George Community Schools	Boyden-Hull Community Schools
Number of Regular Bus Routes	6+1 Kindergarten Route	8+2 Kindergarten Routes
Number of Students Currently Assigned To Bus Routes	364	437
Average Miles Per Bus Route	26½ Miles	22-25 Miles
Maximum Miles Bused (One Way)	27½ Miles	32 Miles
Maximum Riding Time (One Way)	60 Minutes	45-50 Minutes
Current Transportation Cost Per Pupil	Approx. $70 Per Pupil	Approx. $85 Per Pupil

It was difficult to estimate the transportation requirements of the proposed reorganized district, as much would depend upon the nature of the new district. Decisions concerning how current facilities would be used, as well as where additional facilities would be located, would to some extent dictate transportation needs.

The sixty minutes reported by the George district as the current maximum riding time was the same as the maximum recommended by the State Department of Public Instruction. It would not seem that any of the data contained in Table VII would necessarily represent conditions which would prohibit the reorganization under consideration.

III. FISCAL RESOURCES AND FINANCING PATTERNS

In Iowa, the financial capacity of a reorganized school district is generally the sum of the fiscal resources of the two or more districts available for funding the General Fund Budget in a reorganized district is the product of the particular budget year enrollment of the district and the allowed level of per pupil expenditures for that same district, according to current state legislation.

Table VIII represents current financial data for the George and Boyden-Hull Community School Districts along with that projected for a reorganized district comprised of those two districts. The information contained in the table was taken from figures recently presented by the State Department of Public Instruction or derived by using legislated formulas for taxation and current limits on bonding capacity for school districts.

Item 2 in Table VIII, the controlled general fund budget, is the maximum expenditures for the year, less miscellaneous income and funds carried over from the previous year's general fund budget. Item 3, the tax dollars to be raised per thousand dollars of assessed valuation, represents the taxation rate based upon the actual value of property of the district.

Prior to 1975, the State of Iowa used a formula in which 27% of the actual property value was the tax base for valuation of the district. In 1975, the State of Iowa converted to a "real value" or 100% value formula for tax purposes. As a result, taxation rates are currently expressed in terms of dollars per thousand of assessed valuation rather than in millage.

Items 6 and 7 deal with the bonding capacity for the districts, based upon limits established at the state level. Item 6 represents the total bonding capacity of the district in question, based upon a legislated maximum of 5% of the total assessed valuation for any particular school district. In addition, and perhaps more important, no school district, without an additional vote of its constituents, may have a total yearly bonded obligation of more than ten mils times the total valuation of the district. These figures are presented in Item 7 in Table VIII. The special 2.5 mil building fund levy in Item 8 of Table VIII represents funds which could be used in site acquisition and site improvements. These funds, as well as the bonding limits shown in Table VIII, will have particular significance in the following discussion of building conditions and projected needs.

TABLE VIII

CURRENT BUDGETARY INFORMATION FOR THE GEORGE AND BOYDEN-HULL SCHOOL DISTRICTS AND THE PROPOSED REORGANIZED DISTRICT

		GEORGE	BOYDEN-HULL	PROPOSED REORGANIZED DISTRICT
1)	Assessed Valuation			
	1976-77	$60,392,062	$82,537,763	$142,929,825
2)	Controlled General Fund Budget			
	1976-77	$808,862	$959,552	$1,768,414
3)	Total Dollars Per $1,000 of Assessed Valuation to be Raised Through Taxation			
	1976-77	$8.92	$8.78	$8.84
4)	Millage Equivalent of Item 3	33.037	32.519	32.740
5)	Current Bonded Indebtedness	None	$160,000	$160,000
6)	Legal Bond Capacity (5% of Total Assessed Valuation)	$3,019,603	$4,126,888	$7,146,491
7)	Approximate Legal Yearly Bonded Obligation Limit (10 Mils per Year Times Total Valuation)	$163,058	$222,852	$385,910
8)	Special 2.5 Levy Accumulations	Approx. $145,000	Approx. $50,000	Approx. $195,000

IV. PHYSICAL FACILITIES WITH PROJECTED NEEDS AND COST ESTIMATES

At the time of this study, the communities of George, Boyden, and Hull each housed attendance facilities for their respective school districts. The facilities varied greatly in age, capacity, general condition, and in the extent to which they satisfied the prevailing needs of the two systems.

School facilities in Boyden served students in grades kindergarten through fourth who reside in the Boyden area and all students in grades six through eight from the entire district. The facility in Boyden was the product of three separate constructions and had a capacity of approximately 360 students. The old part of the building was nearly sixty years old and provided facilities for junior high classes (grades six through eight) and also Art and Music. The elementary addition to the Boyden facility was thirteen years old and consisted of classrooms for grades kindergarten through third, as well as a library and lunchroom. A fifteen year old gymnasium rounded out the school accommodations in Boyden.

