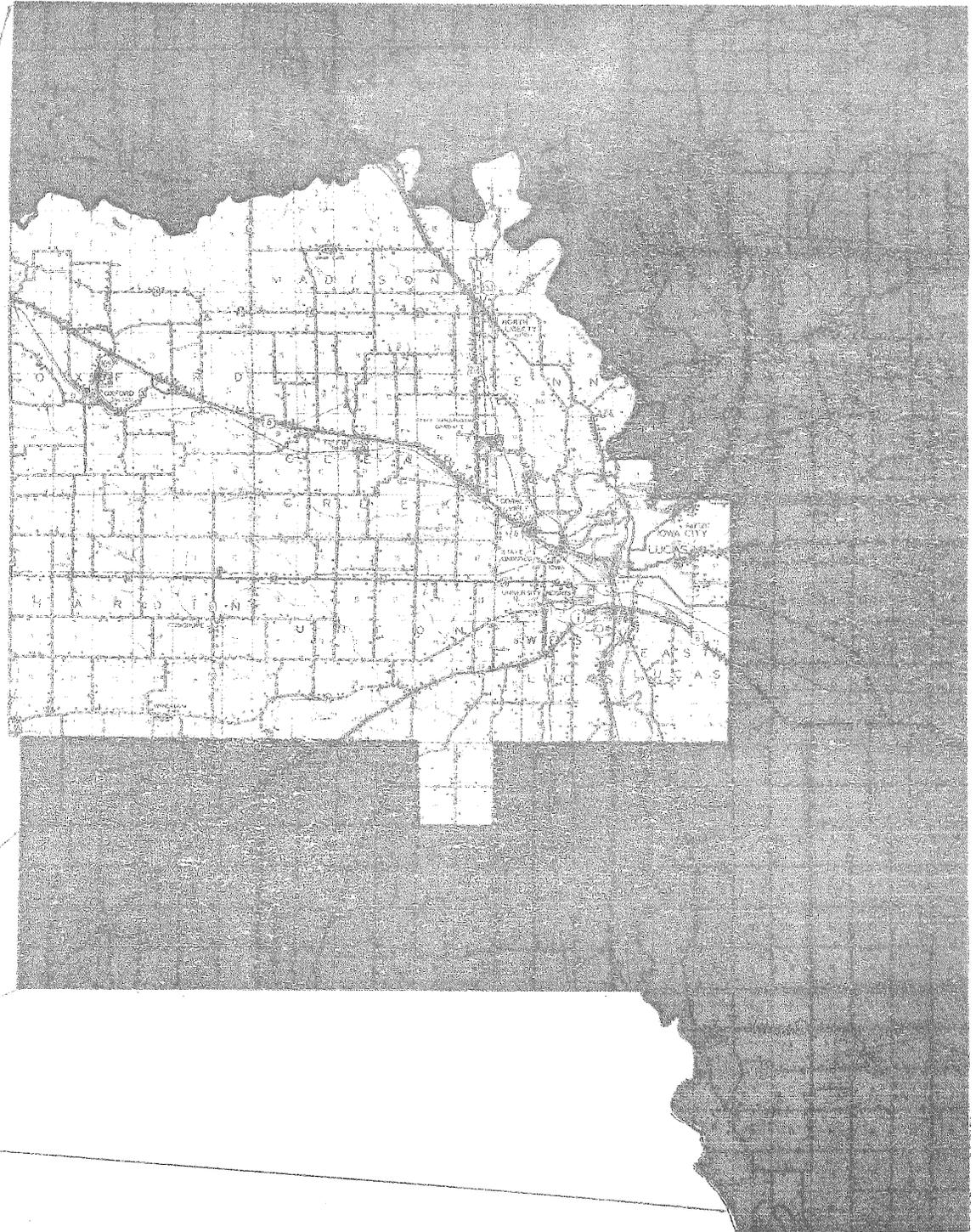
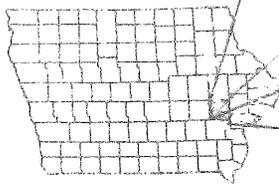


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II School district size - Iowa

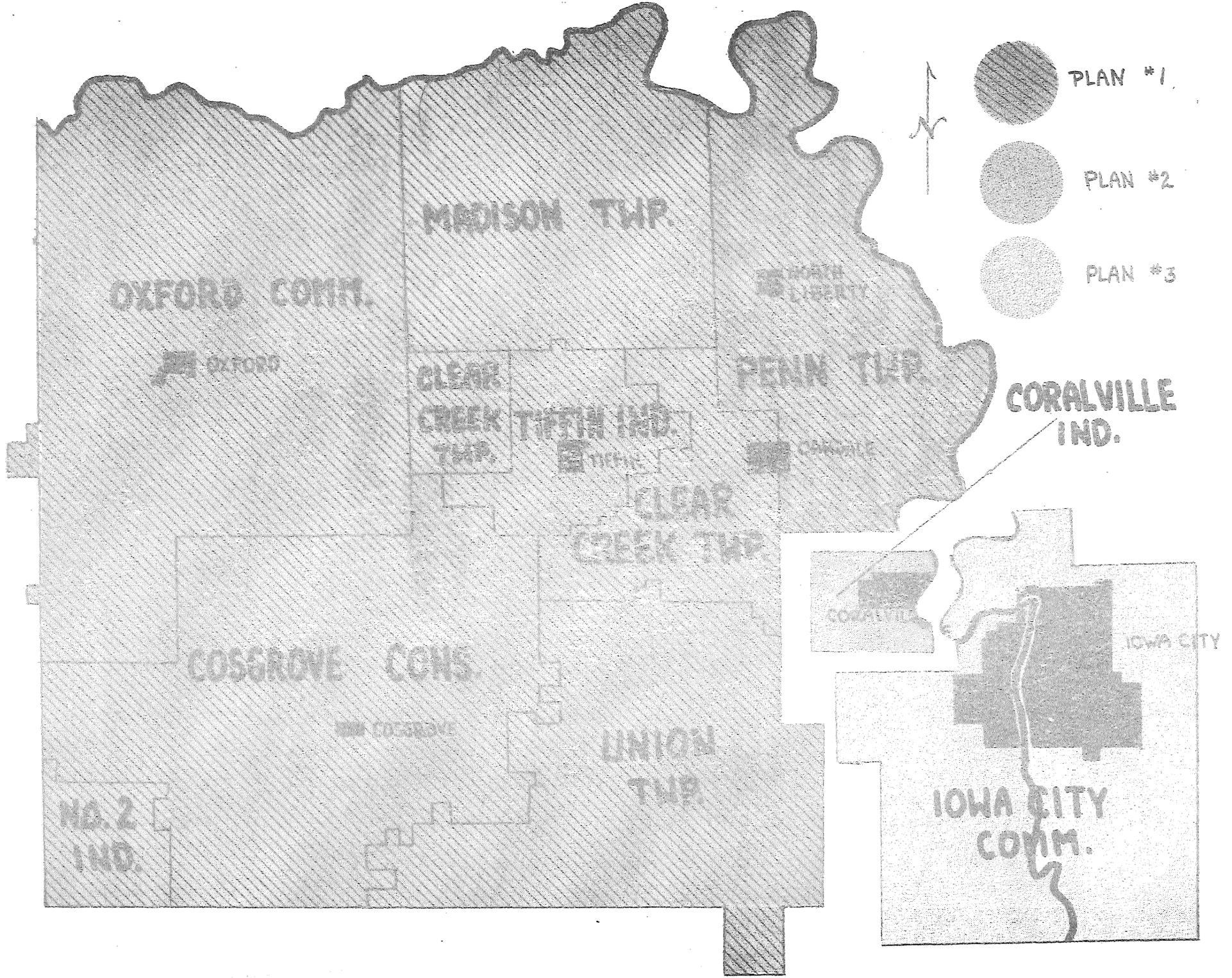
West Johnson County Reorganization Study



DIVISION OF ADMINISTRATION AND FINANCE

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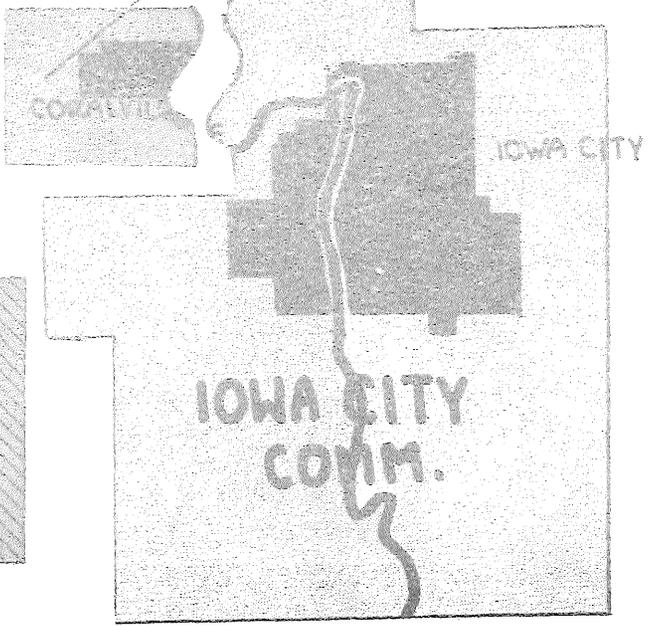
The author acknowledges the contribution of: (1) All school administrators in the area of study in gathering and compiling basic data. (2) Staff members in the division of Administration and Finance for generous help and advice. (3) Arthur Roberts and Fred Bohning of the Transportation Division in designing transportation routes. (4) Gene Coffey in building and plant facilities problems. (5) Marvin Ingle for art work.



- PLAN #1
- PLAN #2
- PLAN #3



CORALVILLE IND.



West Johnson County Reorganization Study

On written request of the Johnson County Board of Education, members of the staff of the State Department of Public Instruction made a study of three different plans for proposed districts in Western Johnson County. The county board specified that the area to be included was to encompass the following districts in their entirety: Oxford, Tiffin, Cosgrove, Coralville, Iowa City, Penn Township, Madison Township, Clear Creek Township, Union Township, and Sharon Number 1 Rural Independent.

The county board further specified that the study should evaluate three different proposed designs for administration units (districts) within the area. Unit I should include Oxford, Cosgrove, Tiffin, Penn Township, Madison Township, Clear Creek Township, Union Township and Sharon #1 Rural Independent. Unit II should include Unit I plus Coralville; and Unit III, all ten districts. (See map)

To recommend units that can best provide a high-quality school program--one with subject matter offerings that will serve all pupils (the accelerated, the average, the slow, and the physically and mentally handicapped)--is the major goal of this study. Although the study has been done with the objective of designing a plan reasonably sure of public acceptance in time, it does not, in any sense, attempt to recommend new units through a popularity poll. No such request was made by the county board, nor was any commitment made by the State Department Staff to poll the people on their evaluation of the three designs.

Although State Department personnel have conferred with local administrators in this area for help in gathering basic data and providing local background, the results and recommendations are those

of State Department personnel and have been arrived at without the influence of any one school administrator, school board member, or any other lay or professional person from within the area of study.

The evaluations and recommendations carry no mandate; the people of the area alone can accept or reject them as they see fit. The special welfare of any of the component districts, any city, town, political sub-division, or individual has not been considered in making the recommendations.

Standards for New School Districts

- I. Insofar as possible districts should be designed which will make possible a program that serves the needs of all pupils efficiently. A recommended comprehensive program is set forth on page (3).
- II. New proposed districts in this study should include plans for maximum utilization of existing plant facilities.
- III. Plans for the new buildings and sites needed should be in terms of program, accessibility and efficient use.
- IV. New districts should be planned with regard for self-sustained communities, population characteristics, natural barriers, transportation facilities, and financial ability to support a comprehensive school program through a combination of local and state support.
- V. New districts should have a sufficient number of pupils to organize:
 - (1) Elementary attendance centers (K-6) with one grade per teacher and with a pupil-teacher ratio of twenty-five pupils per teacher.
 - (2) Secondary school attendance centers with

(a) A teaching staff of not less than twelve (and preferably fifteen) teachers each.

(b) Teachers employed in their fields of major preparation, and

(c) Subject offerings to serve both the needs for college preparation and exploratory vocational areas.

(3) Internally on secondary level into junior and senior high school attendance centers with separate teaching staffs.

VI. New districts should be designed to include recommended attendance centers for all grade levels.

VII. Plans for new districts should include detailed transportation routes including the approximate time each child will be on the bus. No elementary pupil should be on the bus longer than fifty minutes; secondary pupils, no more than seventy-five minutes.

Program

Each of the three suggested plans for reorganization has been judged primarily on the basis of which could afford the best quality educational program. The real objective of all reorganizations should be based on the criteria of a comprehensive school program in which all pupils of the district have an equal opportunity to participate. The first, and unquestionably most important, factor in any quality educational program is the need for excellency in classroom teaching. Important factors beyond the quality of teaching are professional supervision; educational equipment; proper housing; remedial teaching; a guidance program; and provisions for special teachers in art, music, and physical education.

An effective school program is cognizant of individual differences in youth--their individual needs, aptitudes, and potentialities must all be served by the school through its curriculum and teaching.

Elementary Program

K-6

Thus far American education has under-emphasized elementary education. We have employed teachers for the elementary school with less training; we have housed them in the less desirable buildings; we have spent less on their educational equipment; and we have not paid elementary teachers as well as secondary teachers with the same training.

The basic skills have their beginning in the elementary school. Pupils begin to read, to write, to spell, to speak, to listen, to learn something about the fundamental concept of numbers. They begin to participate in the citizenship of their classrooms; they are led into the beginnings of the wonders of nature and science; they test their aptness in music and art; and they acquire their basic concepts of health and safety.

The good elementary program initially encourages accuracy and reasoning. It promotes an aesthetic sense and attempts to keep alive a sense of wonderment and curiosity (in spite of what they may have seen on T. V.).

The elementary program must recognize the need of the steadying experience of working closely with a single teacher. Pupils should be given an opportunity to have a sense of belonging.

Half-day kindergartens are recommended.

Good districts also provide classes for mentally retarded children.

Junior High School Program

(7-8-9)

Separately organized junior high schools (which include grades 7-8-9) are preferable.

The junior high program should recognize the special interests of pupils and permit the exploration of non-academic areas. Certain types and amounts of grouping should be carried on in junior and senior high school programs for those who need it.

The subject matter areas recommended are:

Art	Music
Art Crafts	Instrumental
Foreign Language	Vocal
Health Education	Physical Education
Homemaking	Reading
Industrial Arts	Speech
Business Education (Elem)	Social Studies
Language Arts	Science
Mathematics	Typing (<i>Personal</i>)

Junior High Activity Program

Student Council	Sports (Intramural only)
Camping	Baseball
Clubs	Basketball
Dramatics	Softball
Field Days	Swimming
Y Activity	Tennis
Speech	Golf

Inter-scholastic athletic programs are strongly discouraged.

