

A SURVEY OF  
EDUCATIONAL CONDITIONS  
WITH  
A PLAN FOR CONSOLIDATION  
AND REORGANIZATION OF  
THE PUBLIC SCHOOL SYSTEM  
OF  
GRAHAM COUNTY, ARIZONA

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PUBLIC SCHOOL SYSTEM

Of

GRAHAM COUNTY, ARIZONA

.....

A THESIS

Submitted to the Faculty

Of the University of Arizona

In

Partial Fulfillment of the Requirements

For the Degree of

MASTER OF ARTS

By

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Tucson, Arizona

May, 1923

E9291  
1923  
12

A C K N O W L E D G M E N T

The writer wishes to express his appreciation to the Professors in the College of Education, and especially to Professor A. O. Neal under whose direction the work was done, for help and sympathetic interest in the study.

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## Introduction and Guiding Principles.

The determining factor in the selection of this study was the writer's personal interest in the community involved; especially in the educational progress of that community.

It can scarcely be expected that the work will lead directly or immediately to definite changes in the educational program of the county in question. Yet it is hoped that by a clear statement of existing conditions, together with a suggested plan of procedure, it may help in the development of a sound and progressive program of education for this community.

The best interests of society today demand that we meet the problems of education in a careful, professional, business-like manner; that we discover the real objectives to be attained, and that we set about their attainment with all the devotion, energy and skill at our command.

While we should not be hasty to accept new and untried theories, we must be willing to give up traditional systems and practices when they are clearly blocking the path of efficiency and progress.

Real democracy demands efficiency. The public may rightfully insist on doing its own business but the best good of the public can be served only through the adoption of a program that assures progress and advancement.

Democracy gives no individual or community rights, apart from social responsibility. Education in a democracy--the training of the citizens in a democracy--is a social problem.

Equal educational opportunity is as much a matter of democratic right as is equal protection under the law.

Not only the democratic rights of citizenship, but the very needs of democracy itself can be realized only when this ideal is achieved.

This is the real 'democracy in education', and it is with this goal in mind that this study is attempted.

In all essential respects the community involved in this inquiry is similar to other rural communities, and if the plan contributes anything to this community it may do as much for other similar communities.

PART I.

Chapter 1.

General Features.

A. Physical Features.



The occupation, the business, and even the social life of a people are all more or less determined by the topography and physical features of the country in which they live. Educational practices, and the school systems of communities are likewise closely related to these conditions.

Graham County is located in the south eastern part of Arizona. About eighty percent of the property and ninety percent of the population of the County are found in a narrow strip of land along the Gila river.

The "valley" is some forty miles in length and varies in width from two to ten miles, averaging about six miles. The soil is fertile and the climate mild, permitting a wide variety of crops. The improved farm land in the valley amounts now to about twenty-seven thousand (27,000) acres.

This, however, represents but a small portion of the area of the county. The total area is nearly four thousand five hundred (4,500) square miles, most of which is in mountain ranges and desert waste land.

#### B. Economic Status.

The thirteen and one-half million dollars worth of taxable property are distributed as follows:

4 $\frac{1}{2}$  million in farm land and improvements thereon  
4 $\frac{1}{4}$  million in railroad, telegraph and telephone lines  
2 million in range cattle and goats  
1 million in grazing lands  
2 $\frac{3}{4}$  million in city property.  
1 million in personal property.

The U. S. Census report for 1920 gives 870 farms, 90% of which are operated by their owners. The other 10% are rented--usually on shares--to local people, or to new families who have not yet secured farms of their own.

Forty-seven percent (47%) of the farms are free from debt and most of those still under mortgage are gradually paying themselves out.

The valley is still feeling the effects of the post war 'slump', but the recent opening of the surrounding mines has already stimulated production and business activities almost to their normal conditions.

The county recently voted a five hundred thousand

dollar (\$500,000) road bond and in cooperation with the Federal Government excellent roads are being built, including twenty miles of paved highway along the central portion of the valley.

Further development and expansion are dependent upon the building of storage reservoirs on the Gila and Frisco rivers.

### C. Social Conditions.

The population in 1920 was 10,148, eighty-seven percent of which is native born white. Practically all the foreign and foreign born are Mexicans who will doubtless remain in the county. The population has changed but little in numbers or in character during the past ten years.

There are thirty-three towns in the county, each with its own school house, which serves in most cases as church and social center also.

The majority of the communities have a regular social committee through which a rather definite and varied program of social activities is planned and supervised. Outside of the 'picture shows', there are few commercial amusements. Most of the social life consists of musical, literary and dramatic programs, games and dancing. These activities are promoted and directed by the different auxiliary organizations of the churches.

### D. Elementary Education.

The history of education in the county is practically the same as in all rural communities of the west. The increase in population has been slow and gradual and educational advancement has barely kept pace with the economic, industrial

and social growth.

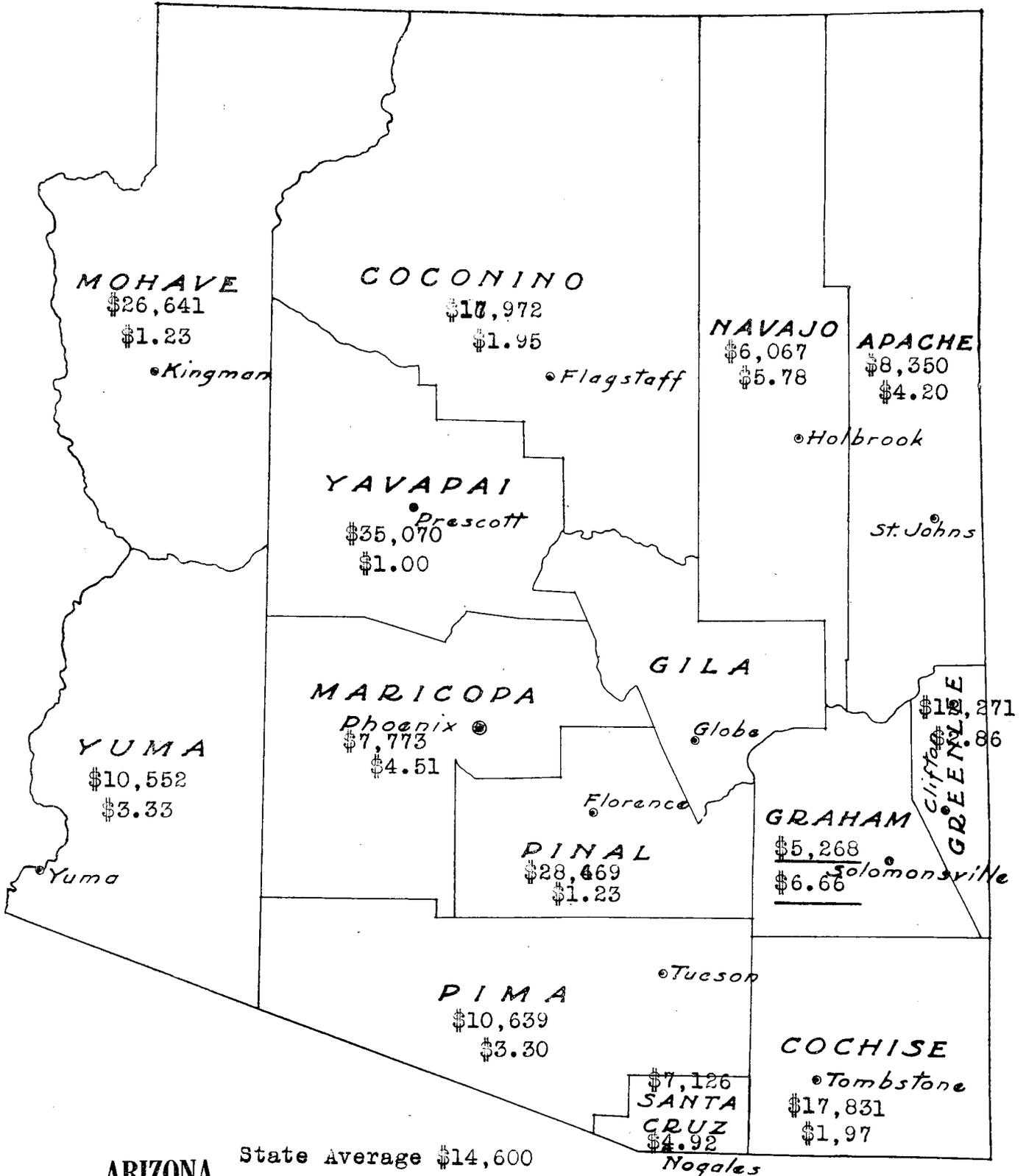
The county enjoys the distinction of having the smallest per capita property valuation in the state. It also has the largest number of children of school age in proportion to its population. It has one and seven-tenths percent (1.7%) of the assessed valuation and four and seven-tenths (4.7%) percent of the school population of the state.