The inadequacies of the Boyden facilities were primarily in the junior high area. There was a shortage of space for junior high classes, no rooms available for Industrial Arts and Home Economics for grades six through eight, and limited space for Art and Music. While the elementary facilities were adequate in size and in excellent condition, there had been some structural problems with the older part of the building.

Hull was the location of school facilities for students in grades kindergarten through fourth who reside in the Hull area as well as stu-

dents in grades five and nine through twelve, district wide. In addition, the district's central administrative offices were located in Hull. The facility in Hull had a capacity of approximately 600 students. The old part of the Hull building was about sixty years old and housed primarily high school classes. One newer section of the building was slightly over twenty years old and consisted of elementary classrooms, a lunchroom and Industrial Arts accommodations. The most recent addition to this structure in 1969 included additional elementary classrooms as well as administrative offices.

The most glaring weaknesses of the attendance center in Hull included the complete lack of a gymnasium-auditorium area and inadequate Industrial Arts-Vocational Agriculture areas. The general condition of facilities in Hull was rated from excellent for the newer additions to fair for the old building.

School facilities in George consisted of two buildings located on a common campus. The older building for students in grades seven through twelve was about fifty-seven years old and had a capacity of approximately 575 students. Facilities were added to this structure in 1950 in the form of a gymnasium and additional classrooms. The George elementary building was the attendance center for all students in the district in grades kindergarten through sixth and, in addition, contained the lunchroom facility for all students K-12. The building was sixteen years old, and had a capacity of about 350 students.

School officials described the deficiencies of the George facilities as inadequate Vocational Agriculture and Industrial Arts areas and a need for additional and improved music instruction space. A secondary need was for a large study hall-commons area.

As one of the primary reasons for the initiation of discussion concerning a possible reorganization involving the George and Boyden-Hull districts concerned building needs in each of the districts, it was logical that any conversation about proposed reorganization should include the investigation of the proposed facilities. Officials from both districts felt there was little reason for considering a combining of the systems without planning to include some new construction in the reorganization effort.

A concensus of opinion among school officials might suggest the addition of an attendance center for all students in grades seven through twelve or grades nine through twelve for the newly reorganized district and the maintenance of elementary attendance centers in each of the three communities. The question concerning the advisability of including the junior high grades (seventh and eighth) in a new facility may be critical to the entire reorganization study. While there are undoubtedly advantages to an attendance center for grades seven through twelve, school officials are aware of the concern for the future utilization of the facilities currently housing these students, should a decision be made to reorganize. In addition, this decision would have a considerable impact upon the funding requirements for new construction.

In reaction to the probable need for additional facilities upon the decision to reorganize, it is important to assess the ability of the resulting reorganized district to finance new facilities sufficient in size and quality to meet the needs of the students of such a district. Table IX represents the cost estimates for new structures of sufficient size to serve students in a reorganized district comprised of the current George and Boyden-Hull Community School Districts.

Estimates of costs in Table IX are presented for facilities to serve both students in grades seven through twelve and grades nine through twelve, using current enrollment figures. The square feet per pupil figures used in Column B in the table represent a range in size based upon the opinions of some State Department officials and personnel from a number of architectural firms. The 100 square feet per pupil figure would generally represent a very basic facility with the educational necessities, while the 150 square feet per pupil structure would be a relatively elaborate construction. The cost per square foot used in Table IX was chosen through discussion with several architectural consultants, relative to current construction costs for educational facilities in the same general geographical vacinity.

Columns F, G, and H in Table IX include the approximate yearly costs (principal and interest) for the various sizes of facilities to serve George and Boyden-Hull students in grades nine through twelve and grades seven through twelve, based upon twenty, fifteen and ten year bond retirement schedules. These figures are the product of the different total facility costs in Column E and a formula provided by Department of Public Instruction school plant consultants.

TABLE IX

COST ESTIMATES FOR THE CONSTRUCTION OF NEW FACILITIES
FOR THE PROPOSED REORGANIZED DISTRICT (GEORGE-BOYDEN-HULL)