Senior High School Program

10-11-12

A. Agriculture 4 years - Voc.

B. Business Education

Bookkeeping
Consumer Education
Office Practice
Shorthand (2 years)
Typing (2 years)
Retail Merchandising (General)

Business Law
General Business
Secretarial Practice
Personal Typing
Salesmanship (General)

Distributive Education
Salesmanship

Retail Merchandising (Comprehensive)
Cooperative Part-Time Program

C. 1. Industrial Arts
Blueprint Reading
Mechanical Drawing
Sheet Metal

Auto Mechanics
Electricity
Metal Work (2 years)
Wood Work (2 years)

2. Trade and Industrial
Extended Work in Areas Under (C)
Carpentry
Machine Shop (2 years)
Welding

Drafting
Printing (2 years)

D. Communication Skills

Debate
Speech
Grammar

English (4 years)
Dramatics
Journalism

E. Languages

2 Modern Foreign Languages (2 years)

F. Mathematics

Algebra (2 years)

Advanced Arithmetic

*3 years as minimum
4 years preferred*

G- Home making

G. Science

General Math
Integrated Math (2 years)
Trigonometry
Statistics and Probability

Calculus (*Introduction*)
Geometry
Solid Geometry

Chemistry
Physical Science
Physiology

Biology
General Science
Physics
Senior Science

H. Social Studies

American Government
Sociology
World History

American History
Economics
World Problems

I. Health & Physical Education (4 years)

K. Music - ←
Vocal & Instrumental (4 years)
Theory of Music
Music Appreciation

Other special services in secondary school programs (including both junior and senior high school) should often include provisions for enrichment schedules in reading and study skills, Iowa history, arts and crafts, government or civics, girls' and boys' health--plus, in some cases, enrichment courses in homemaking, industrial arts and typing.

A guidance program (which begins, of course, in the elementary grades) should offer service in the following areas.

1. Personal problems of the home, school and community.
2. Educational problems such as helping pupils plan courses.
3. Pupil-teacher relationship.

4. Parent-teacher and parent-pupil-teacher communication.
5. Establishment of a proper relationship between the guidance program and the classroom teacher by making possible some in-service training for classroom teachers in counselling and parent-pupil-teacher communications.
6. Testing and interpretation and use of test results.
7. Development and maintenance of comprehensive, intelligible pupil-record system.

Unit I

If we assume at the beginning of the evaluation of Unit I. that it will be possible to effect the district through the processes set forth in Chapter 275, Section 11 through 23 of the Iowa school code, then we could not question that such a district would meet any reasonable standard of adequacy in human resources. The number of children enrolled in public school at the present time would be 1,262, with 266 high school pupils and 996 elementary pupils.

One hundred and forty-two of the 266 high school pupils are attending school outside the area of this proposed district and would have to be transplanted to attendance centers within the boundaries of the new district. It seems that this alone creates a serious barrier to the possible establishment of Unit I.

This unit will continue to increase in population along its eastern boundary particularly. (See Table I) It is possible that it will decrease somewhat in the western more rural agricultural area. It is estimated that the total school population of the area may increase from 1,262 to as many as 1,860 by 1970.

The center of this school population in terms of attendance centers for elementary and secondary pupils appears to be east of Tiffin. With growth, such centers will undoubtedly move east from where such centers would be at present.

In the present area of Unit I only two buildings have much utility as any kind of an attendance center. They are the Oxford and Cosgrove buildings. From the scatter diagram or spot map of pupils in the area, it would be necessary to build ^{plant} at least a building for the grades seven through twelve

perhaps on a site east of Tiffin. If the district were to be recommended and effected near North Liberty, an elementary building to house at least one section of grades K through 6 (or 175 pupils) should be constructed. The Oxford building might well be used. (even though far off from center of school population) to house another two-section elementary school (K through 6), another 350 pupils. There would remain 300 pupils (K-6) to accommodate, and certainly it would be ill-advised to recommend that they all be sent to Cosgrove. The Cosgrove building is also off center but could be used to house one section of elementary pupils (grades K-6), another 175 pupils.

Thus, it seems obvious that, even though people could be induced to create this district, it would be impossible to provide classroom space for the enrollment or to finance such a building program.

Such a proposed district would have something less than \$600,000 bonding limit. A central attendance center for 450 pupils (grades seven through twelve) it is estimated, would cost nearly \$900,000. An additional eight to ten rooms to house pupils in grades K through 6 would be needed; these ten classrooms would cost another \$200,000 to \$250,000.

The above projections are made on the basis of using the Oxford building for two sections of K through 6; the Cosgrove building for one section K through 6; and the anticipated facilities at North Liberty in Penn Township of one section of K-6. Nine hundred (plus) pupils will be enrolled in grades K through 6. This would mean approximately five sections of elementary pupils. Four are accounted for above; but it leaves space for one section to be built.

It is on the basis of these attendance centers that the transportation routing shown elsewhere in this report for Unit I have been designed.

The financial ability of Unit I would be reasonably adequate with approximately \$8,269 in taxable valuation per child.

The bonding limit is woefully inadequate with \$600,000 the top limit and well over a million dollars needed to supply adequate space.

It would require an annual budget of approximately \$250,000 to employ a staff of 21 elementary teachers, 24 high school teachers, 12 or more administrative, supervisory, and special teaching personnel. Estimating this \$250,000 to be two-thirds of the total budget, we project an annual need for over \$300,000. Add this \$300,000 to the requirement for retiring bonds of \$70,000, and a need of \$370,000 annually is not unreasonable. This would project a millage rate of between 35 and 40 mills.

Summary--Evaluation of Unit I

I. It seems very unlikely that this district would have the slightest chance of being voted.

When 165 pupils (142 high school and 23 elementary) are being tuitioned into schools in Iowa City (either to Iowa City Public High School or the University school), a large portion of the non-high school districts (Penn, Clear Creek, Union, Madison and Tiffin) surely would be reluctant to vote for such a reorganization. Cut such a unit down to exclude these high school tuition pupils, and the proposal will be short of human resources (pupils).

It would be impossible to continue to tuition pupils out to Iowa City and the University school, with the new district paying the tuition, when the same facilities (grades K-12) were being offered within the new district.

- II. The center of school population falls somewhere east of Tiffin, therefore the likelihood of a high school attendance center in Western Johnson county seems remote.
- III. As has already been pointed out the bonding limit would not permit, in the foreseeable future, the building of adequate housing facilities.
- IV. The financial ability of such a district is reasonably good, except for bonding limits in the light of buildings needed.
- V. The number of pupils is sufficient if the eight districts could all be included in their entirety in one unit.

The two basic reasons why this Unit I cannot be recommended are: (1) The unlikely chances for a favorable vote, and (2) The housing problems that seem insurmountable.

Unit II

This proposal would be Unit I plus the present Coralville district. It means the addition of 594 pupils (505 elementary and 89 high school pupils) to the 1,262 in Unit I. This would bring the total number of pupils to 1,855; total elementary (grades K-8) to 1,500; and total high school (9th through 12th grade) to 355. If divided on the basis of K-6 and 7-12, there would be 1,235 in grades K through 6 and 620 junior and senior high school pupils in grades 7 through 12.

The financial ability of this proposed district breaks down as follows: (1) A taxable valuation of over 15 million dollars or \$8,131 per resident pupil. (2) An additional \$386,920 in monies and credits. (3) Absorb another \$587,500 in present bonded indebtedness in the Coralville district. (4) \$146,000 bond issue voted in Penn Township plus the bonds outstanding in the Unit I proposal, the Unit II bonding limit would approximate \$620,000.

Again using the same formula for projecting costs (that of using the salary costs as two-thirds of the budget), the estimated millage necessary for the educational program and capital outlay would be approximately the same as Unit I,---35 to 40 mills. Such an estimate does not allow for any possible inflationary economic trends in the future.

If the district were formed it seems advisable under Unit II to locate a six-year high school in or near Coralville to house at least 650 pupils. The need for at least seven more elementary classrooms could be met with some alterations, renovations and additions to existing buildings at Oxford, Cosgrove, and possibly Coralville.

No extra space would be acquired by addition of Coralville to Unit I. With the anticipated gain in school population in Coralville, the problem of housing pupils would become more acute.

It is recommended that the internal organization for Unit II be a K-6-3-3 plan. This would require the construction of a six-year high school building on a site near Coralville. With 171 pupils (now in Iowa City schools) attending here, this building should accommodate at least 650 pupils-- using present enrollment as a basis for judging the needs. This would relieve the Coralville building of their seventh and eighth grade enrollment of 82 pupils, but the release of four classrooms in Coralville might soon be absorbed by the anticipated increase in enrollment in that area. The pre-school and early elementary figures would indicate that, within three to five years, it will be necessary for each grade to have three or four sections. Temporarily, Coralville might house three sections of elementary grades, but new elementary facilities would be needed soon.

It is estimated a six-year high school building to accommodate 650 pupils (plus the additional space needed for elementary pupils) would cost \$1,250,000 to \$1,500,000. The bonding limit of this proposed district would exceed \$600,000 by a very small amount at present. It seems unlikely that the combination of Unit I with Coralville would improve the chances of a needed quality program or enhance the possibilities of obtaining additional necessary space.

The same basic factors used in Unit I for evaluation will apply for Unit II:

1. It is unlikely to gain public acceptance.
2. It would have no legal authority to continue to tuition high school pupils.
3. There is little chance that Western Johnson county would be able to have a high school attendance center.

4. The bonding limits are extremely low in the light of building needs.

Possible Interim Method of Operation

Until new housing for pupils could be acquired, it is difficult to offer a possible way of operation for Unit I or II. Any possible suggestion would necessitate a lowering of educational standards in the area.

It would be physically possible to house 266 high school pupils in the Oxford building by removing all of the grade school pupils except a kindergarten.

It would then be possible to temporarily take care of the elementary grades by using the Cosgrove building, the contemplated Penn Township building, and the Tiffin building (if the State Fire Marshal would approve). Even these facilities would need alterations; some rural school buildings might even need to be pressed into service to accommodate elementary pupils. These facilities would not provide an attractive educational environment. The problems of transportation would be, to say the least, difficult and expensive.

Such a makeshift arrangement, although temporary, is not recommended in this study. Furthermore, it would be doubtful that this operation could be approved for more than a year or two under State Department standards.

Unit III

This proposed district would include all ten districts involved in this study: Iowa City, Coralville, Tiffin, Oxford, Cosgrove, Madison Township, Union Township, Clear Creek Township, Penn Township and Sharon #1.

According to present enrollment figures, Unit III would serve a total of 6,385 pupils, K through 12th grade. On the basis of an 8-4 internal organization, this would mean 5,214 elementary (K-8) and 1,171 high school pupils (9-12). Broken down on the basis of a 6-3-3 internal organization, there would be 4,289 elementary pupils (K-6), 1,234 junior high school pupils (7-8-9), and 862 senior high school pupils (10-11-12).

At the present time, Iowa City has a resident enrollment of 3,054 elementary (K-6), 872 junior high school (7-8-9), and 603 senior high school pupils (10-11-12). (These enrollment figures are based on the enrollments for the school year 1959-1960).

In this proposal all junior and senior high school pupils in the area outside of the present Iowa City district (and not now attending Iowa City schools) could be accommodated in the present Iowa City facilities. The number to be absorbed would be 361; the facilities will easily accommodate 450.

This would leave the problem of housing 1,335 pupils of the area outside Iowa City in grades K-6. With the Penn Township building considered as available, the present buildings at Coralville, Cosgrove, and Oxford could house these elementary pupils temporarily--until it would be possible to construct another section-or double-section elementary attendance center within the area west of Iowa City, perhaps between Tiffin and Coralville or on the site on which Coralville already has an option.

The high school and elementary housing problems will still be acute if the probable rapid growth of this area is considered. There will be a need by 1967 for a new senior high school (and perhaps a junior high) in the area west and south of the city. Some consideration should be given to converting the Coralville building to a junior high school attendance center. By 1967 there would be more than 1,100 pupils in the present senior high school.

It seems feasible that Unit III would make possible the transition to a more comprehensive secondary school program and the housing of the elementary pupils outside the present Iowa City district with less difficulty than either of the other two proposals. This unit would have more elasticity in housing than the others with Iowa City's present facilities and no tuitioning of pupils.

Financial Ability of Unit III

This unit would have a total of \$47,242,677 in taxable valuation, together with \$10,000,000 in monies and credits. The taxable valuation per child to educate would be \$7,400. The encumbered bonding limit would be \$1,438,470. (This figure includes the \$140,000 voted recently in Penn Township but does not include the very recent bond issue of \$750,000 in Iowa City). The estimated millage rate would fall between 45 and 50 mills.

WEST JOHNSON COUNTY CURRENT

District	Bonded Indebtedness	Assessed Valuation	Monies & Credits	Total G. F. Expenditures	Millage Levy		
					Sch. H. F.	Gen. Fd.	S. C. F.
1. Cosgrove	\$ 93,000	\$12,104,237	\$ 105,740	\$ 102,974.05	3.910	32.123	
2. Oxford Comm.	148,000	2,483,036	271,694	112,941.84	5.025	31.160	
3. Tiffin		558,693	46,755	38,652.78		53.077	
4. Clear Creek Twp.	1,500	827,405		20,162.57		21.818	
5. Madison Twp.		1,183,143	33,594	37,499.30		21.059	
6. Penn Twp.		1,642,329	115,116	62,998.29		25.971	
7. Union Twp.		1,382,541	211,050	34,312.14		22.765	
8. Sharon #1		246,817	49,350	8,266.61		32.327	
TOTALS 1, 2, 3, 4, 5, 6, 7, 8	\$ 242,500	\$10,428,201	\$ 833,299	\$ 417,807.58		40.065	
9. Coralville	345,000	4,654,988	386,920	215,288.57	8.177	44.505	
TOTALS 1, 2, 3, 4, 5, 6, 7, 8, 9	\$ 587,500	\$15,083,189	\$1,220,219	\$ 633,096.15		41.973	
10. Iowa City Comm.	2,266,000	32,159,488	8,681,477	\$1,779,049.75	6.641	47.943	.933
TOTALS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	\$2,853,500	\$47,242,677	\$9,901,696	\$2,412,145.90		51.058	

SCHOOL FINANCIAL DATA

Total Millage	Bonding Capacity	Bonds Outstanding	Unencumbered Bonding Capacity	Total Enrollment	Assessed Val. Per Child
36.033	\$ 180,640	\$ 93,000	\$ 87,640		
36.185	220,504	148,000	72,504		
53.077	48,895		48,895		
21.818	68,950	1,500	67,450		
21.059	100,274		100,274		
25.971	142,616	140,000	2,616		
22.765	125,764		125,764		
32.327	23,035		23,035		
	\$ 910,678	\$ 382,500	\$ 528,178	1261	\$8,269.79
52.682	407,261	345,000	62,261		
	\$1,317,939	\$ 727,500	\$ 590,439	1855	\$8,131.10
55.517	3,114,031	2,266,000	848,031		
	\$4,431,970	\$2,993,500	\$1,438,470	6385	\$7,399.01

Anticipating the rapidly growing population and proposed bond issues already being considered, the approximate one and one-half million unencumbered balance available for buildings is again inadequate. Even so this limit seems to offer less in the way of roadblocks than either of the other two proposals.

Evaluation of Unit III

1. It would be possible to immediately provide a more comprehensive junior-senior high school program to all students of the area like the one already in existence in Iowa City.
2. Transportation of pupils to the recommended attendance center is as efficient and convenient as those in the other two proposals. The time on the bus will not exceed acceptable standards.
3. The financial ability of Unit III, based on taxable valuation per child, is not as favorable as it might be. The millage rate will exceed Unit I and II.
4. The housing of pupils and the immediate transition seems less complicated in Unit III.
5. The bonding limit potential would seem to be better for this unit because of the likelihood of new industry locating in Iowa City.

Population Characteristics of the Area

There seems little doubt that Johnson County suburban area around Iowa City will have a tremendous population growth. The table in this report reflects a doubling of school population in this area in the next ten years, (6,385 in 1960 to 12,021 in 1970). It seems safe to say that this growth will concentrate close to the present incorporated area of Iowa City. Other projections by private concerns estimate this growth to be much more rapid than does the table in this report.