The county map on the following sheet shows the relative revenue raising power of the counties.

It will be seen that Graham county has by far the lowest assessed valuation per pupil in school.

It is also evident that to raise an equal amount per child in school, Graham county would have to tax herself almost seven times as much as the richest county and nearly three times as much as the state as a whole.

ACTUAL ASSESSED VALUATION PER PUPIL IN SCHOOL  
AND  
TAX RATES NECESSARY TO RAISE EQUAL AMOUNT PER PUPIL;  
BASED ON A \$1 RATE IN YAVAPAI COUNTY



ARIZONA

State Average \$14,600  
State Rate \$2.40

ASSESSED VALUATION PER PUPIL IN SCHOOL

Counties	:Assessed :	. . . . .
	:Valuation:	
Yavapai	:\$35,070	: _____
Gila	: 31,212	: _____
Pinal	: 28,469	: _____
Mohave	: 26,541	: _____
Coconino	: 17,972	: _____
Cochise	: 17,831	: _____
Greenlee	: 12,271	: _____
Pima	: 10,639	: _____
Yuma	: 10,552	: _____
Apache	: 8,350	: _____
Maricopa	: 7,773	: _____
Santa Cruz:	7,126	: _____
Navajo	: 6,067	: _____
<u>GRAHAM</u>	: 5,268	: _____
State Avg.:	14,600	: _____

There is quite as great variation between size and property value of the districts within the county as the previous figures show between the counties of the state. Reference to the following table bears this out.

ASSESSED VALUATION, AVERAGE DAILY ATTENDANCE,  
AND COST PER PUPIL PER YEAR, IN SCHOOL  
DISTRICTS OF GRAHAM COUNTY FOR THE YEAR 1922

School Districts	:Assessed Valuation	:Property Value Per Pupil	:Cost per pupil per year	:Average daily attendance
49	: \$ 21,445	: \$ 2,681	: \$160.96	: 8
43	: 90,517	: 8,229	: 141.52	: 11
24	: 156,091	: 11,341	: 137.65	: 12
2	: 42,527	: 3,866	: 130.14	: 11
9	: 150,956	: 8,386	: 112.39	: 18
25	: 160,000	: 10,000	: 107.39	: 16
5	: 1,744,223	: 9,744	: 94.49	: 179
	:	:	:	:
44	: 210,785	: 6,323	: 86.83	: 33
14	: 88,156	: 4,898	: 78.41	: 18
16	: 380,240	: 9,053	: 69.77	: 42
31	: 198,556	: 5,840	: 68.31	: 34
26	: 104,570	: 2,432	: 68.28	: 43
13	: 212,058	: 8,482	: 62.60	: 25
11	: 160,615	: 2,397	: 58.17	: 67
	:	:	:	:
4	: 944,762	: 3,057	: 57.92	: 309
10	: 440,134	: 5,446	: 57.25	: 81
17	: 118,065	: 2,894	: 55.35	: 41
6	: 1,195,332	: 3,573	: 55.01	: 334
34	: 127,019	: 1,628	: 52.53	: 78
7	: 283,145	: 3,826	: 51.54	: 74
1	: 1,836,416	: 3,916	: 50.57	: 469
	:	:	:	:
28	: 77,295	: 3,092	: 48.00	: 25
41	: 445,987	: 7,648	: 47.43	: 57
40	: 83,243	: 2,312	: 47.05	: 36
12	: 323,858	: 2,971	: 46.73	: 109
23	: 35,988	: 1,028	: 43.70	: 35
20	: 429,650	: 8,593	: 43.45	: 50
8	: 105,250	: 2,770	: 40.07	: 38
County	: 13,487,202	: 5,986	: 61.15	: 2,253
State	830,536,542	: 19,028	: 87.03	: 43,646

ASSESSED VALUATION PER CHILD IN SCHOOL IN SCHOOL  
DISTRICTS OF GRAHAM COUNTY 1922

School Districts	Property Valuation	per pupil
Sunnyside	\$ 2,681	_____
Enterprise	8,229	_____
Ranger	11,341	_____
MountainView	3,866	_____
Klondyke	8,386	_____
Geronimo	m 10,000	_____
Solomonville	9,744	_____
California	6,323	_____
Alger	4,898	_____
Bonita	9,053	_____
Emery	5,840	_____
Hubbard	8,432	_____
Aravaipa	8,482	_____
Eden	2,397	_____
Thatcher	3,057	_____
SanJose	5,446	_____
Bryce	2,894	_____
Pima	3,573	_____
Lee	1,628	_____
Ft. Thomas	3,826	_____
Safford	3,916	_____
Coon	3,092	_____
Redlands	7,648	_____
Artesia	2,312	_____
Central	2,971	_____
Sanchez	1,028	_____
Lone Star	8,593	_____
Graham	2,770	_____
County Avg.	5,986	_____
State Avg.	19,028	_____

Districts are listed in order of per pupil cost per yr.

### E. Taxable Property, Variations.

With such a vast difference in the size and valuation of the districts, it naturally follows that the school facilities will also show great variation.

It is significant to note that the six smallest districts in point of attendance show the highest per capita cost.

It may seem unusual that the seven cheapest schools are found in the group which included the next to the smallest districts.

### F. Efficiency and Economy.

A study of the school conditions in these districts, however, shows why this is the case. For example, the cheapest school has not spent more than \$100 on improvements in the last five years. In spite of the fact that the school site includes more than two acres of level fertile ground with a large irrigation canal immediately above<sup>it</sup>, there is not a tree or shrub or blade of grass on the plot.

The building itself is little more than a protection from the weather. Walls, floors and furniture show no signs of paint, varnish or even thorough cleaning.