A School Population To Be Served	B Square Feet Per Pupil	C Total Square Feet Required	D Cost Per Square Foot	E Approx. Cost of Facility (C X D)	F Approx. Yearly Cost (Principal & Interest) (20 Year Bond Retirement Schedule)	G Approx. Annual Cost (Principal & Interest) (15 Year Bond Retirement Schedule)	H Approx. Yearly Cost (Principal & Interest) (10 Year Bond Retirement Schedule)
Grades 7-12 641 Pupils	100	64,100	$33	$2,115,300	$184,454	$217,875	$287,469
Grades 9-12 430 Pupils	100	43,000	$33	$1,419,000	$123,736	$146,157	$192,842
Grades 7-12 641 Pupils	125	80,125	$33	$2,644,125	$230,567	$272,344	$359,336
Grades 9-12 430 Pupils	125	53,750	$33	$1,773,750	$154,671	$182,696	$241,052
Grades 7-12 641 Pupils	150	96,150	$33	$3,172,950	$276,681	$326,813	$431,203
Grades 9-12 430 Pupils	150	64,500	$33	$2,128,500	$185,605	$219,235	$289,263

In order to assess the new construction capacity of a combined George-Boyden-Hull school district, a comparison between the figures in Columns F, G, and H of Table IX and those in Item 7 In Table VIII for the proposed combined district is particularly significant. As can be seen in Table IX, the $385,910, the maximum legal annual bonded obligation limit for the proposed reorganized district, from Table VIII, would be sufficient in most cases to satisfy the approximate annual cost requirements for the bond retirement schedules represented in Columns F, G, and H of Table IX. After deducting the 1½ mils from the proposed district annual bonded obligation limit to meet the current bond obligation for the Boyden-Hull district, available funds would still be sufficient to satisfy most of the requirements described in Columns F, G, and H of Table IX.

The figures in Table IX are based upon building costs which may be expected to continue to rise, increasing the total cost of the selected facility. In addition, enrollments at the time of construction, according to projections, will have declined and the assessed valuation, according to past trends, will have increased. A combination of these factors would, perhaps, tend to support a conclusion that the proposed reorganized school district could probably support the projected construction needs as described in this chapter.

CHAPTER IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

I. SUMMARY

In the fall of 1976, the George and Boyden-Hull Community School Districts became the subjects of simultaneous studies by committees comprised of lay persons, teachers and school administrators. These studies grew out of a growing concern in each district about the condition and suitability of existing school facilities and various problems related to declining enrollments.

This study was an attempt to assess the feasibility of reorganizing the two districts as one solution to the problems under consideration. The areas selected as most pertinent to the study included enrollment projections, district sizes and transportation requirements, fiscal resources and physical facilities. Information about these areas was collected and developed for a proposed reorganized district consisting of the George and Boyden-Hull districts. It was the opinion of the author that a study of this nature was necessary, in order to arrive at intelligent conclusions concerning the advisability of pursuing the district reorganization effort.

II. CONCLUSIONS

1. The George and Boyden-Hull Community School Districts will continue to experience declines in enrollment, at least through 1981-82.

2. There was evidence that subsequent declines might necessitate additional staff reductions and perhaps adjustments in curricular offerings,

particularly should state authorities continue to mandate budget limitations closely tied to school district enrollments.

3. The present travel requirements of the George and Boyden-Hull school districts were not excessive and were within accepted recommended maximums. The travel requirements of the proposed new district would be subject to the site selection for any additional attendance centers required.

4. The area of a school district of the size of the combined Boyden-Hull and George districts would not appear to be restrictive when compared to existing school districts in the area.

5. The George and Boyden-Hull Community School Districts appeared to have adequate financial resources to continue the support of programs currently being offered.

6. The tax base, in terms of real property value for the two districts, along with the limited current bonded obligation and accumulation of additional funds available for construction or improvement of facilities through the special 2.5 mil building levy, presented a favorable condition for the consideration of additional facilities, either individually or as a consolidated district.

7. Existing facilities for the George and Boyden-Hull school systems varied greatly in condition and suitability. Problems with facilities in the two districts ranged from inadequate space for desired and required programs to questionable structural conditions for some facilities.

8. Some new construction was needed and would probably be undertaken whether or not a district reorganization occurs.

9. The estimated new construction capacity of the Boyden-Hull and George districts, as well as the proposed reorganized district, appeared to be adequate.

10. On the basis of the information developed in this study, the proposal to form a single school district from the present George and Boyden-Hull Community School Districts would appear to be a reasonable one.

III. RECOMMENDATIONS

1. The boards of directors of the George and Boyden-Hull districts should consider the reorganization of the two districts as a feasible solution to the problems which prompted the study.

2. School authorities and study committees should address themselves to a number of issues relevant to the proposed reorganization, including site selection for new attendance centers, the utilization of facilities currently in use, grade levels to be provided for in any new attendance centers, and options for financing new constructions.

3. In addition to the reorganization of the George and Boyden-Hull districts, a number of other possible actions are recommended for study, including other district reorganization possibilities, the construction of new facilities by each of the districts, the sharing of staff and facilities, and revised patterns of utilization of current facilities and resources.

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