The University of Iowa employs a large number of people--some 3,900 at the present time. Without much doubt, unless the University curtails its enrollment, the number of students enrolled will increase. Many married students furnish additional pupils in the public schools of this area, particularly at the early elementary level. The predictions are for additional industry to locate in this general area, and this will accelerate population growth.

University School

As far as this study is concerned, we have given no consideration to the experimental school at the State University of Iowa. This in no way indicates that those involved in this project have discounted the excellent work being done or the research being developed by the University through the experimental school. It simply means that, under the present Iowa school code, we find no way to involve the facilities in public school operation. When non-high school districts are eliminated, there will be no provisions for the district to pay tuition fees to the University School.

It is to be hoped that, should reorganization be effected (or, through legislation, non-high school districts no longer exist), some legislation might be forth-coming permitting the high school districts to pay fees to the University School for educational services for at least some of their resident pupils.

WEST JOHNSON COUNTY 1959-1960 SCHOOL

Districts	Pre-School Census					Total Pre- School	Resident Elementary Enrollment							
	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.		K	1	2	3	4	5	6	
1. Cosgrove	23	19	25	24	22	113	23	24	28	27	17	22	22	
2. Oxford Comm.	34	33	28	25	29	149	40	34	31	39	25	24	23	
3. Tiffin	10	13	14	8	5	50	11	10	10	13	10	11	10	
4. Clear Creek Twp.	9	12	8	8	4	41	9	8	4	7	5	4	2	
5. Madison Twp.	10	6	9	12	3	40	7	7	11	6	8	5	4	
6. Penn Twp.	19	19	25	24	22	109	25	25	27	23	23	23	20	
7. Union Twp.	13	11	12	17	12	65	10	10	9	8	8	5	11	
8. Sharon #1	3	0	3	4	3	13	4	3	6	5	1	3	1	
TOTALS	121	113	124	122	100	580	129	121	126	128	97	97	93	
Tuition Transfers							3	3	3	3	3	2	2	
1960	121	113	124	122	100	580	*	132	124	129	131	100	99	95
1961	121	121	113	124	122	601		132	132	124	129	131	100	99
1962	126	121	121	113	124	605		139	132	132	124	129	131	100
1963	126	126	121	121	113	607		144	139	132	132	124	129	131
1964	127	126	126	121	121	621		150	144	139	132	132	124	129
1965	130	127	126	126	121	630		157	150	144	139	132	132	124
1966	132	130	127	126	126	641		165	157	150	144	139	132	132
1967	134	132	130	127	126	649		169	165	157	150	144	139	132
1968	136	134	132	130	127	659		174	169	165	157	150	144	139
1969	138	136	134	132	130	670		181	174	169	165	157	150	144
1970	140	138	136	134	132	680		188	181	174	169	165	157	150

ENROLLMENT & PROJECTIONS THROUGH 1970

			Total Res. Elem.						Total Res. H. S.	Tuition Paid		Total Tuition	Total School
7	8	Ungr.	Enroll.	9	10	11	12	Ungr.	Enroll.	Elem.	H. S.	Pupils	Pupils
16	18		197	10	12	11	5		38				235
38	31	1	286	27	25	17	17		86	1		1	373
8	8		91								27	27	118
5	5		49								13	13	62
10	9		67								31	31	98
19	2	1	188							18	44	62	250
6	3		70							4	20	24	94
1			24								7	7	31
103	76	2	972	37	37	28	22		124	23	142	165	1262
2	2		23	36	36	35	35		142				
105	78	2	995	73	73	63	57		266				
95	105		1047	73	73	73	63		282				
99	95		1081	77	73	73	73		296				
100	99		1130	81	77	73	73		304				
131	100		1181	83	81	77	73		314				
129	131		1238	86	83	81	77		327				
124	129		1272	90	86	83	81		340				
132	124		1312	93	90	86	83		352				
132	132		1362	96	93	90	86		365				
139	132		1411	100	96	93	90		379				
144	139		1467	104	100	96	93		393				

Districts	Pre-School Census					Total Pre- School	Resident Elementary Enrollment						
	1 Yr...	2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.		K	1	2	3	4	5	6
9. Coralville	55	80	64	72	70	341	78	73	50	66	52	55	49
Tuition Transfers													
TOTALS: 1-9	176	193	188	194	170	921	210	197	179	197	152	154	144
1961	176	176	193	188	194	927	210	210	197	179	197	152	154
1962	177	176	176	193	188	910	224	210	210	197	179	197	152
1963	174	177	176	176	193	896	233	224	210	210	197	179	197
1964	171	174	177	176	176	874	246	233	224	210	210	197	179
1965	167	171	174	177	176	865	259	246	233	224	210	210	197
1966	165	167	171	174	177	854	274	259	246	233	224	210	210
1967	163	165	167	171	174	840	284	274	259	246	233	224	210
1968	160	163	165	167	171	826	299	284	274	259	246	233	224
1969	158	160	163	165	167	813	313	299	284	274	259	246	233
1970	155	158	160	163	165	801	329	313	299	284	274	259	246
10. Iowa City	821	803	726	633	597	3580	602	507	448	416	354	350	308
TOTALS: 1-9	997	996	914	827	767	4501	812	704	627	613	506	504	452
1961	997	997	996	914	827	4731	812	812	704	627	613	506	504
1962	1046	997	997	996	914	4950	861	812	812	704	627	613	506
1963	1094	1046	997	997	996	5130	919	861	812	812	704	627	613
1964	1134	1094	1046	997	997	5268	992	919	861	812	812	704	627
1965	1164	1134	1094	1046	997	5435	1068	992	919	861	812	812	704
1966	1201	1164	1134	1094	1046	5639	1156	1068	992	919	861	812	812
1967	1246	1201	1164	1134	1094	5839	1240	1156	1068	992	919	861	812
1968	1290	1246	1201	1164	1134	6035	1336	1240	1156	1068	992	919	861
1969	1334	1290	1246	1201	1164	6235	1435	1336	1240	1156	1068	992	919
1970	1378	1334	1290	1246	1201	6449	1532	1435	1336	1240	1156	1068	992

* "K" column is a projected number based on the percentage that the kindergarten year bears to the total of the elementary enrollment, K-8.

			Total Res. Elem. Enroll.						Total Res. H. S. Enroll.	Tuition Paid		Total Tuition Pupils	Total School Pupils
7	8	Ungr.		9	10	11	12	Ungr.		Elem.	H. S.		
53	29		505								89	89	594
				23	22	22	22		89				
158	107	2	1500	96	95	85	79		355				1855
144	158		1601	96	96	95	85		372				1973
154	144		1667	100	96	96	95		387				2054
152	154		1756	104	100	96	96		396				2152
197	152		1848	107	104	100	96		407				2255
179	197		1955	110	107	104	100		421				2376
197	179		2032	114	110	107	104		435				2467
210	197		2137	117	114	110	107		448				2585
210	210		2239	121	117	114	110		462				2701
224	210		2342	125	121	117	114		477				2819
233	224		2461	129	125	121	117		492				2953
333	327	69	3714	213	214	209	168	12	816				4530
491	434	71	5214	309	309	294	247	12	1171				6385
452	491		5521	309	309	309	294		1221				6742
504	452		5891	322	309	309	309		1249				7140
506	504		6358	330	322	309	309		1270				7628
613	506		6846	335	330	322	309		1296				8142
627	613		7408	342	335	330	322		1329				8737
704	627		7951	351	342	335	330		1358				9309
812	704		8564	359	351	342	335		1387				9951
812	812		9196	366	359	351	342		1418				10614
861	812		9819	374	366	359	351		1450				11269
919	861		10539	383	374	366	359		1482				12021

Summary and Recommendations

The Johnson County Board of Education has adopted a county plan. This county plan, as designed, includes the ten districts considered in this study plus Scott Township and a portion of Newport Township in one unit. This study recommends that (in time, at least) this area called "Unit Two" of the county plan should be in one district. The interdependence of the people in these districts in unit two cannot be ignored. With growth of industry and the increase in the size of farms in the rural area this interdependency will grow more and more.

The problem of making the educational program fit the needs of the area can best be done from one centralized administration. The location of the University of Iowa makes a college preparatory program a must. A very excellent college preparatory program already exists in the Iowa City system. It can accommodate all of the high school pupils of the total area of unit two of this county plan at the present time. The vocational part of the high school program can be made elastic enough to meet the requirements of present job opportunities and new opportunities that might come with the location of new industry in the area.

With the contemplated road and highway improvements (new Interstate Highway 80, the improvement of U.S. Highway 6, the old and new U.S. Highway 218) and the black top roads available, transportation of pupils would be possible without exceeding the standard for time on buses--75 minutes for high school pupils and 50 minutes for elementary pupils. The transportation reports indicate no elementary pupil would be on the bus more than 51 minutes, and no high school pupil would be on the bus more than 58 minutes in Unit III.

The financial ability of this Unit III is average for the state; if additional area to the east and north were included, the financial ability in terms of taxable valuation per child would improve. When it is recognized that Iowa's method of financing public education needs revision to relieve property tax and when state funds are distributed in a manner which equalizes financial ability among all the school districts operating efficiently, taxable valuation should become a less significant factor. It is also likely that some revision upward in bonding limits will be forthcoming in the light of the economic inflation we have already experienced.

In this area, a rural non-high school district has merged with Iowa City, and others are contemplating such action. Much time and assistance in long-time planning would be gained by a complete reorganization of the area into one district as soon as possible.

In the light of the definite possibility of all non-high school districts being attached to a twelve grade district as of July 1, 1962, it would seem advisable for the people of the area to plan their own new district rather than have the county board of education attach their district. At least through the process of reorganization citizens will have the right to express their desires at a ballot box.

REPORT ON PRESENT PLANT FACILITIES

Cosgrove

Many of the classrooms in the Cosgrove plant are small and could not be enlarged--limiting the number of rooms available. This plant does, however, have good physical education facilities. But, because of location and the number of students available in this area, it is not logical to consider this building as a junior or senior high center.

There are 12 classrooms plus a study hall in the building; three of the classrooms are small and should be considered adequate only for small groups of 18-20 pupils. Two other classrooms in the basement next to the furnace room should not continue in service any longer than absolutely necessary. This plant could accommodate a double-section elementary school on a temporary basis if the classes assigned are kept small.

The plant could accommodate a single K-6 elementary school quite easily; several small rooms might be assigned for special education groups, since these classes are usually small.

Oxford

The Oxford building does not have much to offer in the way of special facilities; but, if the study hall is counted as a room, there are 13 rooms that could be used for elementary purposes-- a sufficient number to accommodate a double-section elementary building.

If the two one-room buildings located north of the main plant are included, 11 rooms plus a study hall, a science room, and one other small room are available for use of small classes in advanced subject matter. This number does not, however, include the kindergarten room which probably should continue for that purpose.

This building would accommodate approximately 450-500 junior or senior high students if all the elementary students (except the kindergarten) were transported to other centers.

It should be stressed that neither Coralville, Oxford or Cosgrove have special facilities adequate to accommodate junior or senior high schools of more than 200-250 students.

Coralville

The Coralville plant, with twenty classrooms, could serve a three-section elementary program with 630 students. If the study hall, shop, science, and homemaking rooms were converted into classrooms, the plant could accommodate about 750 elementary students.

This plant could also be used to house a junior high school. If this is done, however, the two classrooms adjacent to the gymnasium should be converted to locker rooms. There would then be eighteen classrooms available, not including a gymnasium, study hall, music, science and home-making areas. A 500-pupil junior high would require 13 general classrooms, leaving, in this instance, four or five classrooms to be assigned for elementary purposes.

If this plant were to be used for either a junior or senior high school, the number of special facilities would need to be increased and improved.

Penn. Township

The new proposed building at North Liberty will accommodate approximately 200 elementary students.

General Summary on Plant Facilities

The 798 elementary students in Unit I will require 32 classrooms, while the 1233 in Unit II will require 49 classrooms. The present enrollments in junior-senior high school of Unit I will require 12-13 classrooms plus adequate special facilities. The present junior-senior enrollments of Unit II will require 15-16 classrooms plus proper special facilities.

Summary

Unit I could house all but five sections of the elementary pupils in permanent facilities. The balance of the elementary students could all be accommodated temporarily in sub-standard rooms at Cosgrove, or a few sections could be housed at Tiffin.

This would leave facilities to be provided for the top seven grades. The junior-senior high school in this area will eventually number 650-700 students--the minimum for which one would want to provide facilities. The cost of adequately providing this plant would probably be \$800,000 to \$1,000,000.

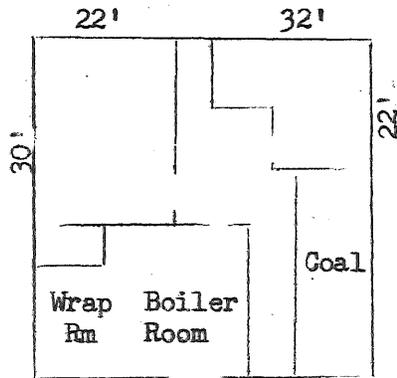
It would be necessary to provide additional elementary facilities; the average cost over the last five years has been \$25,000 per room.

Unit II could house all but four or five sections of the elementary pupils in permanent facilities. The balance of the elementary students could be housed temporarily in sub-standard spaces.

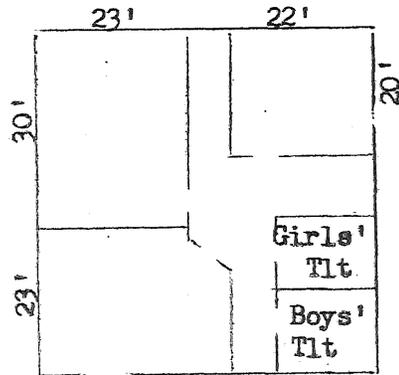
This would leave facilities to be provided for the upper seven grades. The junior-senior high enrollment in this area will eventually number over 1,000 students, demanding \$1,500,000 to \$2,000,000 for adequate facilities, not counting the needs for elementary rooms.