The school had an average attendance of thirty-eight (38) pupils, paid its teacher twelve hundred (\$1200) dollars, and was in session one hundred forty-eight (148) days. The daily program shows that the teacher really tried to 'hold' school, but that she found it impossible to actually teach the pupils, who in-

cluded members of each of the eight grades.

The only school having more than the average number of pupils, and yet falling in the cheapest group, had one hundred sixty days of school and employed four teachers at an average salary of \$106.00 per month.

The principal of this school was a Normal Graduate, but neither of her assistants had more than a high school education. One teacher had charge of the upper grades, and she tried to "hear" no less than twenty recitations each day. This forced her to continue the old traditional curriculum, which was abandoned a generation ago, in all up-to-date schools, rural as well as urban.

The course of study, in this district, provided for no music; no physical education or health work; no vocational guidance or training; no nature study or science; in fact it provided nothing but the grind, grind, grind of reading a text book one period and re-citing it on the next.

Such conditions may provide a "cheap" school but they certainly do not represent an economic return on their cost-- no matter how little this may be.

As for promoting and encouraging the growth of its students and patrons in social interest and insight and in democratic participation and experience, the school did just a little less than nothing.

#### G. Basis of School Organization and Administration.

There is another reason why school facilities show such a wide variation among the districts. The entire program of school buildings, equipment and physical improvement rests upon

each district alone. If any improvement is made the district must vote a special tax or a bond issue to cover the cost.

During the period from 1910 to 1920 approximately ten percent (10%) of the total school expenditures of the districts came from special district taxes, levied largely to pay bond redemption and interest charges.

The average tax rate for bond interest and redemption in the fifteen districts having outstanding bonds in 1920-22, was twenty-nine and one-half cents ( $29\frac{1}{2}\text{¢}$ ) per one hundred (\$100) dollars of taxable property.

The total general county tax rate for all school purposes for this same period was sixty two (62¢) cents per one hundred dollars property valuation. That is, the special district tax rate for building and improvements was practically one-half as much as the total county rate for all other school purposes.

In two districts this special bond redemption and interest tax was one dollar and ten cents (\$1.10) per one hundred dollars valuation. And in these districts even this exceedingly high tax rate yielded less than nine hundred dollars (\$900) per district.

On such small tax units it is evident that schools must continue to remain in the class commonly known as the "little red school house".

The district boundaries were not determined upon economic or educational principles. The districts just simply "grew up" as the country was settled. When once these districts are established it is next to impossible to affect changes in

either their location or extent.

Now that these district lines have been fixed it is looked upon in many of the districts as revolutionary if not democratically sacrilegious to change them or to consolidate them with adjoining districts.

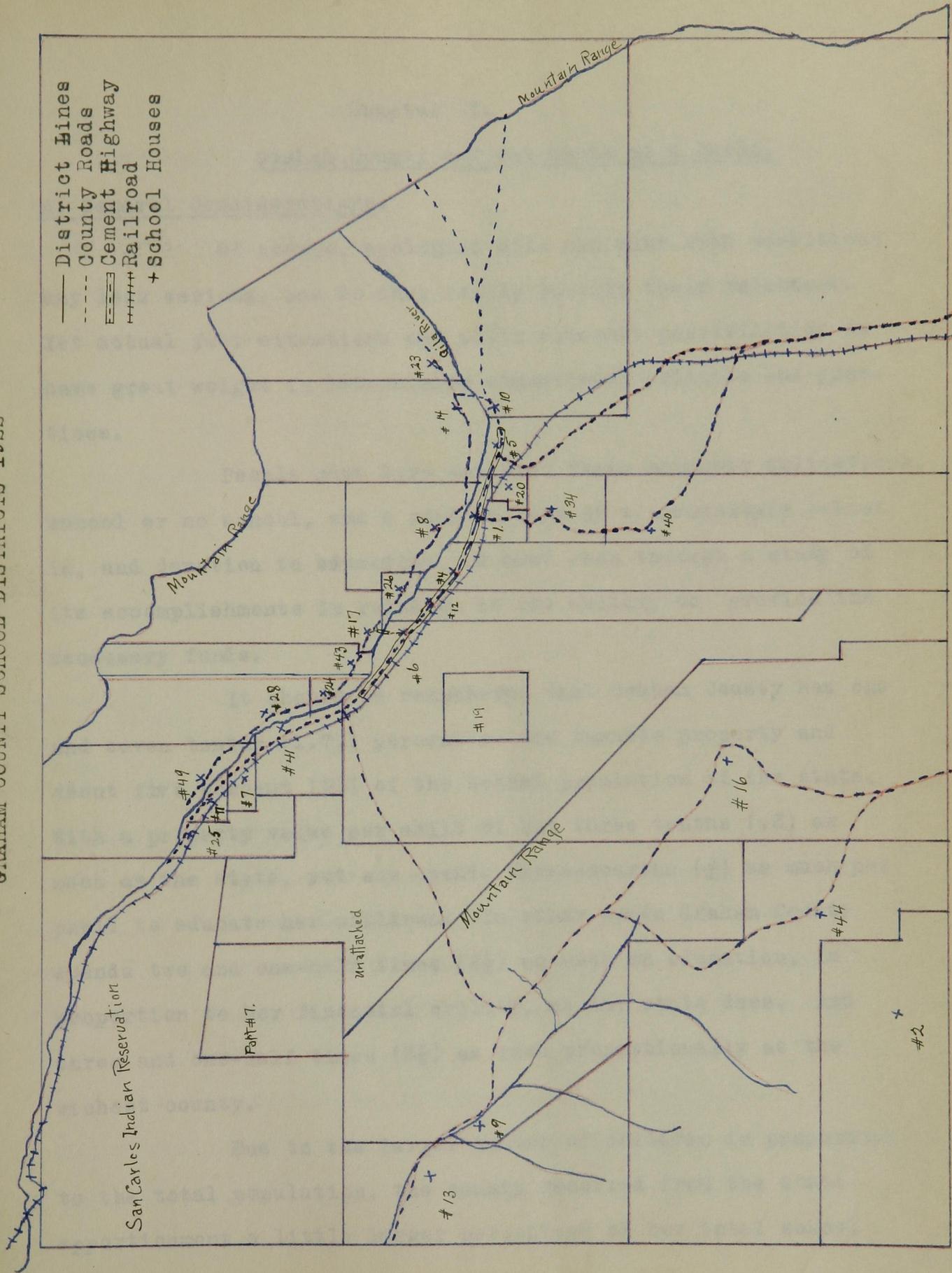
Yet in many instances these district lines completely ignore social, commercial, economic and civic units. The people go to "town" to do their business, to exercise their rights and responsibilities of citizenship, to get their mail, and for their entertainment. In many cases practically the only community activity is the five-day-a-week session of the 'district school'.

In too many cases these little district schools are neither democratic nor public. The trustees meet once or twice a year and elect a teacher. The county superintendent "calls" as the law demands. Thus the law is complied with and the district school is perpetuated.

Until some plan is adopted, that will place the whole program of school organization and administration upon a larger unit basis, Graham County, like many other rural sections of our country, will be able to give themselves neither Democratic, Economical nor Efficient Public Education.

If one had tried to cut the county up 'piece meal' into the greatest number and widest variety of regularly and irregularly shaped districts, it is doubtful if that result would have been more nearly realized as the map on the following page will bear out.