COSGROVE SCHOOL

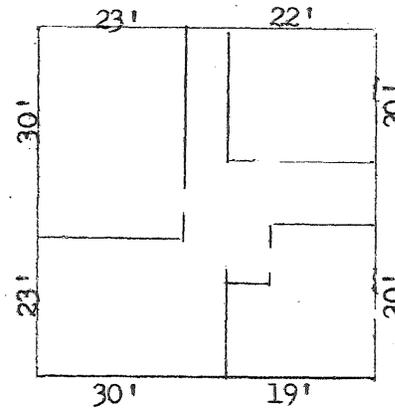
Main Building



Basement



First Floor



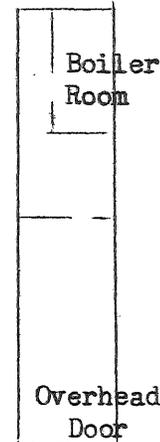
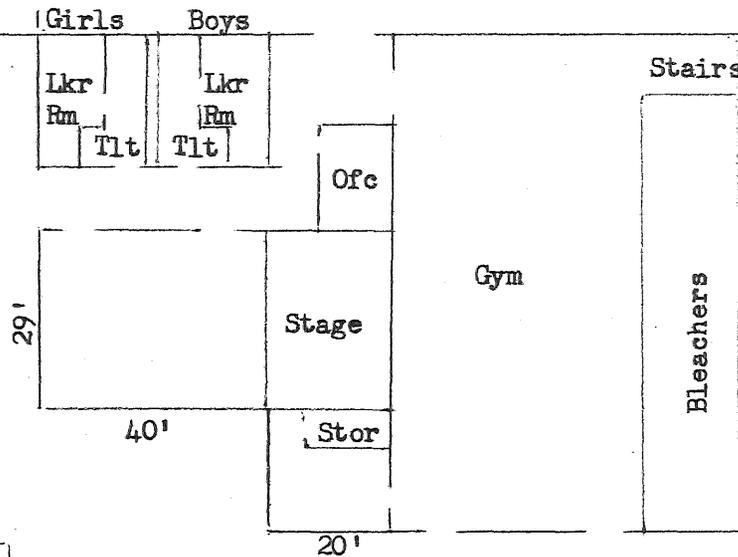
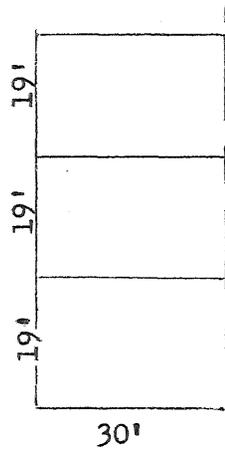
Second Floor

TOTALS:

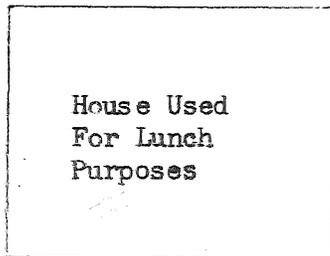
Main: 4 Elementary Classrooms
 3 Small Classrooms
 2 Basement Classrooms

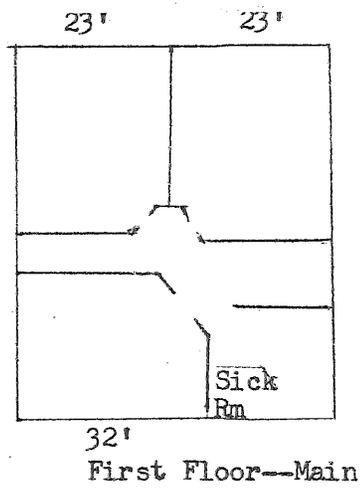
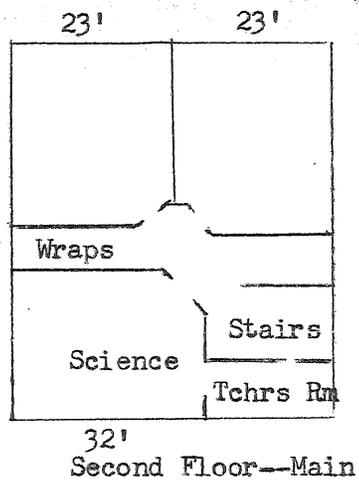
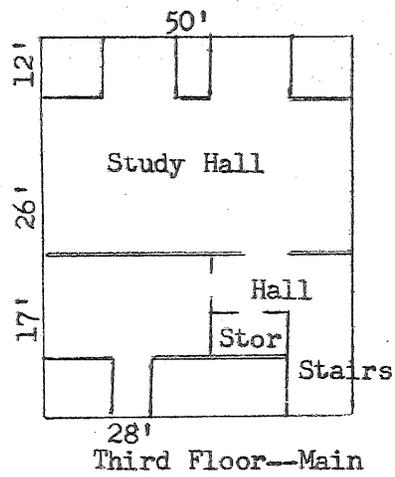
New Add: 3 Classrooms

Plus: Gymnasium
 Shop
 Stage
 Study Hall
 Kitchen
 Lunch Facilities
 (in House)

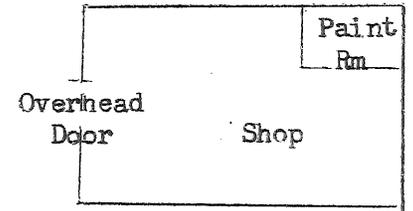


Shop (under bleachers)

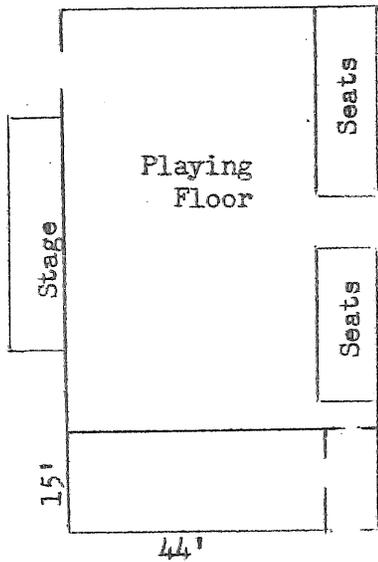




OXFORD COMMUNITY

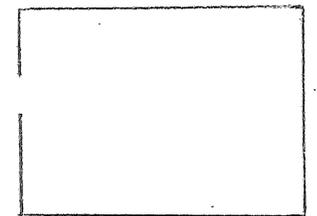
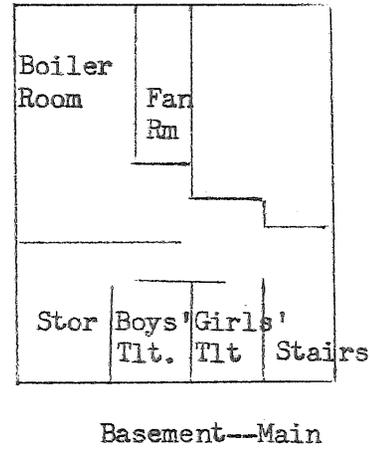


New Frame Bldg

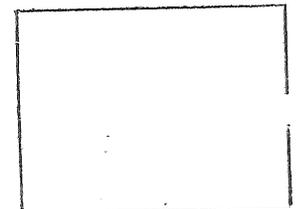
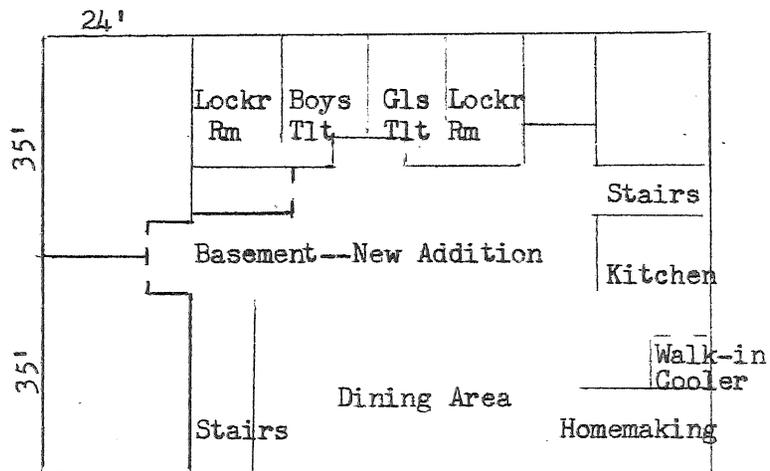
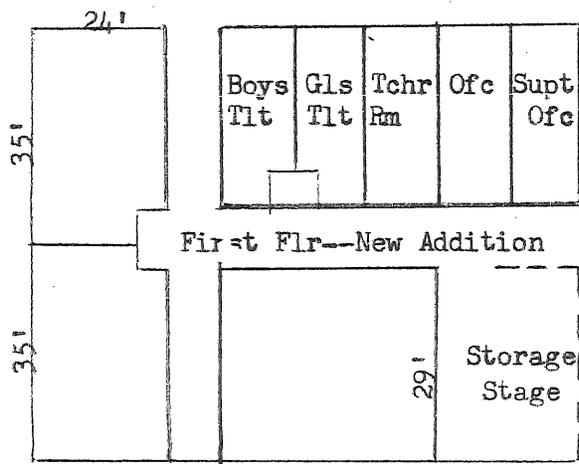


TOTALS:

- 12 Classrooms
- 2 One-Room Schools
- 1 Small Room-3rd Flr, Main
- Gymnasium
- Study Hall
- Lunch Facilities
- Shop Building

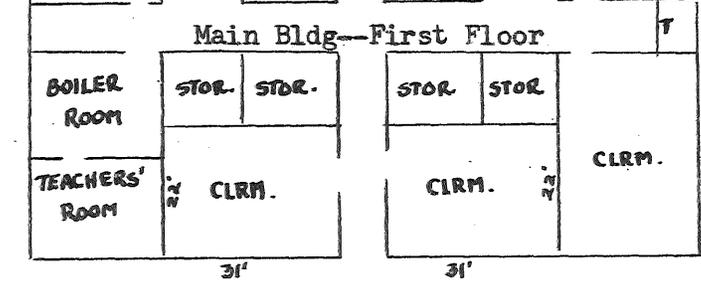
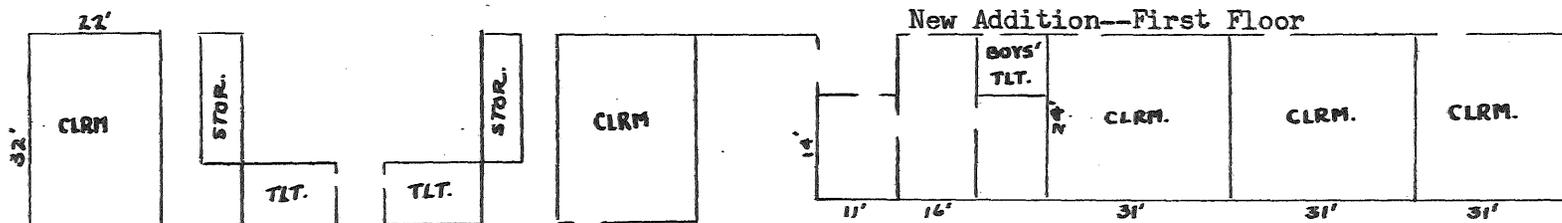
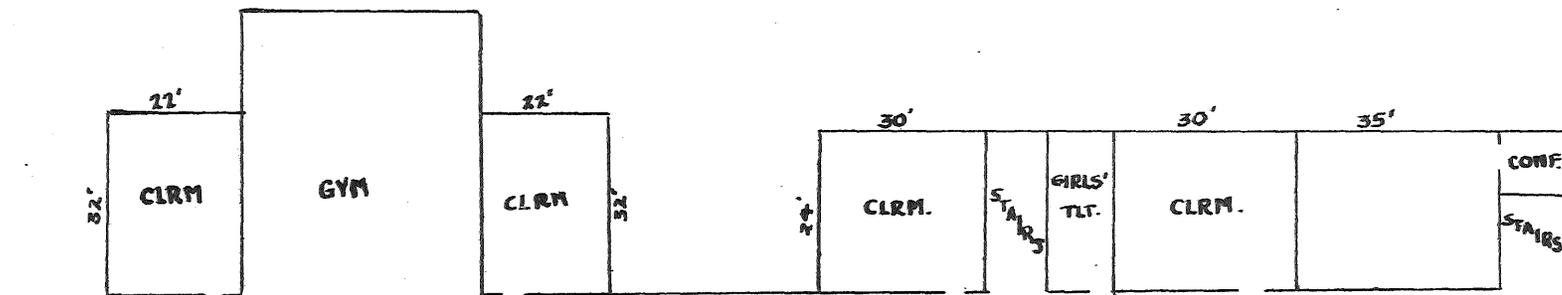


One-Room Bldg



One-Room Bldg

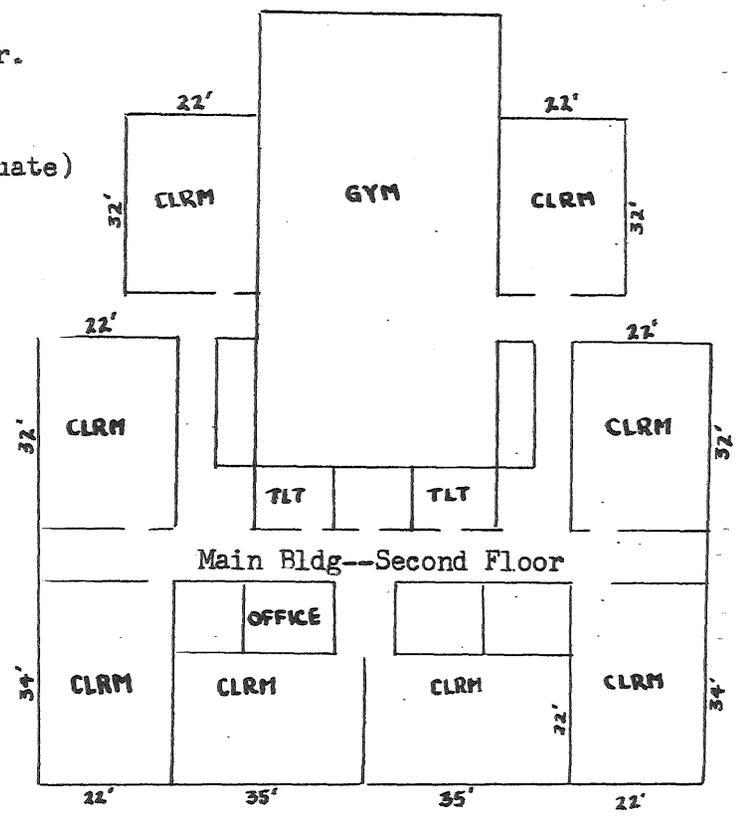
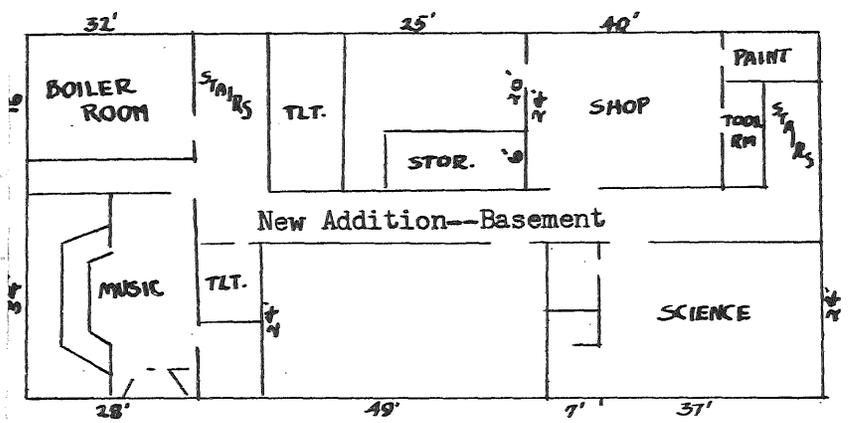
ALTERNATIVE



CORALVILLE

- 7 Classrooms - Main Bldg, 1st Flr.
- 8 Classrooms - Main Bldg, 2nd Flr.
- 5 Classrooms - New Addition, 1st Flr.
- 20 Classrooms

Plus: Gym (Locker Rooms--Not Adequate)
 Homemaking
 Science
 Shop & Planning Room
 Music
 Study Hall--Library



An additional single-section elementary plant could reasonably satisfactorily accommodate the extra children of Unit III in permanent classrooms. At the present, Iowa City can accommodate all of the junior-senior high students of this entire area. Although this plan may eventually have some building problems, it seems they could be more easily solved (because of the broader financial base) in Plan III than in either Plan I or Plan II.

Transportation Survey
Johnson County

Unit I

This suggested transportation program is based on the assumption that the area will have five attendance centers. The proposed new building, a few miles east of Tiffin, will be used to serve all junior and senior high school pupils from the entire area. It will also serve as an elementary center for those pupils living in that area. In addition, there will be elementary centers at North Liberty, Cosgrove and Oxford.

As a general rule, there are three plans that may be used in transporting pupils in a district of this kind. For reference purposes, we shall label these plans as number 1, 2, and 3.

Under plan number 1, buses operate in the vicinity of each attendance center and bring all the pupils to the respective centers. Pupils who will not attend school at that center will then be expressed to the school where they will attend. For example, the buses operating in the Cosgrove area will transport all pupils to Cosgrove. The junior and senior high school pupils will then be expressed to the new building.

This plan has a number of disadvantages. Pupils have to be delivered to the elementary centers early enough in the mornings so as to give the express buses time to deliver the high school pupils to the new building. In the evening these elementary pupils will have to wait until the express buses return with the high school pupils. This makes for a long day for the elementary pupils and also causes morning and evening disciplinary problems.

Another disadvantage is that in some instances junior and senior high school pupils will be transported in a direction away from the high school building and then brought back by the express buses.

Under plan number 2 the junior and senior high school would have a longer day than the elementary centers. It would start 45 minutes earlier in the morning and dismiss 45 minutes later in the afternoon. The buses first pick up only the junior and senior high pupils. After delivering them to the school, these same buses would be used to serve the elementary centers. In the evening the elementary pupils are taken home first and the buses then return to the main building for the junior and senior high pupils.

This plan has several advantages. It provides a longer day for the high school pupils, thus making it possible to get in many of the extra curricular activities during the regular school day. Pupils do not have to wait for buses after a dismissal time. As a rule, this plan calls for fewer buses since some of them will serve double duty, a high school route and an elementary route.

The third plan uses separate buses for each attendance center. This plan may require a few more buses but it gives better service to the pupils. In all instances the buses can be timed so as not to reach the center until time for school to start. There is also no waiting at dismissal time since all buses are immediately available. It is also possible to have the same length of day at all centers or some may have a longer or shorter day, if it is so desired.

The third plan is the one used in this survey. There are eleven routes to the new building. These routes are shown in red on the map. The routes are numbered one to eleven. These eleven routes were developed on the "spoke" principle. This means that the first pickup in the morning

is made near the outside edge of the area, the bus then proceeding as directly as possible to the attendance center.

Only buses numbered 1 and 9 pick up all pupils along their routes. Some of the others pick up only pupils in grades 7 through 12 at the start of the run and when they arrive in the new building area they also pick up elementary pupils. A few of the buses pick up only pupils in grades 7 through 12 along their entire route. This procedure for each bus is described in the part of this report captioned "Description of Bus Routes."

All bus routes are shown elsewhere on a map of the area. Route 12 through 15 go to Cosgrove, 16 through 18 go to Oxford, and 19 and 20 to North Liberty. The entire plan has 20 routes, requiring 20 buses for regular service. The district should have two additional buses to be held in reserve so as to insure uninterrupted service.

It will be noted from the part of this report captioned "Bus Route Information" that the longest time any pupil will be on the bus is 60 minutes. This is true for the first pupils who enter the bus on routes 2, 3, and 4. All the other routes require less time to complete the run. This is in line with the recommendation of the department that the maximum time a junior and senior high school pupil should be required to ride is 75 minutes and elementary pupils 50 minutes. The first pupils on the 60 minute routes are high school pupils.

Bus routes indicated on the map are not considered final. Before such a proposed administrative area would be organized, road conditions and location of pupils would have changed. The bus routes as shown do indicate how such a system might operate and to that extent fulfill their purpose.

Administration

To assure proper administration of the transportation program, responsibility for administration must be centered on one individual. In the typical Iowa school district this individual must be the superintendent of schools. If a qualified member of the professional staff is available, he might be given responsibility, under the superintendent of schools, for supervision of transportation. Districts of the size of this one could well afford to employ a full time director of transportation, with responsibility, under the superintendent of school, for supervision of the transportation program.

In any case, definite and detailed arrangements should be made for the following:

1. Supervision of maintenance personnel to provide for a repair and maintenance program designed to achieve the utmost in safety, economy, and efficiency.
2. Training and supervision of drivers.
3. Detailed record keeping.
4. Routing of buses.
5. Purchasing of equipment and supplies.
6. Education of pupils, parents, and teachers in their responsibilities and relationships regarding transportation.

Maintenance

A good transportation maintenance program acts to increase economy and efficiency in operation, and to reduce accident hazards. It also helps to provide an educationally sound transportation environment and thus serves to reinforce the educational program.

Maintenance personnel should include:

1. For a fleet of ten buses, one full time master-mechanic capable of doing, expertly, all necessary repair work including major overhauls.
2. For each additional ten buses, one assistant mechanic capable of competently assisting with repair work and taking responsibility for greasing, oiling, washing, tire repairs, etc.

Adequate maintenance facilities would include a garage, located at the main or high school attendance center, with one repair stall and one washing and greasing stall.

It should be designed and equipped to handle all major service operations needed by all the buses of the system. A gasoline pump for fueling buses and adequate lubrication facilities should be provided. The equipment should include a heating unit capable of maintaining a temperature of 60° F. during winter months.

The transportation designed for the units in this study is based on the pupils actually spotted. In Penn Township, Clear Creek Township and Union Township undoubtedly many public school pupils were missed when the home members and grade levels were reported. These are in newly developed residential areas and the actual identifications were not possible thus the enrollment figures for resident pupils exceeds the number of pupils on the spot maps.

For all practical purposes the transportation design will function but in some cases an additional bus or two might be necessary, or some routes now designed to be for pupils in grades 7-12 might need to pick up some elementary pupils.

For example in Unit I the Oxford building is short of enough pupils to fill out a full two section K-6 attendance center. This simply means that there will need to be added two buses to transport the 100 odd pupils largely in the eastern part of the area to the Oxford building. Those making the study are sure that these pupils are in public school in the area of Unit I but were missed in the spotting of pupils by grade levels and homestead numbers.

Bus Route Information
To New Building

Route No.	First Pickup	Last Pickup	No. Pupils	No. Miles	No. Stops	Size of Bus	Time in Minutes
1	Home 6, Sec. 1 Sharon Twp.	Home 30, Sec. 1 Union Twp.	52	17	22	54	50
2	Home 62, Sec. 33 Hardin Twp.	Home 14, Sec. 27 Clear Creek Twp.	42	22	22	48	60
3	Home 41, Sec. 19 Hardin Twp.	Home 12, Sec. 28 Clear Creek Twp.	45	22	23	48	60
4	Home 37, Sec. 19 Hardin Twp.	Home 57, Sec. 36 Oxford Twp.	53	22	22	54	60
5	Home 15, Sec. 9 Hardin Twp.	Tiffin	50	17	17	54	46
6	Home 37, Sec. 30 Oxford Twp.	Home 10, Sec. 19 Madison Twp.	54	13	12	60	35
7	Home 2, Sec. 6 Oxford Twp.	Home 21, Sec. 22 Oxford Twp.	50	12	12	54	35
8	Home 3, Sec. 4 Oxford Twp.	Tiffin	53	15	16	54	42
9	Home 6, Sec. 32 Jefferson Twp.	Home 4, Sec. 21 Madison Twp.	49	17	20	54	50
10	Home 2, Sec. 27 Jefferson Twp.	Home 6, Sec. 22 Madison Twp.	52	14	15	54	40
11	Home 2, Sec. 30 Big Grove Twp.	Home 27, Sec. 36 Madison Twp.	50	17	13	54	43

To Cosgrove

Route No.	First Pickup	Last Pickup	No. Pupils	No. Miles	No. Stops	Size of Bus	Time in Minutes
12	Home 37, Sec. 27 Union Twp.	Home 37, Sec. 13 Hardin Twp.	48	15	22	54	47
13	Home 58, Sec. 28 Hardin Twp.	Home 55, Sec. 24 Hardin Twp.	46	13	17	48	40
14	Home 23, Sec. 18 Hardin Twp.	Home 51, Sec. 23 Hardin Twp.	40	13	21	48	43
15	Home 1, Sec. 7 Union Twp.	Home 19, Sec. 11 Hardin Twp.	40	16	20	42	47

To Oxford

16	Home 12, Sec. 7 Hardin Twp.	Home 40, Sec. 29 Oxford Twp.	45	20	18	48	53
17	Home 6, Sec. 3 Oxford Twp.	Home 16, Sec. 10 Oxford Twp.	40	10	17	42	34
18	Home 15, Sec. 5 Madison Twp.	Home 30, Sec. 21 Oxford Twp.	32	14	16	42	40

To North Liberty

19	Home 2, Sec. 30 Big Grove Twp.	Home 23, Sec. 2 Madison Twp.	23	10	12	36	30
20	Home 12, Sec. 30 Penn Twp.	Home 50, Sec. 20 Penn Twp.	26	10	15	36	33

Description of Bus Routes
To New Building

Route No.

1 This route starts at home (6) sec. 1, Sharon Twp. The bus picks up all pupils along the route and transports them to the new building.

It serves homes (8) (7) (5) sec. 1; (12) (10) (9) (11) sec. 11; (4) (1) (2) (3) sec. 2. The bus enters Union Twp. to serve homes (43) sec. 36; (39) sec. 25; (27) (26) (25) (28) sec. 24; (17) (18) sec. 13; (6) sec. 12. The last stop is at home (30) sec. 1, Union Twp.

2 This route starts at home (62) sec. 33, Hardin Twp. On the first part of the route the bus picks up only grades 7 through 12. At home (16) sec. 14, Union Twp. it begins to pick up all pupils.

The bus serves homes (63) sec. 33; (64) sec. 34; (67) sec. 35. It enters Union Twp. to serve homes (32) sec. 29; (36) (37) sec. 27; (42) sec. 34; (38) sec. 26; (24) sec. 22; (16) sec. 14; (14) sec. 16; (34) sec. 3; (28) sec. 4; (29) sec. 3. It enters Clear Creek Twp. to serve homes (23) sec. 35; (20) (19) (22) (21) sec. 34; (13) sec. 27. The last stop is at home (14) sec. 27.

3 This route starts at home (41) sec. 19, Hardin Twp. The bus picks up only grades 7-12 until it reaches home (31) sec. 6, Union Twp. At this home and from then on it picks up all pupils.

The bus serves homes (43) sec. 20; (46) sec. 29; (58) sec. 28; (47) sec. 21; (50) sec. 22; (60) sec. 27; (53) sec. 24. The bus enters Union Twp. to serve homes (30) sec. 30; (22) sec. 20; (19) sec. 19; (10) sec. 18; (15) (11) sec. 17; (5) sec. 8; (1) sec. 7; (31) (32) (33) sec. 6. It enters Madison Twp. to serve homes (17) (18) sec. 32; (11) sec. 29. The last stop is at home (12) sec. 28.

4 This route starts at home (37) sec. 19, Hardin Twp. The bus picks up only 7 through 12 students along the entire route. It also picks up the 7 through 12 pupils in Cosgrove.

The bus serves homes (25) (27) sec. 17; (45) (46) sec. 21; (32) (33) sec. 15; (34) sec. 14; (51) sec. 23; (55) sec. 24; (37) (35) sec. 13. It also serves home (8) sec. 18, Union Twp. Back in Hardin Twp. it proceeds to homes (22) sec. 12; (19) sec. 11; (16) sec. 9; (8) sec. 3; (20) sec. 12; (10) sec. 2. In Oxford Twp. it serves homes (56) sec. 35; (59) sec. 36. The last stop is at home (57) sec. 36, Oxford Twp.

5 This route starts at home (15) sec. 9, Hardin Twp. Along its entire route it picks up only grades 7 through 12.

The bus serves homes (14) sec. 8; (17) sec. 9; (26) sec. 17; (23) sec. 18; (12) sec. 7; (3) (4) sec. 6. It enters Oxford Twp. to serve homes (47) sec. 32; (51) (52) (53) sec. 34; (50) sec. 33; (55) sec. 35; (45) sec. 25. The last stop is at Tiffin where it picks up all 7 through 12 pupils in the town.

6 This route starts at home (37) sec. 30 Oxford Twp. It picks up only pupils in grades 7 through 12.

It serves homes (38) (39) (40) sec. 29; (41) sec. 28; (28) sec. 19. As the bus passes through Oxford Twp. it picks up 38 of the pupils living there. It then proceeds to home (32) (33) sec. 23; (34) sec. 24. The bus makes its last stop at home (10) sec. 19, Madison Twp.

7 This route starts at home (2) sec. 6, Oxford Twp. The bus picks up only pupils in grades 7 to 12. It serves homes (9) (10) (8) sec. 7; (11) (12) (13) sec. 8; (19) (21) sec. 18; (22) sec. 17. The bus then proceeds into Oxford where it picks up the remaining 34 pupils. From Oxford it proceeds to homes (23) sec. 15 and (31) sec. 22. The latter is the last stop.

8 This bus starts at home (3) sec. 4, Oxford Twp. It picks up only pupils in grades 7 through 12 until it reaches Tiffin. At Tiffin it picks up all elementary pupils and then proceeds directly to its destination.

The bus serves homes (15) sec. 9; (5) sec. 3; (7) sec. 2; (17) sec. 11; (24) sec. 15; (25) sec. 14; (26) (27) sec. 13; (18) sec. 12. The bus enters Madison Twp. to serve homes (24) sec. 7; (4) sec. 5; (25) sec. 8; (32) sec. 17; (2) (3) sec. 20. The last stop is at Tiffin.

9 This route starts at home (6) sec. 32, Jefferson Twp. The bus picks up all pupils along its route.

It serves homes (7) sec. 33 in Jefferson Twp. It proceeds into Madison Twp. to serve homes (19) (20) sec. 3; (16) (17) (18) sec. 4; (26) sec. 9; (27) (28) ((29) (30) sec. 10; (38) sec. 15; (34) (35) (33) (37) (36) sec. 16; (35) sec. 17; (5) sec. 21. The last stop is at home (4) sec. 21.

10 This route starts at home (2) sec. 27, Jefferson Twp. The bus picks up only pupils in grades 7 through 12 until it reaches home (8) sec. 23, Madison Twp. From then on it picks up all pupils.

The bus serves homes (3) (4) sec. 26; (9) (10) sec. 35. It enters Madison Twp. to serve homes (21) (22) sec. 2. The bus enters the town of North Liberty and picks up 30 of the pupils to be transported to the central building. The bus leaves North Liberty and stops at homes (40) (39) sec. 14; (8) (7) sec. 23. The last stop is at home (6) sec. 22, Madison Twp.

11 This route starts at home (2) sec. 30, Big Grove Twp. The bus enters the town of North Liberty and picks up the 36 remaining pupils who will attend the central school. Only pupils in grades of 7 through 12 are picked up until the bus reaches the last stop. At this stop the elementary pupils are also picked up.

After the bus leaves North Liberty it serves homes (50) sec. 20; (9) sec. 21; (16) (19) (20) sec. 28; (15) sec. 29; (21) sec. 31; (22) sec. 32; (16) sec. 30, all in Penn Twp. The bus enters Madison Twp. to serve homes (15) sec. 25 and (27) sec. 36. Home (27) sec. 36 is the last stop.

To Cosgrove

12 This route starts at home (37) sec. 27, Union Twp. The bus picks up only elementary pupils who attend school at Cosgrove.

The bus serves homes (36) sec. 27; (35) (34) sec. 28; (32) (33) sec. 29; (23) sec. 20; (20) (19) sec. 19; (10) sec. 18; (15) (12) (11) sec. 17; (4) (5) sec. 8; (3) (2) sec. 7. The bus enters Hardin Twp. and serves homes (22) (21) sec. 12; (35) (36) (37) sec. 13. Home (37) sec. 13 is the last stop.

13 This route starts at home (58) sec. 28, Hardin Twp. The bus picks up only pupils who attend Cosgrove. As the bus passes through Windham it picks up the 10 elementary pupils living in the village.