GRAHAM COUNTY SCHOOL DISTRICTS 1922



## Chapter II.

### Graham County and the State as a Whole.

#### A. General Considerations.

Of course, apologies will not make such conditions any less serious, nor do they really justify their existence. Yet actual fact situations and plain economic possibilities do have great weight in determining educational policies and practices.

People must live and meet their economic obligations, school or no school, and a real measure of a community's belief in, and devotion to education, is best seen through a study of its accomplishments in relation to its ability to provide the necessary funds.

It should be remembered that Graham County has one and seven tenths (1.7%) percent of the taxable property and about five percent (5%) of the school population of the state. With a property value per child of but three tenths (.3) as much as the state, yet she spends three-fourths ( $\frac{3}{4}$ ) as much per pupil to educate her children. In other words Graham County spends two and one-half times ( $2\frac{1}{2}$ ) as much on education, in proportion to her financial ability, as the state does. And three and one-half times ( $3\frac{1}{2}$ ) as much proportionally as the richest county.

Due to the larger number of children in proportion to the total population, the county received from the state apportionment a little larger percentage of her total school

expenditure than the average county. Hence the county has to raise a smaller percent of its school revenue from county and district taxes, than the other counties. This does not mean that the county actually raises less per dollar of property valuation. The fact is, she raises much more, because her property valuation per school child is so much less.

B. Sources of School Funds in Graham County.

Such items as revenue from timber sales, land rentals, etc. are included in state funds. Such items as poll taxes, fines, etc. are all listed as general county taxes.

	State Funds	:	General	:	Special District Taxes
		:	Co. Taxes	:	Maintainance:Bldg. & Imp.
	-----				
Graham Co.....	\$50,675.84	:	\$81,351.00	:	\$12,621.84 : \$16,055.91
Percent in Graham County	31.5	:	50.6	:	.....17.9.....
Percent in State as a Whole	29.1	:	42.5	:	.....28.4.....

C. Common School Teaching Force.

There were in the common schools in Graham County in 1922, fourteen men and seventy six women teachers. The percentage of men teachers in the state is nine and four tenths (9.4) while in the county fifteen and five tenths percent (15.5%) of the teachers are men.

The Graham County teachers have less professional training than do the teachers of the state as a whole. One-fifth in Graham county as against one-seventeenth in the state as a whole have had no training beyond high school.

In the county fifty percent (50%) while in the state as a whole twenty-two and one-half percent (22.5%) of the teachers have had but one year of training beyond high school graduation. Thirty percent (30%) of Graham County teachers and fifty-four percent (54%) of the teachers of the state are Normal Graduates.

It is hardly fair to compare Graham County teachers or schools with those of the state as a whole, because the county has no city schools at all. A comparison with schools of the same size more nearly reveals the true relative conditions of the county.

Sixty-one percent (61%) of the districts of the state are one teacher districts while thirty-nine percent (39%) of the districts in the county have but one teacher.

The percentage of two teacher districts is approximately twelve (12) for the state and fourteen (14) for the county. But the professional preparation of teachers in the schools of the same size is considerably higher in the state than the county.

Each teacher in the county has an average of thirty one pupils, while in schools of the same size in the state, each teacher has an average of twenty-two pupils.

The average annual salary of teachers in the county is one thousand and seventy-five dollars (\$1075); the average annual salary of the teachers in the same sized schools of the state as a whole is one thousand two hundred forty-five dollars, (\$1245). This difference might be expected because of the better

training of the teachers of the state.

The teachers of the one room schools of the county however, receive thirty-one dollars (\$31) more per year than do the one room teachers of the state as a whole.

The one six teacher school in the county paid its teachers on the average one hundred twenty-eight dollars (\$128) per year more than the teachers in the six teacher schools of the state receive.

In sixteen out of the twenty-eight schools of the county the average annual salary of the teachers is three hundred seventy-three dollars (\$373) less than the annual average salary of teachers in schools of the same size in the state as a whole.

From the data regarding professional preparation of teachers it is reasonable to conclude that the average pupil in Graham County gets less out of his school life and training than does his fellow-pupil in the state as a whole. Consequently he must face his life's work with less chance of success.

The above data is shown in tabular form on the following page.

COMPARISON OF SCHOOLS OF CERTAIN SIZES IN GRAHAM COUNTY AND IN THE STATE AS A WHOLE\*

	One teacher schools	Two teacher schools	Three teacher schools	Four or five teachers	Six to nine teachers	Ten to fourteen teachers					
	State:County	State:County	State:County	State:County	State:County	State:County					
No. of districts	270 : 11	: 56	: 7	: 30	: 5	: 24	: 1	: 24	: 1	: 15	: 3
% teachers with training above H.S.	67% : 44.5%	: 47%	: 50%	: 83%	: 47%	: 84%	: 50%	: 96%	: 100%	: 93%	: 89%
Pupils per teacher	14.8 : 26	: 19.4	: 24.5	: 23.4	: 24	: 22.9	: 30.8	: 25.8	: 39	: 26	: 37
Days in Av'g. term	161 : 153	: 162	: 148	: 164	: 160	: 164	: 165	: 167	: 172	: 170	: 166
Annual cost per pupil	\$106 : \$96	: \$89	: \$59	: \$67	: \$58	: \$78	: \$47	: \$87	: \$95	: \$84	: \$55
Av'g. teacher's salary	\$1179 : \$1210	: \$1285	: \$923	: \$1458	: \$1017	: \$1409	: \$1044	: \$1364	: \$1492	: \$1526	: \$1170

\*From Sixth Biennial Report of State Superintendent of Public Instruction and Graham County Superintendent's Annual Report, 1922.

D. School Attendance.

That Graham County does not have as much money to spend on its schools as the other counties of the state, Graham County citizens do not deny. But that this proves that they think less of their schools, they do not admit.

They insist that they are spending all that they can afford to spend, and that other communities are not yet doing this much. The resulting difference in available school funds merely proves that we do not yet have equal educational opportunities in the state.

As shown by previous charts and references, the average taxpayer in Graham County pays a much larger percentage of his income and a higher tax rate on his property for the support of the public schools, than does the average citizen of the state as a whole.

It usually follows that appreciation is in direct proportion to cost. The more we sacrifice for a thing the more highly we prize it and the more loyal to it we become. This may be one of the reasons for the excellent patronage of the schools by the average parent in the county.

The county has a higher percentage of its school population enrolled in school than does any other county in the state. The state as a whole has six out of each ten, while the county has seven and one-half out of each ten of its population between 6 and 20 years of age in its schools.

**PERCENTAGE OF CHILDREN OF CERTAIN AGE GROUPS ENROLLED  
IN THE PUBLIC SCHOOLS OF GRAHAM COUNTY AND IN THE STATE**

Age groups	Enrolled in School State	:	Enrolled in School County	:	Graham County's Rank among counties
7 to 13 years..	78.8	:	92.2	:	FIRST
12 and 15 yrs.	73.8	:	88.2	:	FIRST
16 and 17 "	45.3	:	54.0	:	FIRST
18 to 20 "	14.4	:	19.5	:	FIRST
7 to 20 "	60.8	:	75.2	:	FIRST

**TOTAL POPULATION, NUMBER ENROLLED IN SCHOOL, NUMBER NOT  
ENROLLED IN SCHOOL IN CERTAIN AGE GROUPS IN GRAHAM  
COUNTY IN 1920 (From U.S. Census Report)**

Age	Population	In School	Not in School
7-13 years...	1970.....	1816.....	154
14-15 ".....	535.....	474.....	61
16-17 ".....	463.....	261.....	202
18-20 ".....	548.....	107.....	441
Total 7-20 Yrs.	3516.....	2658.....	858

Up to the age of sixteen practically all of the population is enrolled in school. The few not enrolled are in most instances either lawfully excused or they are of the transient type who happened to be at hand when the census was taken.