The bus serves homes (63) sec. 33; (59) sec. 27; (64) sec. 34; (67) sec. 35; (40) (41) sec. 36; (29) sec. 25. The bus enters Union Twp. to serve homes (31) (30) sec. 30; (19A) sec. 19. It reenters Hardin Twp. to serve homes (61) sec. 26; (50) sec. 22; (52) sec. 23; (53) (54) sec. 24. The last stop is at home (55) sec. 24.

14 The route starts at (23) sec. 18, Hardin Twp. Only elementary pupils are picked up. The bus serves homes (24) sec. 18; (38) (37) (39) (40) (43) sec. 19; (43) (44) sec. 20; (45) (46) (47) sec. 21; (31) (32) (33) sec. 15; (49) sec. 22; (34) sec. 14. The last stop is home (51) sec. 23.

15 This route starts at home (1) sec. 7, Union Twp. The bus picks up only elementary pupils. The bus enters Hardin Twp. to serve homes (11) sec. 1; (20) sec. 12; (10) sec. 2; (56) (57) sec. 36; (18) sec. 11; (7) sec. 3; (6) (5) sec. 4; (16) (17) sec. 9; (13) sec. 8; (25) (26) sec. 17; (28) (29) sec. 16; (30) sec. 15. The last stop is at home (19) sec. 11.

To Oxford

16 This route starts at home (12) sec. 7, Hardin Twp. The bus picks up only elementary pupils. It serves homes (2) (4) (1) sec. 6. The bus enters Oxford Twp. to serve homes (47) (48) sec. 32; (46) sec. 31; (49) (50) sec. 33; (53) sec. 34; (54) sec. 35; (58) sec. 36; (45) sec. 25; (43) sec. 27; (42) (41) sec. 28; (38) sec. 29; (37) (36) sec. 30; (29) sec. 19; (20) sec. 18. The last stop is at home (40) sec. 29.

17 This route starts at home (6) sec. 3, Oxford Twp. The bus picks up only elementary pupils. It serves homes (5) (4) sec. 3; (3) (16) sec. 8; (1) sec. 5; (2) sec. 6; (9) (10) sec. 7; (19) sec. 18; (11) (12) sec. 8; (21) (22) sec. 17; (14) sec. 9. The last stop is at home (16) sec. 10.

18 This route starts at home (15) sec. 5, Madison Twp. The bus picks up only elementary pupils. It serves homes (25) sec. 8; (32) sec. 17; (13) sec. 6; (24) sec. 7. The bus enters

Oxford Twp. to serve homes (26) sec. 13; (25) sec. 14. The bus returns to Madison Twp. to serve homes (31) sec. 18; (1) sec. 19; (10) (9) sec. 30. Back in Oxford Twp. it makes pickups at homes (44) sec. 26; (33) (32) sec. 23; (31) sec. 22. The last stop is at home (30) sec. 21.

To North Liberty

19 This route starts at home (2) sec. 30, Big Grove Twp. It picks up only elementary pupils. The bus serves homes (3) (4) sec. 30. It then proceeds to Jefferson Twp. to serve homes 2, sec. 27; (8) (9) (10) (11) (12) sec. 35. In Madison Twp. it serves homes (21) (22) (23) sec. 2. Home (23) sec. 2 is the last stop.

20 This route starts at home (12) sec. 30, Penn Twp. The bus picks up only elementary pupils. It serves homes (13) sec. 30; (21) sec. 31; (22) sec. 32; (14) (15) sec. 29; (17) (18) (19) (20) sec. 28; (10) (8) sec. 21; (6) sec. 16; (5) (7) sec. 20. Home (5) sec. 20 is the last stop.

Transportation Survey
Johnson County

Unit II

Attendance centers under this plan are as follows:

New building - Grades 7 through 12 from entire district.

Coralville - Grades K through 6 from Coralville only.

North Liberty - Grades K through 6.

Cosgrove - Grades K through 6.

Oxford - Grades K through 6.

The number of pupils to be transported under Unit II and III are identical. Unit III differs from Unit II only in that the 7 through 12 pupils will be transported to Iowa City, whereas in Unit II they will be transported to the new building near Tiffin. Actually under Unit III more pupils should be transported but the map does not show where they live.

The programs for Units I and III were developed on the assumption that all attendance centers would maintain the same hours. Separate buses were used for each attendance center.

Unit number two was developed on a different basis. It is based on the assumption that the high school attendance center will open at 8:30 A.M. and dismiss at 4:30 P.M. The elementary centers will open at 9:15 A.M. and dismiss at 3:45 P.M.

Under this plan the buses will start out in the morning and pick up only pupils in grades 7 through 12 and transport them to the new building. Most of these same buses will then return to the area where they started in the morning, picking up elementary pupils along the route.

Thus many of the buses serve two routes. Fewer buses and drivers are needed under this plan, but most of the buses will travel more miles.

Thirteen buses will be needed to transport the pupils to the high school building. There are ten regular routes and three express buses. The three express buses transport the 171 pupils from Coralville to the high school building.

It will be noted that this unit calls for one more bus than under Unit III even though the same number of pupils are transported to the high school. The reason for this is that Coralville is ideally located under Unit III so that buses coming from the west can complete their loads there and then proceed to Iowa City without much, if any, excess driving. Thus, under Unit III buses could be loaded to near capacity whereas under Unit II this is not possible, since the vehicles cannot pass through Coralville on their way to the high school. Consequently, under Unit III, only one express bus need be used to transport the Coralville pupils, whereas under Unit II, three are needed. However, the total buses needed for transporting all pupils is less under Unit II than Unit III. Unit III calls for 23 regular buses, whereas Unit II requires 19, with the same number of pupils transported.

Four of the high school buses cannot be used efficiently for grade routes. Those buses that also serve a grade route must be able to complete the run from the high school to the grade center in 45 minutes or less. There is no place that bus #10 could be used under these circumstances.

The other three buses not used on an elementary route are the three express buses from Coralville. However, it is quite likely that they could be used to transport some of the elementary pupils at Coralville.

It will be noted that the high school buses are fairly well loaded to capacity. However, when these same buses are used on elementary routes, in most cases they will not be filled to capacity. A 60-passenger bus may serve a 30-pupil route. This is due to the time element involved in elementary routes under this plan.

Two buses, number 1 and 2 come from North Liberty and surrounding territory with high school pupils. These same buses return to North Liberty along elementary routes 14 and 15. For economy reasons, the drivers of these two buses should be from North Liberty or vicinity, since after they complete the two runs, they are back where they started. At 3:45 these two buses take the elementary pupils home and they arrive at the high school about 4:30 to take the high school people home.

The same procedure is followed at the other centers. Buses numbered 4, 5, 6, and 3 return to Oxford on routes 17, 18, 19, and 20. Buses numbered 7, 8, and 9 return to Cosgrove on routes 24, 23, and 25.

There are six buses that serve elementary routes only. They operate in territory too far from the high school building to make it possible for a high school bus to serve them. Elementary bus #16 operates in the far North Liberty area; #21 and 22 in Oxford area; #26, 27, 28 in the Cosgrove area.

This plan of operation as described in this unit would not work very well in Unit-III. To work satisfactorily, the high school should be toward the center of the district with the elementary centers located near the boundaries. The plan could be used satisfactorily in Unit I.

The plan described in Unit III, where all attendance centers keep the same hours, and each center has its own independent bus system, will work equally well in this unit, and the equipment needed would be about the same.

The same system is used in identifying the bus routes on the map for this unit as was used in the others.

Bus Route Information
to High School

Route No.	First Pickup	Last Pickup	No. Pupils	No. Miles	No. Stops	Size of Bus	Time in Minutes
1	North Liberty	Home 26, sec. 35 Clear Creek Twp.	52	15	16	54	42
2	Home 1, sec. 27 Jefferson Twp.	Home 14, sec. 27 Madison Twp.	52	19	16	54	49
3	Home 18, sec. 12 Oxford Twp.	Home 12, sec. 28 Clear Creek Twp.	50	18	21	54	52
4	Home 2, sec. 6 Oxford Twp.	Home 11, sec. 29 Madison Twp.	30	21	18	36	54
5	Home 9, sec. 7 Oxford Twp.	Home 10, sec. 30 Madison Twp.	54	15	14	60	40
6	Home 28, sec. 19 Oxford Twp.	Home 45, sec. 25 Oxford Twp.	55	20	15	60	50
7	Home 12, sec. 7 Hardin Twp.	Home 17, sec. 32 Clear Creek Twp.	32	20	17	36	52
8	Home 41, sec. 19 Hardin Twp.	Home 5, sec. 8 Union Twp.	44	22	16	48	54
9	Home 56, sec. 29 Hardin Twp.	Home 19, sec. 34 Clear Creek Twp.	32	22	18	36	56
10	Home 6, sec. 1 Sharon Twp.	Home 20, sec. 34 Clear Creek Twp.	26	24	17	36	59
11	Coralville to High School		57	4	None	60	8
12	Coralville to High School		57	4	None	60	8
13	Coralville to High School		57	4	None	60	8

To North Liberty
Elementary Only

Route No.	First Pickup	Last Pickup	No. Pupils	No. Miles	No. Stops	Size of Bus	Time in Minutes
14	Home 26, sec. 35 Clear Creek Twp.	Home 5, sec. 20 Penn Twp.	40	15	20	54	45
15	Home 14, sec. 27 Madison Twp.	Home 6, sec. 32 Jefferson Twp.	28	16	15	54	44
16	Home 1, sec. 27 Jefferson Twp.	Home 4, sec. 30 Big Grove Twp.	21	15	14	36	40

To Oxford
Elementary Only

17	Home 12, sec. 28 Madison Twp.	Home 25, sec. 14 Oxford Twp.	28	17	15	36	44
18	Tiffin	Home 43, sec. 27 Oxford Twp.	44	15	15	60	41
19	Home 22, sec. 34 Clear Creek Twp.	Home 41, sec. 29 Oxford Twp.	22	17	14	60	44
20	Home 32, sec. 5 Union Twp.	Home 4, sec. 6 Hardin Twp.	22	16	11	54	39
21	Home 2, sec. 6 Oxford Twp.	Home 9, sec. 7 Oxford Twp.	36	15	16	42	42
22	Home 12, sec. 7 Hardin Twp.	Home 20, sec. 18 Oxford Twp.	26	12	12	36	34

To Cosgrove
Elementary Only

Route No.	First Pickup	Last Pickup	No. Pupils	No. Miles	No. Stops	Size of Bus	Time in Minutes
23	Home 23, sec. 35 Union Twp.	Home 37, sec. 13 Hardin Twp.	34	14	16	48	40
24	Home 7, sec. 12 Union Twp.	Home 55, sec. 24 Hardin Twp.	30	16	17	36	44
25	Home 17, sec. 13 Union Twp.	Home 30, sec. 30 Hardin Twp.	17	16	12	36	40
26	Home 43, sec. 36 Union Twp.	Home 29, sec. 25 Hardin Twp.	31	20	14	36	49
27	Home 38, sec. 19 Hardin Twp.	Home 52, sec. 23 Hardin Twp.	36	13	18	42	40
28	Home 19, sec. 11 Hardin Twp.	Home 51, sec. 23 Hardin Twp.	40	12	19	42	40

Description of Bus Routes
To High School
Grades 7 through 12 Only

- 1 This route starts at North Liberty where it picks up 36 pupils. The bus then proceeds to homes (5) sec. 20; (9) (11) sec. 21; (19) (20) (16) sec. 28; (15) sec. 29; (22) (21) sec. 32; (12) sec. 30, Penn Twp. The bus enters Clear Creek Twp. to serve homes (15) sec. 25; (27) sec. 36. The last stop is at home (26) sec. 35.

- 2 This route starts at home (1) sec. 27, Jefferson Twp. It serves homes (2) (3) (4) sec. 27; (5) sec. 26; (9) (10) sec. 35. The bus proceeds into Madison Twp. to serve homes (21) (22) sec. 2. It then proceeds to Big Grove Twp. to homes (1) (2) sec. 30. On its way back through North Liberty it picks up the remaining 30 pupils and then proceeds into Madison Twp. to serve homes (41) (39) (40) sec. 14; (8) sec. 23. The last stop is at home (14) sec. 27.

- 3 This route starts at home (18) sec. 12, Oxford Twp. The bus enters Madison Twp. to serve homes (24) sec. 7; (32) sec. 17; (25) sec. 8; (14) sec. 5. In Jefferson Twp. it stops at home (7) sec. 33. Back in Madison Twp. it proceeds to homes (19) sec. 3; (16) (17) sec. 4; (26) sec. 9; (28) (30) sec. 10; (34) (35) (36) (37) sec. 16; (38) sec. 15; (5) sec. 21. This bus picks up the 18 pupils at Tiffin and proceeds to the last stop, home (12) sec. 28.

- 4 This route starts at home (2) sec. 6, Oxford Twp. The bus serves homes (3) sec. 5; (14) (15) sec. 9; (12) (13) sec. 8; (5) sec. 3; (7) sec. 2; (17) sec. 11; (25) sec. 14; (24)

sec. 15; (26) (27) sec. 13. It enters Madison Twp. to serve homes (2) (3) sec. 20.

The last stop is at home (11) sec. 29.

5 This route starts at home (9) sec. 7, Oxford Twp. The bus serves homes (8) (10) sec. 7; (19) sec. 18; (11) (21) sec. 8. The route extends into Oxford where the bus picks up 40 pupils and then proceeds to homes (31) sec. 22; (32) (33) sec. 23; (34) sec. 24. The last stop is at home (10) sec. 30, Madison Twp.

6 This route starts at home (28) sec. 19, Oxford Twp. The bus enters Oxford and picks up the remaining 32 pupils. It then proceeds to homes (40) (39) (38) sec. 29; (37) sec. 30; (47) sec. 32; (50) (51) sec. 33; (52) (53) sec. 34; (55) (56) sec. 35; (59) (57) sec. 36. The last stop is at home (45) sec. 25.

7 This route starts at home (12) sec. 7, Hardin Twp. The bus serves homes (3) (4) sec. 6; (23) sec. 18; (25) (26) sec. 17; (15) (16) (17) sec. 9; (8) sec. 3; (10) sec. 2; (20) sec. 12. The bus enters Union Twp. to serve homes (1) sec. 7; (31) sec. 5. The last two stops are at homes (18) (17) sec. 32, Clear Creek Twp.

8 This route starts at home (41) sec. 19, Hardin Twp. The bus serves homes (37) sec. 19; (45) (46) (47) sec. 21; (43) sec. 20; (50) sec. 22; (32) (33) sec. 15; (34) sec. 14; (51) sec. 23. The bus picks up the 7 pupils at Cosgrove and proceeds to homes (55) sec. 24; (19) sec. 11; (22) sec. 12; (35) sec. 13. The bus enters Union Twp. and proceeds to homes (8) sec. 18; (4) (5) sec. 8; (11) sec. 17. The last stop is at home (5) sec. 8.

9 This route starts at home (56) sec. 29, Hardin Twp. The bus serves homes (58) sec. 28; (62) (63) sec. 33; (60) sec. 27; (66) sec. 35; (53) sec. 24. It enters Union Twp. to serve homes (30) sec. 30; (19) sec. 19; (10) sec. 18; (15) sec. 17; (22) sec. 20; (32) sec. 29; (36) (37) sec. 27; (24) sec. 22; (13) sec. 16. The last stop is at home (19) sec. 34, Clear Creek Twp. This bus also picks up the two pupils at Windham.

10 This route starts at home (6) sec. 1, Sharon Twp. The bus serves homes (8) sec. 1; (9) (10) (11) sec. 11; (3) sec. 2. It enters Union Twp. to serve homes (42) sec. 33; (38) sec. 26; (39) sec. 25; (27) (26) (25) sec. 24; (18) sec. 13; (6) sec. 12; (30) sec. 1; (29) sec. 3. The bus enters Clear Creek Twp. to serve homes (23) sec. 35; (21) (20) sec. 34. Home (20) sec. 34 is the last stop.

11, 12, 13 These three are express routes carrying the 171 pupils from Coralville to the high school.

To North Liberty
Elementary Only

14 This is high school bus number 1. It leaves the high school and returns to North Liberty by the same general route. The first pickup is at home (26) sec. 35, Clear Creek Twp. It serves homes (24) (25) sec. 35; all the homes along highway 6 in sec. 36. In Penn Twp. it serves homes (27) sec. 31; (12) (13) sec. 30; (21) (22) sec. 32; (14) sec. 29; (17) (18) (19) (20) (16) sec. 28; (8) sec. 21; (5) (7) sec. 20. Home (5) sec. 20 is the last stop.

15 This is high school bus number 2. It returns to North Liberty but does not entirely follow the same route. Its first stop is at home (14) sec. 27, Madison Twp. It serves homes (13) sec. 27; (6) sec. 22; (7) (8) sec. 23; (24) (28) (30) (27) sec. 10; (26) sec. 9; (17) (18) (16) sec. 4. The last two stops are at homes (6) sec. 32 and (7) sec. 33, Jefferson Twp.

16 This bus is not used on a high school route. It starts at home (1) sec. 27, Jefferson Twp. It serves homes (2) (3) sec. 27; (8) (9) (10) (11) (12) sec. 35. It enters Madison Twp. to serve homes (21) (22) (23) sec. 2. The bus then goes to homes (2) (3) (4) sec. 30 in Big Grove Twp. and then to North Liberty.

To Oxford
Elementary Only

17 This is high school bus number 4. It returns to Oxford making its first pickup at home (12) sec. 28, Madison Twp. It serves homes (4) (5) sec. 21; (35) (36) (37) (33) sec. 16; (32) sec. 17; (15) sec. 5; (25) sec. 8; (31) sec. 18; (24) sec. 7; (13) sec. 6. The bus enters Oxford Twp. to serve homes (26) sec. 13 and (25) sec. 14. This is the last stop.

18 This is high school bus number 5. It returns to Oxford making the first stop at Tiffin where it picks up the 18 elementary pupils. It serves homes (11) sec. 29; (10) (10A) sec. 30; (1) sec. 19. The bus enters Oxford Twp. to serve homes (33) (32) sec. 23; (44) sec. 26; (23) sec. 15; (31) sec. 22; (30) sec. 21; (42) sec. 28. The last stop is at home (43) sec. 27.

19 This is high school bus number 6. It returns to Oxford making the first pickup at home (22) sec. 34, Clear Creek Twp. The bus serves homes (21) (20) (19) sec. 34; (18) sec. 31. In Union Twp. it serves homes (28) sec. 4; (33) sec. 6. The pupils in home (10) (9) sec. 2, Hardin Twp. are also picked up. The bus enters Oxford Twp. to serve homes (58) (57) sec. 36; (56) (54) sec. 35; (45) sec. 25; (53) sec. 34; (48) sec. 32; (41) sec. 29. The last stop is at home (41) sec. 29.

20 This is high school bus number 3. On its return to Oxford it makes the first stop at home (32) sec. 5, Union Twp. It serves homes (31) sec. 6; (1) sec. 7 and then enters Hardin Twp. for pickups at homes (11) sec. 1; (20) sec. 12; (18) sec. 11; (7) sec. 3; (16) sec. 9; (5) sec. 4. The last stop is at home (4) sec. 6, Hardin Twp.

21 This bus is not used on a high school route. The bus starts at home (2) sec. 6, Oxford Twp. It also serves home (1) sec. 32 in Monroe Twp. The bus returns to Oxford Twp. to serve homes (3) sec. 5; (4) (5) (6) sec. 3; (14) (15) sec. 9; (16) sec. 10; (12) (21) (22) sec. 8; (8) (9) sec. 7. This is the last stop.

22 This bus does not serve a high school route. The bus starts at home (12) sec. 7, Hardin Twp. It serves homes (2) (1) sec. 6. The bus moves into Oxford Twp. to serve homes (47) sec. 32; (46) sec. 31; (35) (36) (37) sec. 30; (38) (40) sec. 29; (29) sec. 19. The last stop is at home (20) sec. 18.

To Cosgrove

23 This is high school bus number 8. On its return to Cosgrove it makes its first

stop at home (23) sec. 35, Union Twp. It serves homes (29) (34) sec. 3; (5) (4) sec. 8; (12) (11) sec. 17; (8) sec. 18; (2) (3) sec. 7. The bus enters Hardin Twp. to serve homes (36) (35) (37) sec. 13; (21) (22) sec. 12. The last stop is at home (37) sec. 13.

24 This high school bus is number 7. On its way back to Cosgrove it makes its first stop at home (7) sec. 12, Union Twp. The bus serves homes (6) sec. 12; (16) sec. 14; (13) (14) sec. 16; (34) sec. 28; (33) sec. 29; (23) (22) sec. 20; (15) sec. 17; (10) (9) sec. 18; (19) (20) sec. 19; (53) (54) (55) sec. 24. Home (55) sec. 24 is the last stop.

25 This is high school bus number 9. On its return to Cosgrove it makes its first stop at home (17) sec. 13, Union Twp. It serves homes (25) (28) (27) sec. 24; (39) sec. 25; (37) (36) sec. 27; (35) sec. 28; (32) sec. 29; (31) (30) sec. 30; (21) sec. 19. The last stop is at home (30) sec. 19.

26 This bus is not used on a high school route. The route starts at home (43) sec. 36, Union Twp. The bus enters Sharon Twp. to serve homes (6) (5) (7) sec. 1; (10) (12) (11) sec. 11; (4) (1) (2) sec. 2. It enters Hardin Twp. to serve homes (40) (41) sec. 36; (61) sec. 35. The last stop is at home (29) sec. 25.

27 This bus is not used on a high school route. It starts at home (38) sec. 19, Hardin Twp. It serves homes (37) (39) (40) (42) sec. 19; (43) (44) sec. 20; (47) sec. 21; (57) (58) sec. 28; (63) sec. 33; (64) sec. 34; (65) sec. 35; (59) (61) sec. 27; (50) sec. 22. The last stop is at home (52) sec. 23.

28

This bus is not used on a high school route. It starts at home (19) sec. 11, Hardin Twp. It serves homes (30) sec. 15; (29) (28) sec. 16; (17) sec. 9; (13) sec. 8; (23) (24) sec. 18; (26) (25) (27) sec. 17; (45) (46) sec. 21; (31) (32) (33) sec. 15; (48) (49) sec. 22; (34) sec. 14. The last stop is at home (51) sec. 23.

Transportation Survey
Johnson County

Unit III

Attendance centers under this plan are located as follows:

Iowa City - Grades 7 through 12 from entire district.

Grades K through 6, Iowa City only.

Coralville - Grades K through 6, Coralville only.

North Liberty - Grades K through 6.

Cosgrove - Grades K through 6.

Oxford - Grades K through 6.

Each attendance center under this program has its own bus system except Coralville. None of the pupils in grades K through 6 are transported to Coralville since the town itself has about 413 of these people. Of course, if desired, some of these people in that vicinity could be transported to that center.

There are 12 bus routes to Iowa City, numbered 1 to 12. They are shown on the map with the number of each placed in a circle at the start of the route. Only pupils in grades 7 through 12 are picked up on these routes.

It will be noted that buses on routes numbered 3, 7, 8, 10, are routed through Coralville where each picks up a specified number of pupils. These buses then proceed directly to Iowa City. One additional bus is needed to transport these people. The route for this bus is not drawn on the map although it is listed as route #12.

Four routes, 13, 14, 15, 16, go to Cosgrove, five routes 17, 18, 19, 20, 21, go to Oxford, and 2 routes, 22, 23, go to North Liberty. The buses on these routes pick up only elementary pupils, grades K through 6. These routes are shown on the map and the number of each is enclosed in a circle near the start of the route.

The plan calls for 23 buses for regular daily use. The district should have two additional vehicles to be held in reserve.

The map does not show any pupils living directly south, east and north of Iowa City. No doubt there are pupils living in these areas but it was not possible to pinpoint their location. It is also quite likely that some pupils in other sections of the proposed district are not shown on the map. Consequently, more buses may be needed than is indicated in this report.

For additional recommendations, the reader is referred to the Plan #1 report. Many of these recommendations apply equally well to this plan and will not be repeated in this report.

Bus Route Information
To Iowa City

Route No.	First Pickup	Last Pickup	No. Pupils	No. Miles	No. Stops	Size of Bus	Time in Minutes
1	Home 2, Sec. 27 Jefferson Twp.	Home 21, Sec. 31 Penn Twp.	45	13	14	48	36
2	Home 1, Sec. 30 Big Grove Twp.	Home 19, Sec. 28 Penn Twp.	42	12	10	48	31
3	Home 7, Sec. 33 Jefferson Twp.	Coralville	50	16	18	54	45
4	Home 1, Sec. 6 Oxford Twp.	Home 26, Sec. 35 Clear Creek Twp.	41	19	18	48	51
5	Home 9, Sec. 7 Oxford Twp.	Home 11, Sec. 29 Madison Twp.	56	19	16	60	49
6	Home 19, Sec. 18 Oxford Twp.	Home 10, Sec. 30 Madison Twp.	53	18	8	54	40
7	Home 37, Sec. 30 Oxford Twp.	Coralville	55	20	18	60	53
8	Home 12, Sec. 7 Hardin Twp.	Coralville	56	21	16	60	53
9	Home 37, Sec. 19 Hardin Twp.	Home 5, Sec. 8 Union Twp.	52	21	20	60	56
10	Home 56, Sec. 29 Hardin Twp.	Coralville	55	24	15	60	57
11	Home 6, Sec. 1 Sharon Twp.	Home 6, Sec. 12 Union Twp.	22	24	16	36	58
12	Coralville	Coralville	57	4	1	60	10

Route No.	First Pickup	Last Pickup	To Cosgrove				
			No. Pupils	No. Miles	No. Stops	Size of Bus	Time in Minutes
13	Home 6, Sec. 1 Sharon Twp.	Home 9, Sec. 18 Hardin Twp.	42	18	21	48	51
14	Home 42, Sec. 19 Hardin Twp.	Home 55, Sec. 24 Hardin Twp.	57	15	22	60	47
15	Home 40, Sec. 19 Hardin Twp.	Home 51, Sec. 23 Hardin Twp.	44	12	20	48	40
16	Home 28, Sec. 24 Hardin Twp.	Home 30, Sec. 15 Hardin Twp.	46	16	21	48	48
To Oxford							
17	Home 1, Sec. 7 Union Twp.	Home 29, Sec. 19 Oxford Twp.	54	17	21	60	50
18	Home 29, Sec. 3 Union Twp.	Home 39, Sec. 21 Oxford Twp.	36	17	20	42	49
19	Home 25, Sec. 35 Clear Creek Twp.	Home 23, Sec. 15 Oxford Twp.	52	14	15	60	40
20	Home 1, Sec. 6 Oxford Twp.	Home 20, Sec. 18 Oxford Twp.	42	16	18	48	45
21	Home 6, Sec. 32 Jefferson Twp.	Home 25, Sec. 14 Oxford Twp.	30	18	20	36	51
To North Liberty							
22	Home 2, Sec. 27 Jefferson Twp.	Home 8, Sec. 23 Penn Twp.	28	17	18	36	47
23	Home 13, Sec. 30 Penn Twp.	Home 7, Sec. 20 Penn Twp.	27	13	15	36	37

Description of Bus Routes
To Iowa City

1 This route starts at home (2) sec. 27, Jefferson Twp. The bus picks up only pupils in grades 7 through 12.

The bus serves homes (3) (4) sec. 27; (5) sec. 26; (8A) (10) sec. 35. It enters Madison Twp. to serve homes (21) (22) sec. 2. As it passes through North Liberty it picks up 30 pupils and proceeds to home (5) sec. 20, Penn Twp., (15) sec. 29; (22) sec. 32. The last stop is at home (21) sec. 31, Penn Twp.

2 This route starts at home (1) sec. 30, Big Grove Twp. The bus picks up only pupils in grades 7 through 12.

It serves home (2) sec. 30 and then proceeds to North Liberty where it picks up the remaining 36 pupils. It then proceeds to homes (9) (11) sec. 21; (16) (20) sec. 28. The last stop is at home (19) sec. 28, Penn Twp.

3 This route starts at home (7) sec. 33, Jefferson Twp. The bus picks up only pupils in grades 7 through 12.

It enters Madison Twp. to serve homes (19) (20) sec. 3; (16) sec. 4; (26) sec. 9; (28) (30) sec. 10; (34) (36) (37) sec. 16; (38) sec. 15; (39) (40) sec. 14; (8) sec. 23; (15) sec. 25. The bus enters Penn Twp. to serve home (16) sec. 30 and (27) sec. 31. The bus then proceeds to Coralville and picks up 25 pupils and then heads for Iowa City nonstop.

4 This route starts at home (1) sec. 6, Oxford Twp. The bus picks up only pupils in grades 7 through 12.

It serves homes (3) sec. 5; (15) sec. 9; (5) sec. 3; (7) sec. 2; (17) sec. 11; (18) sec. 12. The bus enters Madison Twp. to serve homes (24) sec. 7; (25) sec. 8; (14) sec. 5; (32) sec. 17; (35) sec. 16; (5) sec. 21; (12) sec. 28; (14) sec. 27. The last stop is at home (26) sec. 35, Clear Creek Twp. As the bus passes through Tiffin, it picks up the 14 pupils residing there who will attend Iowa City.

5 This route starts at home (9) sec. 7, Oxford Twp. The bus picks up only pupils in grades 7 through 12.

The bus serves homes (10) (8) sec. 7; (21) (22) sec. 17; (12) (13) sec. 8; (14) sec. 9. The bus enters the town of Oxford and picks up 30 pupils. It then proceeds to homes (23) (24) sec. 15; (25) sec. 14; (26) (27) sec. 13. It enters Madison Twp. to serve homes (2) (3) sec. 20. The last stop is at home (11) sec. 29.

6 This route starts at home (19) sec. 18, Oxford Twp. The bus picks up only pupils in grades 7 through 12.

The bus serves homes (40) (39) sec. 29; (28) sec. 19; (32) (33) sec. 23; (34) sec. 24. The bus enters Madison Twp. and makes its last stop at home (10) sec. 30. As the bus passes through Oxford it picks up the remaining 42 pupils living in the town.

7 This route starts at home (37) sec. 30, Oxford Twp. The bus picks up only pupils in grades 7 through 12.

The bus serves homes (38) (41) sec. 29; (47) sec. 32; (50) (51) sec. 33; (52) (53) sec. 34; (45) sec. 25; (55) (56) sec. 35; (59) (57) sec. 36. The bus enters Clear Creek Twp. to serve homes (18) (17) sec. 32; (19) (20) (21) sec. 34; (23) sec. 35; (30) sec. 1. The last stop is at home (30) sec. 1, Union Twp. At Coralville it picks up 25 pupils and then proceeds to Iowa City.

8 This route starts at home (12) sec. 7, Hardin Twp. The bus picks up only pupils in grades 7 through 12.

The bus serves homes (3) (4) sec. 6; (23) sec. 18; (14) sec. 8; (15) (17) (16) sec. 9; (8) sec. 3; (10) sec. 2; (20) sec. 12. The bus enters Union Twp. to serve homes (1) sec. 7; (31) sec. 5; (29) sec. 3. From this point it proceeds to Coralville and picks up 27 pupils.