It will be noted however, that beginning at sixteen the number not enrolled increases rapidly. For the group sixteen and seventeen years of age, fifty-six percent (56%) are enrolled, but for the next older group less than twenty percent (20%) remain.

For the whole groups sixteen to twenty years of age but one third are enrolled in school. This group includes the high school students and the figures show most conclusively that this is an important educational problem in the county. In this group, six hundred forty-three are not receiving the education that successful citizenship and economic independence demand.

Here again, Graham County's school system is neither efficient, public, nor really democratic. It is not efficient because it does not hold the students and thus it fails to give them that training which success in our modern life demands of them. It is not public, because it is not participated in by the majority of the pupils in the county. It is not democratic because it fails to provide the facilities for the education of its growing citizenship, and thus makes it necessary for them to attend private schools, or go to other counties for their education.

### Chapter III.

#### History and Status of Secondary Education.

##### A. Early Development.

Graham County is young, as a county. It is less than thirty-five (35) years since the valley was settled by Americans and it takes time--much time--to transform a wilderness, especially a desert wilderness, into a modern self-sustaining commonwealth. At least some economic and industrial development must come before the establishment and growth of social and educational institutions is possible. While it is true that each

"generation begins where the previous generation began, biologically" it is equally true that "each generation should begin where the previous generation left off, sociologically".

This only means that each generation shall take its step--at least one step-- up the ladder of progress. Anything less than this would lead to stagnation, and decay, and if it became at all general it would lead to the breaking down of democracy.

#### B. Secondary Education.

##### (1) Gila Academy.

The pioneers of Graham County realized this, and as early as 1885 they began to provide for the education of the young people of the valley. Since there was at that time no provision for public high schools, these early educational devotees appealed to their church leaders for help.

This help, at first largely in the nature of encouragement and sympathetic interest, finally led to the establishment in 1889 of the Latter Day Saints Academy.

The Church paid all the salaries of the instructors, leaving to the local patrons the responsibility of providing buildings, equipment and necessary operating expenses.

The school was small at the beginning, but made steady and continuous growth until in 1922 it had 250 students.

At first the only standards and entrance requirements were evidence of a desire to learn and an application for admission.

Under these conditions, the work was not of standard high school grade. However, the good that it did for the backward, over-aged students who could not and would not longer benefit by attendance at the district schools, cannot be measured. Nor can the effect that this educational leadership has had on the public schools themselves be over estimated.

Gradually, as the public schools developed and raised their standards, and increased the amount of work they could do, the Academy was able to add to its upper grade courses.

By 1910 the preparatory department was eliminated and the school became a regular four year high school. At this time the school moved into its new and modern \$60,000 building, and the name was changed from the Latter Day Saints Academy to the Gila Academy.

In 1917 the Academy was admitted to membership in the North Central Association of Secondary Schools and Colleges.

Beginning in 1920 to offer some work of Junior College grade, the school was designated by the Church in 1922, as the Gila Normal College.

A two year normal course was outlined and presented to the State Board of Education and application was made for rating as a Standard Normal School. The State Board, however, denied this application, suggesting that Arizona's State Normal schools offered sufficient opportunity for prospective teachers.

In accordance with this decision of the State Board, the Gila Normal College is now the Gila Junior College and it will

go on serving the people of the Gila Valley, and of the State. The course will cover two full years of standard Junior College work, including the first year of the Normal school work required by the state normal schools.

Until 1914, the Gila Academy was the only high school in the county, and at present (1922) it has 240 of the 375 high school students attending high school in the county.

Beginning in September of 1923, the Gila Junior College will not be open to first year high school students. Dropping one additional year at a time, by 1927 the college will do no high school work, but will confine the program entirely to college courses.

#### (2) The Safford High School.

The Safford public school system has offered high school advantages within its own district for several years. It has a regular four year high school, with standing in the North Central Association of Secondary Schools and Colleges. It is not a Union High School, but a district high school. Students from other districts may attend, by paying a fixed tuition.

Three other common school districts offer some work of "advanced" grade. But there is no other place where regular high school work is attempted.

#### (3) Present Need for High School Advantages.

Since the announcement that the Gila Junior College will not receive new high school students after this year, there has been some agitation for a county system of secondary

education. There can be no question but that now is the opportune time to lay the foundation for an efficient economical and progressive system of secondary education in Graham County. A change must be made and one of the primary purposes of this thesis is to suggest the proper basis and the principles upon which this change should be made.

## PART II.

### Chapter IV.

#### Re-Organization of District System Necessary.

##### A. The People and Their Educational Needs.

The people of Graham County believe in education and that a system of efficient, democratic, public schools is the major factor in this education. This fact is well established by their effort and devotion in the past.

On a basis of one-third as much taxable wealth per child, the county has spent three-fourths as much per child, on education as has the State of Arizona as a whole.

The larger percentage of the school population of the county than in any other county in the State are in attendance in the schools. The school term in the county is somewhat shorter, the teachers have less professional training, receive less salary, and teach more children per teacher, than in the State as a whole. This relative condition will probably remain until we develop in Arizona a plan providing Equal Educational Opportunities to all

parts of the state alike.

Still this does not mean that we need or can have in Graham County no improvement even under our present system.

(1) Present Advantages only Partly Equalized.

The state law providing a minimum of \$1500 for one teacher and \$3000 for two teacher schools, out of general state and county taxes is an excellent provision. It enables these little schools to have adequate funds to provide good schools--as good as may be reasonably be expected on such a small attendance basis. But it takes more than funds to train boys and girls to the stature of democratic citizenship.

(2) Small Schools Less Efficient and Less Democratic.

These small schools are the ones with the less efficient teachers, the poorer buildings and equipment; with the most illy adapted course of study and the most indifferent and inefficient management and supervision.

Indeed they have less than no management or supervision. Because of their independence of county and state supervision they get no help from this source, and because of the lack of training and experience, the local trustees do not even attempt it. So long as this dodging between local independence and county or state supervision, both of which are equally mythical and groundless, is kept up these little district schools will continue to be inefficient and undemocratic.

The age old axiom that democracy means independent, self-sustaining, self-governing units, bonded together for common

protection and the promotion of common interests, has absolutely no connection with the maintainance of these little isolated, inefficient, unsocial, political school districts.

B. Small School Districts Not "Self-Supporting".

Of the eleven one teacher districts in Graham County, none of them raises the full amount that is spent on its schools. The aggregate expenditure in the eleven one teacher schools exceeded the amount paid in them by all the school taxes they paid, State, County, and Local, by \$7,632.60. That is, of \$17,325 apportioned to these eleven one teacher schools, only \$9,692.40 was actually paid in school taxes by these districts themselves.

The relative amounts for the two room schools were about the same. Of \$15,650 apportioned to the five two teacher schools, \$8,727.88 was raised by the districts, while \$6,822.12 was a gift to these districts, from the State and the County outside of these districts.