9 This route starts at home 37, sec. 19, Hardin Twp. The bus picks up only pupils in grades 7 through 12. As the bus passes through Cosgrove it picks up the seven pupils living in the town.

The bus serves homes (41) sec. 19; (25) (26) (27) sec. 17; (43) sec. 20; (45) (46) (47) sec. 21; (50) sec. 22; (32) (33) sec. 15; (34) sec. 14; (51) sec. 23; (55) sec. 24; (37) (35) sec. 13; (19) sec. 11; (22) sec. 12. The bus enters Union Twp. to serve homes (8) sec. 18; (4) (5) sec. 8; (11) sec. 17. The last stop is at home (5) sec. 8.

10 This route starts at home (56) sec. 29, Hardin Twp. The bus picks up only pupils in the 7th through 12th grades.

It serves homes (58) sec. 28; (62) (63) sec. 33; (60) sec. 27; (66) sec. 35; (53) sec. 24. The bus enters Union Twp. to serve homes (30) sec. 30; (19) sec. 19; (10) sec. 18; (22) sec. 20; (15) sec. 17; (14) sec. 16. After this stop the bus goes to Coralville and picks up 35 pupils.

11 This bus starts at home (6) sec. 1, Sharon Twp. It picks up only pupils in grades 7 through 12.

It serves homes (8) sec. 1; (10) (9) (11) sec. 11; (3) sec. 2. The bus enters Union Twp. to serve homes (27) sec. 24; (38) sec. 26; (42) sec. 33; (37) (36) sec. 27; (32) sec. 29; (24) sec. 22; (26) (25) sec. 24; (18) sec. 13. The last stop is at home (6) sec. 12.

12 This route starts at Coralville, picks up the remaining 57 pupils and proceeds directly to Iowa City. The route is not shown on the map.

To Cosgrove

13 This route starts at home (6) sec. 1, Sharon Twp. The bus picks up elementary pupils only. It serves homes (5) (7) sec. 1; (10) (11) (12) sec. 11; (1) (2) (4) sec. 2. It enters Union Twp. to serve homes (43) sec. 36; (39) sec. 25; (27) sec. 24; (37) (36) sec. 27; (35) (34) sec. 28; (25) sec. 20; (15) sec. 17; (28) (19) sec. 19; (10) sec. 18. The last stop is at home (9) sec. 18.

14 This route starts at home (42) sec. 19, Hardin Twp. It serves homes (43) (44) sec. 20; (58) (57) sec. 28; (47) sec. 21; (50) sec. 22; (61) (59) sec. 27; (64) sec. 34; (63) sec. 33; (65) (67) sec. 35; (40) (41) sec. 36; (29) sec. 25. The bus enters Union

Twp. to serve homes (31) (30) sec. 30; (32) sec. 29; (21) sec. 19. The bus reenters Hardin Twp. and proceeds to homes (52) sec. 23; (53) (54) (55) sec. 24. Home (55) sec. 24 is the last stop. This bus also picks up the 10 elementary pupils in Windham.

15 This route starts at home (40) sec. 19, Hardin Twp. The bus picks up elementary pupils only. It serves homes (39) (37) (38) sec. 19; (24) (23) sec. 18; (13) sec. 8; (25) (26) sec. 17; (28) (29) sec. 16; (17) sec. 9; (45) (46) sec. 21; (48) (49) sec. 22; (31) (32) sec. 15; (34) sec. 14. The last stop is at home (51) sec. 23.

16 This route starts at home (28) sec. 24, Union Twp. The bus picks up only elementary pupils. It serves homes (25) sec. 24; (17) sec. 13; (6) sec. 12; (16) sec. 14; (13) (14) sec. 16; (12) (11) sec. 17; (5) (4) sec. 8; (3) (2) sec. 7; (8) sec. 18. The bus enters Hardin Twp. to serve homes (35) (36) sec. 13; (22) (21) sec. 12; (19) sec. 11. The last stop is at home (30) sec. 15.

To Oxford

17 This route starts at home (1) sec. 7, Union Twp. The bus picks up elementary pupils only. It enters Hardin Twp. to serve homes (11) sec. 1; (20) sec. 12; (18) sec. 11; (7) sec. 3; (16) sec. 9; (5) (6) sec. 4; (4) (2) (1) sec. 6. The bus enters Oxford Twp. to serve homes (47) (48) sec. 32; (46) sec. 31; (35) (36) (37) sec. 30; (38) (40) sec. 29. The last stop is at home (29) sec. 19.

18 This route starts at home (29) sec. 3, Union Twp. The bus picks up elementary

pupils only. The bus enters Clear Creek Twp. to serve homes (23) sec. 35; (20) (21) (22) sec. 34; (18) sec. 32. In Union Twp. it serves homes (34) sec. 3; (28) sec. 4; (31) (32) sec. 5; (33) sec. 6. In Hardin Twp. the bus serves homes (10) (9) sec. 2. It enters Oxford Twp. to serve homes (57) sec. 36; (56) (54) sec. 35; (53) sec. 34; (58) sec. 36; (45) sec. 25; (43) sec. 27; (42) sec. 28. The last stop is at home (39) sec. 22.

19 This route starts at home (25) sec. 35, Clear Creek Twp. The bus picks up elementary pupils only. It serves homes (24) sec. 35; (13) (14) sec. 27; (12) sec. 28; (11) sec. 29; (9) (10) sec. 30; (31) sec. 18; (1) sec. 19. This bus also picks up the 26 elementary pupils in Tiffin. The bus enters Oxford Twp. to serve homes (33) (32) sec. 23; (31) sec. 22. The last stop is at home (23) sec. 15.

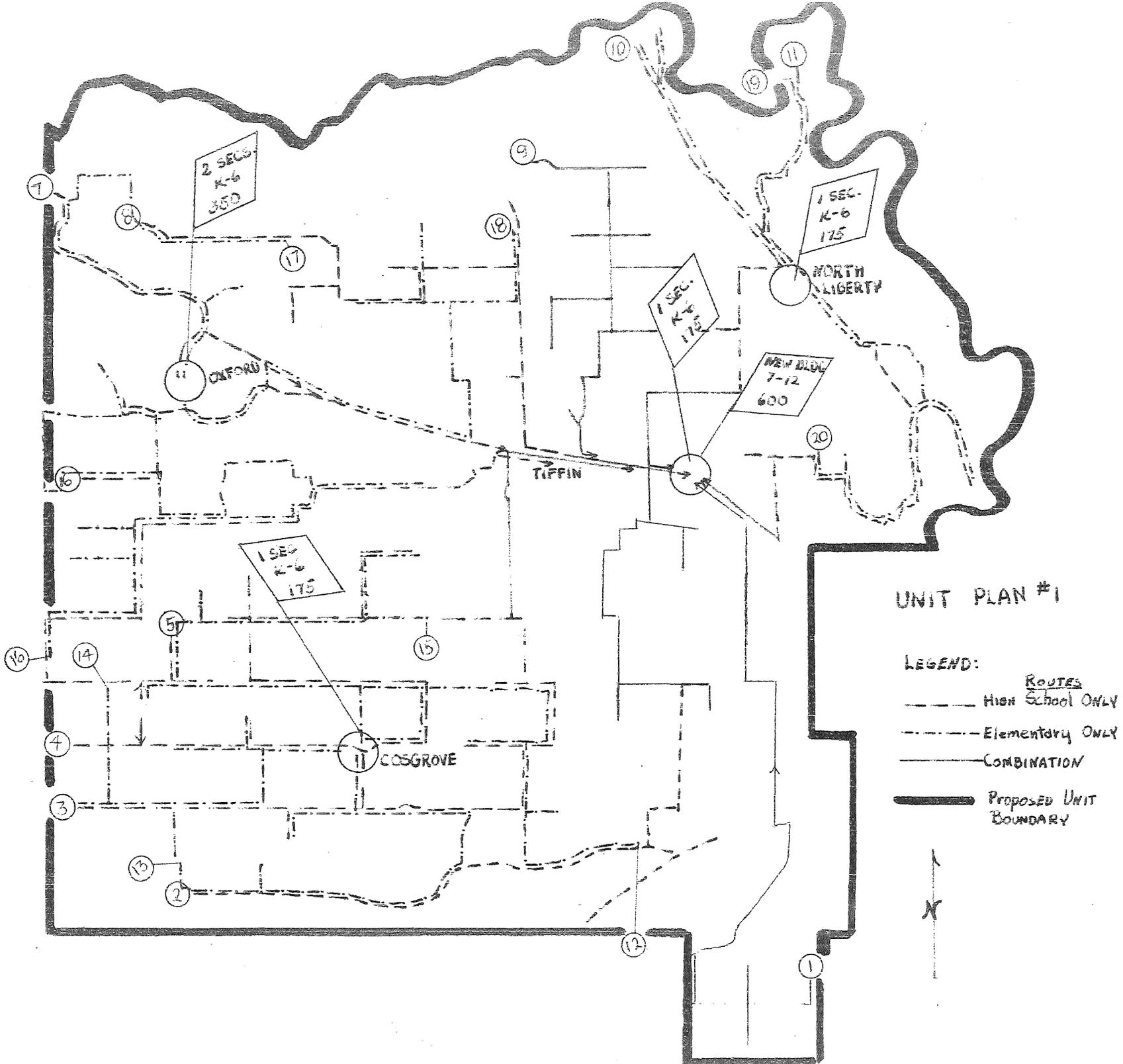
20 This route starts at home (11) sec. 6, Oxford Twp. The bus picks up only elementary pupils. In Monroe Twp. it serves home (1) sec. 32. Back in Oxford Twp. the bus proceeds to homes (3) sec. 5; (6) (14) sec. 9; (4) (5) (6) sec. 3; (16) sec. 10; (22) (21) sec. 17; (12) sec. 8; (8) (9) sec. 7; (19) sec. 18. The last stop is at home (20); sec. 18.

21 This route starts at home (6) sec. 32, Jefferson Twp. The bus picks up elementary pupils only. It serves homes (7) sec. 33. The bus enters Madison Twp. to serve homes (16) (17) (18) sec. 4; (26) sec. 9; (27) sec. 10; (30) sec. 10; (37) (36) (35) (33) sec. 16; (4) (5) sec. 21; (32) sec. 17; (25) sec. 8; (15) sec. 5; (24) sec. 7; (13) sec. 6. The bus enters Oxford Twp. to serve homes (26) sec. 13 and (25) sec. 14. Home (25) sec. 14 is the last stop.

To North Liberty

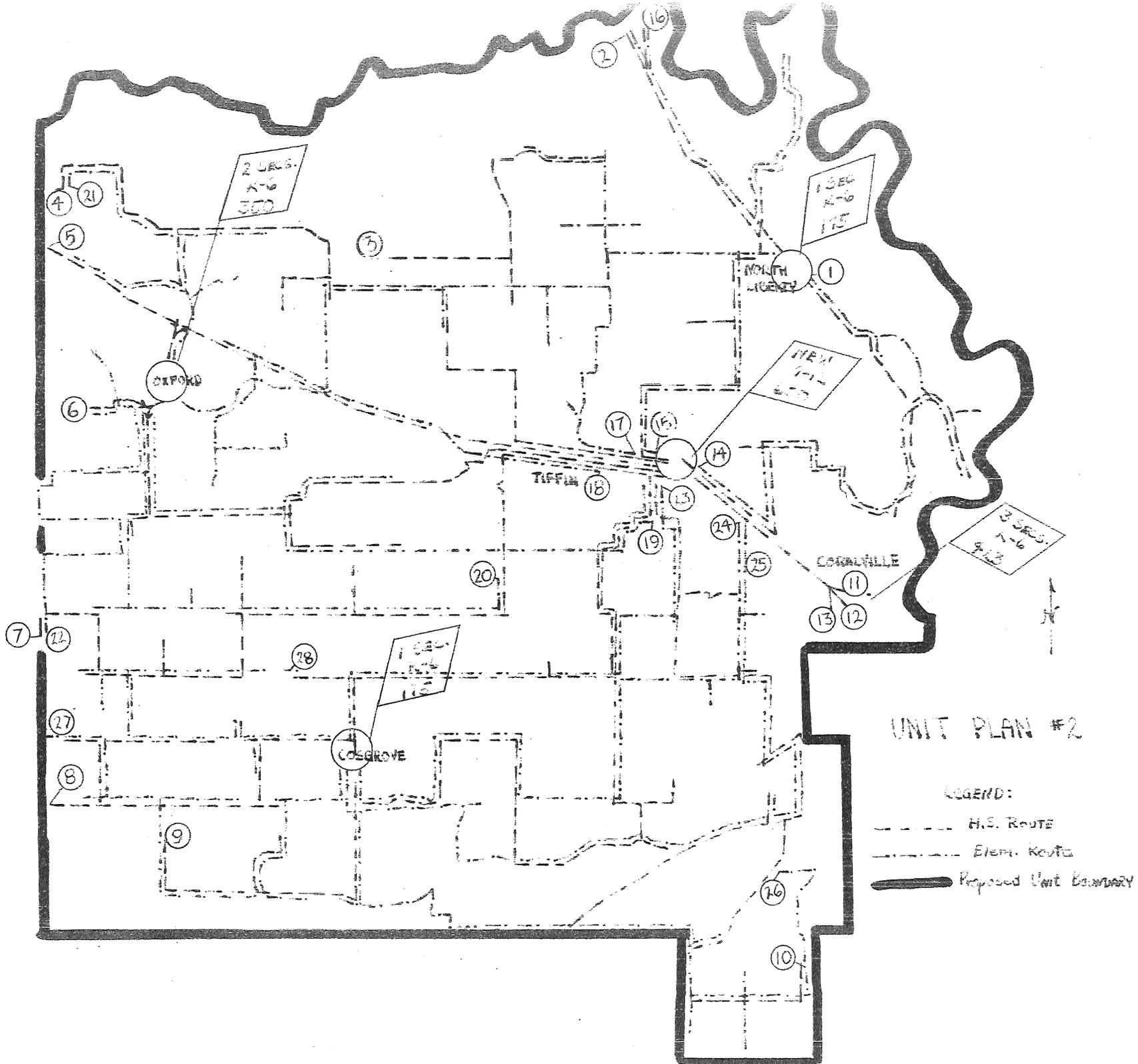
22 This route starts at home (2) sec. 27, Jefferson Twp. The bus picks up only elementary pupils. It serves homes (3) sec. 27; (8) (8A) (10) (11) (12) sec. 35. The bus enters Big Grove Twp. to serve homes (2) (3) (4) sec. 30. In Madison Twp. the bus proceeds to homes (23) (22) (21) sec. 2; (29) (28) sec. 10; (8) sec. 23. The last stop is at home (7) sec. 23.

23 This route starts at home (13) sec. 30, Penn Twp. The bus picks up only elementary pupils. It serves homes (12) sec. 30; (21) (22) sec. 31; (14) sec. 29; (16) (17) (18) (19) (20) sec. 28; (10) (8) sec. 21; (6) sec. 16; (5) sec. 20. The last stop is at home (7) sec. 20.



UNIT PLAN #1

- LEGEND:
- ROUTES
High School ONLY
 - · - · - Elementary ONLY
 - COMBINATION
 - Proposed Unit Boundary



UNIT PLAN #3

LEGEND:

- U.S. ROUTE
- - - - - HIGHWAY ROUTE
- PROPOSED UNIT BOUNDARY