So that, except in very few instances, the local people in the smaller school districts in Graham County do not provide all the funds which are expended by them for Education.

The oft repeated axiom (so-called) that local districts should manage and control education in their own districts because local people are paying the cost of that education, is not according to the facts in Graham County. And sooner or later, there must come a reorganization of these districts, so that real economy, educational as well as financial may be assured.

With but one high school in the county and that one

a district high school, it is too plain to need comment that some plan must be developed that will provide the boys and girls of high school age and grade in the various districts in the county an opportunity to attend high school.

It is entirely out of the question both economically and educationally for each of the present districts to attempt to maintain a high school.

(1) Cannot Finance Efficient School Work.

It is also impossible for many- or most - of the districts to support even their present schools, so that some plan of consolidation is imperative.

Practically all the leading authorities on education today, agree that the common elementary school should include but the first six years of school work.

There is not a city of any size, in the country, but that has already separated the seventh and eighth grades from the elementary schools and many of the rural schools have also adopted this plan. These grades are usually put with the ninth grade to form the intermediate or junior high school.

As stated above, it is impossible for most of the present districts in Graham County to even attempt to carry on this junior high school work. There are at least three reasons why it is impossible for them to do this work with any degree of success.

First, the taxable wealth of the present districts is too small to provide the necessary funds.

Second, they do not have a sufficient number of

students of junior high school grade to justify the expense or to make classwork successful.

Third, the present course of study in the seventh and eighth grades, and the course which they would be able, or likely to offer in the ninth grade, is neither well adapted to the needs of the students nor acceptable as to standards of teachers qualifications, equipment, or subject matter.

As pointed out above, none of the one or two teacher districts, or even the three or four teacher districts are able to raise sufficient funds to properly maintain their present schools. Not one of these schools has a taxable wealth of as much as \$450,000. Only two exceed \$400,000 in wealth; five have between \$200,000 and \$400,00; nine have between \$100,000 and \$200,000 and seven have less than \$100,000 of taxable wealth.

The number of students available for the work, is too small to justify the expense that would be incurred. Only one of these districts has as many as one hundred students in the entire eight grades. Twenty of the twenty-eight of such districts, have less than seventy-five pupils, and seventeen have less than fifty pupils in the entire eight grades.

The enrollment in the junior high school would not exceed forty-five (45) in any of the districts mentioned. In twenty of the twenty-eight such districts the number would be less than twenty. With such a small enrollment it is evident that a junior high school could not possibly succeed, even if the funds were available.

C. Common School Course of Study Needs Reorganization.

Under the present organization and administration in these little schools, the addition of the ninth grade would not lead to the needed reorganization of the course of study. Wherever the ninth grade has been added it has merely led to the addition of a few more courses. The same organization and the same arrangement and point of view have continued to guide the work of these schools.

An examination of the present course of study in even one of the larger of these schools shows most clearly that a reorganization of the curriculum is absolutely necessary. Under the present course these schools do not hold the boys and girls, nor do they give them the insight or training that modern society and the responsibilities of democratic citizenship demand.

COURSE OF STUDY IN A GRAHAM COUNTY PUBLIC SCHOOL

Seventh Grade

Required Subjects	No. in class	Time of Recitation	Recit's per week
1. Arithmetic.....	9	30 min.	5
2. Drawing.....	"	20 "	5
3. English.....	"	20 "	5
4. Geography.....	"	20 "	5
5. History.....	"	20 "	5
6. Reading.....	"	20 "	5
7. Spelling.....	"	10 "	5
8. Writing.....	"	10 "	5

ELECTIVE SUBJECTS--NONE.

Eighth Grade

Required Subjects	No. in Class	Time of recitation	Recit's per week
1. Arithmetic.....	11	30 Min.	5
2. Drawing.....	"	20 "	5
3. English.....	"	20 "	5
4. Geography.....	"	20 "	5
5. History.....	"	20 "	5
6. Spelling.....	"	10 "	5
7. Writing.....	"	10 "	5
8. Reading.....	"	20 "	5
9. Physiology.....	"	20 "	5

The addition of another year of similar work, organized in the same way, taught in the same way, given the same time consideration, and with little or no improvement in equipment or teaching preparation, would surely not appeal to the average wide-awake, energetic rural boy or girl. The whole "meal" seems almost as dry and uninteresting as does the school plant-- building and grounds.

The attempt to hold boys and girls in schools that have such a course of study, even under compulsory attendance laws, is only fairly successful, and an effort to prolong the grind would surely meet with little sympathy or response from the boys and girls.

Contrast the above course with the one offered in another school-- the latter less than three miles from the former:

COURSE OF STUDY IN A CERTAIN GRADE SCHOOL IN GRAHAM COUNTY

Seventh Grade

Required Subjects	No. in class	Time of recitation	Recit's per week
1. English	32	40 min.	5
2. Penmanship	32	20 min.	5
3. Geography & Civics	"	60 "	5
4. Music	"	30 "	5
Elect two from the following:			
Home Economics	13	2½ hrs.	5
Animal Husbandry	11	1½ "	5
Art	26	30 min.	5
Handicraft	15	30 "	5

Eighth Grade

Required Subjects			
English	26	50 min.	5
U.S. History	26	50 "	5
Music	26	30 "	5
<u>Boys:</u>			
Farm Crops	17	90 "	5
Agr. Arithmetic	17	60 "	5
Hygiene & Sanitation	17	60 "	3
<u>Girls:</u>			
Home Economics	9	2½ hrs.	5
Practical Arithmetic	9	40 min.	5
Physiology and Home Nursing	9	60 "	3
<u>Boys &amp; Girls together:</u>			
Community Health Problems	26	60 "	2

If the work in the elementary and primary grades in these two schools is as much in contrast as are the courses submitted above--and they usually are--it must be plain even to the most humble layman, that equal educational opportunity is a stranger in the county in which such schools are found.

PART III.

Chapter 5.

Consolidation the Best Remedy.

This condition of inefficiency and inequality of

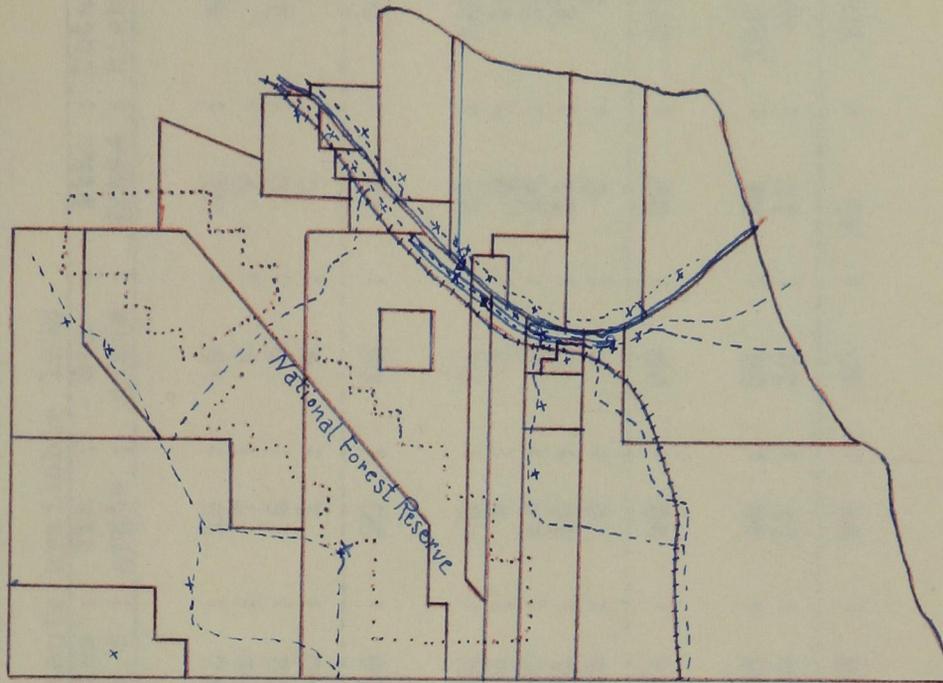
educational opportunity must not continue. I believe that if the facts were known to the citizens of these districts, they would gladly welcome, and even demand the adoption of some plan with proper means of altering these conditions.

Fortunately, the geographical conditions of the valley make consolidation not only highly possible, but decidedly advantageous.

With the exception of the four districts south of the Graham mountains the country readily lends itself to a program of consolidation into six instead of the twenty-three school districts. The maps on the following page show how this consolidation would affect their size and number .

The second page following gives a more detailed picture of these school districts. The number of students listed in each group was obtained by moving all the grades up one year and adding a beginners grade equal to the present first grade.

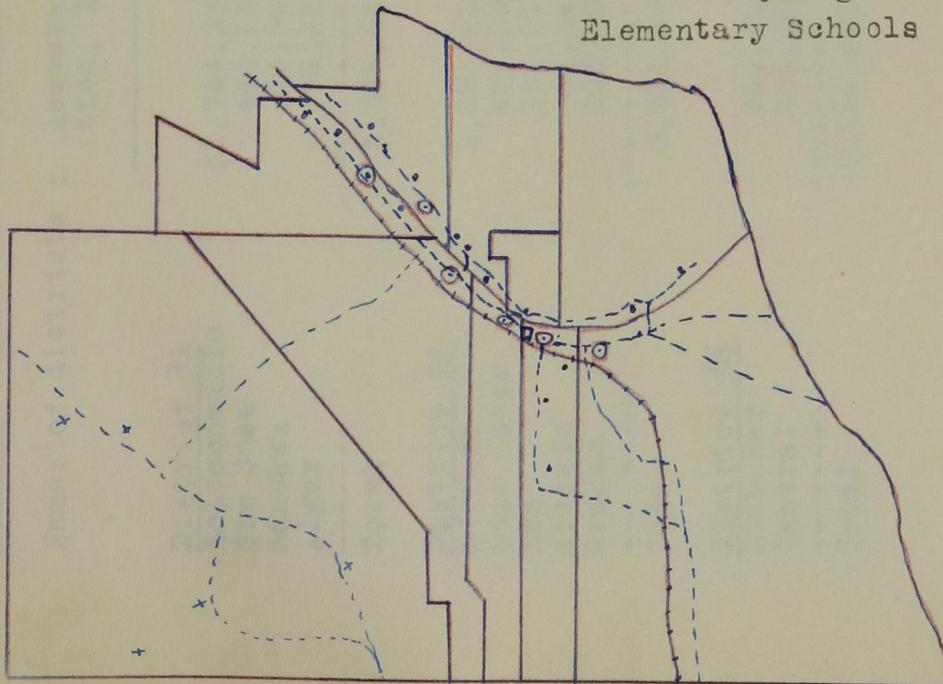
SCHOOL DISTRICT BOUNDARIES 1922



- District Boundaries —————
- County Roads - - - - -
- Rail Road +++++
- District Schools x
- Consolidated Schools ⊙

DISTRICT BOUNDARIES UNDER CONSOLIDATION PLAN

- County High Sch. □
- Elementary Schools •



ASSESSED VALUATION AND NUMBER OF STUDENTS IN PROPOSED CONSOLIDATED DISTRICTS

Names of districts :	Assessed valuation, 1922	Students available 1923				Total junior high school
		Grades 1 to 6	7th grade	8th grade	9th grade	
<u>District #1</u>						
Solomonville	\$1,744,223	243	16	16	11	43
San Jose	440,134	82	7	0	0	7
Sanchez	35,988	51	6	5	0	11
Alger	88,136	40	1	4	0	5
-----						
Total	2,308,481	416	30	25	11	66
<u>District #2</u>						
Safford	1,836,416	563	60	70	50	180
Lone Star	429,650	54	5	7	6	18
Lee	127,019	90	12	9	16	36
Artesia	83,243	31	16	0	11	27
Graham	105,250	36	6	2	0	8
-----						
Total	2,581,578	774	99	88	82	269
<u>District #3</u>						
Thatcher	944,762	280	44	28	34	106
Central	323,858	98	12	15	17	44
-----						
Total	1,268,620	378	56	43	41	150

ASSESSED VALUATION AND NUMBER OF STUDENTS IN PROPOSED CONSOLIDATED DISTRICTS

Names of districts : Assessed valuation, 1922 : Students available 1923 : Grades : 1 to 6 : grade : 7th : grade : 8th : grade : 9th : grade : Total junior high school

District #4

Pima	\$1,195,333	349	33	41	42	116
Hubbard	104,570	45	12	4	5	21
Bryce	118,065	43	9	7	3	19
Enterprise	90,517	24	0	0	0	0
Total	1,508,484	461	54	52	50	165

District #5

Ft. Thomas	283,145	69	11	11	12	34
Redlands	445,987	82	0	4	5	9
Emery	198,556	32	6	10	0	16
Geronomo	160,000	15	4	7	1	12
Total	1,088,688	198	21	32	18	71

District #6

Eden	160,615	76	8	7	3	18
Coon	77,296	27	6	3	7	16
Sunnyside	21,445	17	0	5	0	5
Total	259,356	120	14	15	10	39

It will be noted that under the consolidation plan, the smallest junior high school will have thirty-nine pupils to start with. And the smallest single class in these schools will have ten students. In all cases the seventh, eighth, and ninth grade classes will be made large enough to do good class work at a fairly economical cost. Except in the one district, the taxable wealth will be increased to over a million dollars per district.

If all the pupils now in school in these districts were kept in school next year, and another first grade as large as the present one were added, the removal of the seventh, eighth and ninth grades of each of the schools to one central school in each district, would not reduce the number of students in any of the schools now running.

Under the grouping proposed, the six junior high schools would have a total attendance as follows:

Eden	39 pupils.	Smallest group	10 students.
Solomonville	66 "	"	" 11 "
Ft. Thomas	71 "	"	" 18 "
Thatcher	150 "	"	" 41 "
Pima	156 "	"	" 50 "
Safford	269 "	"	" 82 "

Contrast these groups with the present condition in the seventh, eighth grades of the schools involved in these consolidated units.

Total number of schools now running, 22.

NUMBER OF STUDENTS PER GROUP

Grade groups:	0:	1-3 :	4-6 :	7-9 :	10-12 :	13-15 :	over 15:	Total
Seventh grade groups	3	2	5	5	2	1	4	19
Eighth grade groups	7	3	3	1	3	1	4	15

UNDER CONSOLIDATION PLAN

	10-19:	20-29 :	30-39:	40-49:	50-59 :	60-100:	Total
1st yr. junior high (seventh grade)	1	1	1	-	2	1	6
2nd yr. junior high (eighth grade)	1	1	1	1	1	1	6
3rd yr. junior high (ninth grade)	3	0	0	1	1	1	6

D. Advantages of Consolidation.

The social and educational advantages that would come to the pupils, through membership in these larger groups cannot be measured in dollars and cents.

It would make it possible to have better buildings with more and better equipment, more adequately trained teachers, a broader and more varied social life, and a richer and more practical course of study.

The value of these things is so evident that it should require no argument to establish their soundness and validity.

But could the pupils really be brought together? Would the cost of transportation be prohibitive? Would they still be able to live at home? These questions are important and must be given fair consideration.

E. Problems of Consolidation.

(1) Consolidation and Student's Home Life.

Educational authorities readily agree with parents that boys and girls of junior high school age, should live at home. They need the supervision and care of their parents, and their parents need the help that the boys and girls can render in attending to home chores. These home duties are also very essential to the proper training of the boys and girls.

Under no conditions is it recommended or intended that these junior high school students should live away from home. The experience of hundreds of such districts actually bears out the fact that, however, under a properly conducted transportation plan these students can not only be transported safely and economically, but they will actually have more time at home than they now have. It is also a well established fact, that attendance is much more regular under consolidation and transportation provisions, than under the isolated small district conditions.

## (2) The Transportation Problem.

Let us see just how the transportation problem could be handled in these districts. Taking the Solomonville district as an illustration. Under the proposed consolidation, sixth, seventh and eighth grades, would constitute the first, second, and third years of the junior high school, the year following.

### a. The Sanchez-Alger Schools.

The Sanchez students could be brought from their homes to the Alger district, a distance of not more than three miles. Here they would be joined by the five students from the Alger district, and all would be transported across the river.

Either of two possibilities might be used to get them from their homes on the north side of the river to the south side of the river. A hack could bring them from the Sanchez district to, and across the river at the Alger school. The crossing at this point is safe and dependable for a team practically all of the school year. Or, at small expense, a suspension foot bridge could be placed at this crossing of the river.

B. San Jose School.

From this river crossing at Alger to the Solomonville school house is not over four miles. The same bus which goes to this river crossing for the Sanchez-Alger students could pick up the seven students from San Jose district, as it passed on its way to Solomonville.

This route, then, would cover four miles by auto bus and three miles by hack. Or if a foot bridge were installed, a small car could bring the students from Sanchez and Alger to the bridge then the San Jose bus could take them on to Solomonville.

c. Transportation Costs.

From a very large number of actual cases, in various parts in the United States the average cost of auto bus transportation for school pupils is 25.4¢ per mile per truck. This includes redemption and interest on the original cost of the bus; actual transportation and operating expenses, and repair and upkeep on the car. The total mileage on this haul would be seven miles each way or fourteen miles per school day. Allowing for a term of one hundred seventy (170) days, this would mean a total of 2380

truck miles. Figured at the rate of 25.4¢ per bus mile the annual cost would be \$594.52.

In some cases transportation cost is expressed in cost per child per day. The cost ranges from 10¢ to 30¢ per child per day, over routes ranging from two to sixteen miles.

An average of six and one-half ( $6\frac{1}{2}$ ) miles gives an average student cost of 20¢ per day. These figures cover a wide range of road conditions and a great number of cases. Using these figures the transportation cost in this district would be as follows: Twenty-three pupils at 20¢ per pupil per day gives \$4.60 per school day. Allowing for one hundred seventy days (170) it would cost \$782 per year to transport these seventh, eighth and ninth grade pupils from Sanchez, Alger and San Jose to Solomonville school. Averaging figures with those given above would give an approximate cost of about \$650 per year for transportation.

This is certainly an added expense, but it should be remembered that twenty three boys and girls are given an additional month of school each year besides the advantages that come through social contact with larger classes; through study under more proficient teachers; through the use of more and better school equipment; and through a program of school studies that is practical and of vital interest to them. In the face of all these advantages this added cost represents a most wise and economical investment.

A straight addition of \$650 for transportation, in this consolidated district, would mean the addition of 2.8¢ on

each one hundred dollars of taxable property in the district. Surely no one would be the poorer for the addition of this insignificant amount to his taxes.

The problem of transportation would be simpler in the other districts, because of better roads, and because no other district would have to cross the river without access to a good bridge.

d. Safford Consolidated District.

The Safford consolidated district would include five districts. Data for the transportation of the pupils of the seventh, eighth and ninth grades of this district into Safford for a school term of one hundred seventy (170) days is given in the following table:

Schools	Length of route	No. of pupils	No. of busses	Annual student mileage	Annual transportation cost
Artesia	10 miles	27	1	3400 miles	\$863.60
Lee	4 "	36	2	720 "	690.88
Lone Star	2 $\frac{1}{2}$ "	18	1	850 "	215.90
Graham	2 "	8	1	680 "	172.72
<hr/>					
Totals	18 $\frac{1}{2}$ Miles	79	5	7650 "	1943.10

The additional tax levy on this district necessary to raise this amount is 7.52¢ per \$100 valuation.

(3) Junior High School Needs.

Let us see what conditions would prevail should the present schools in this district continue to offer seventh and eighth grade work in the present schools.

Schools	NUMBER OF PUPILS IN DIFFERENT GROUPS		
	Primary- (1-2-3)	Intermediate (4-5-6-)	Junior high (7-8-9)
Lone Star	36	18	18

NUMBER OF PUPILS IN DIFFERENT AGE GROUPS  
(Continued)

	Primary (1-2-3)	Intermediate (4-5-6)	Junior High (7-8-9)
Lee	46	44	36
Artesia	25	6	27
Graham	12	24	8

This grouping is purely arbitrary, and it does not represent the best grouping, for the equal distribution of children among teachers. It does show, however, that a proper program of work would be impossible in these districts.

(4) Teachers Needed.

Here arises the question of how many pupils a teacher ought to try to handle. With the buildings, the facilities, and the equipment provided in these schools, it would be little less than criminal and most certainly it would not be conducive to worthwhile results for a teacher to have more than thirty children, especially if the children are in three or more grades.

a. The Lone Star School.

The Lone Star school could be handled by two teachers by putting the third grade with the intermediate group, if the junior high school group were transported to Safford.

If, however, they were kept in the district, it would necessitate the addition of a third teacher. The cost of this extra teacher then should be credited to the consolidation plan to help check off the expense of transportation. By saving the cost of one teacher here, to say nothing of the cost of providing another another class room in the district it would actually be \$1200 cheaper to transport the eighteen junior high school pupils to

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(Continued)

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Safford than to provide for them in the present school.

b. The Lee School.

At present three teachers handle this school. But by adding the ninth grade, it would be impossible for the three teachers to take care of the school. Indeed, the ninety children in the Primary and Intermediate groups, are more than three teachers can handle properly. Here again it would be cheaper in dollars and cents to transport the thirty-six junior high school pupils to Safford than to teach them in the present school. The importance of providing a suitable building and adequate facilities and qualified teachers for doing junior high school work should also be kept in mind in this connection.

c. The Artesia School.

This district at present really has poor facilities for a one teacher school. Crowding two teachers and fifty-eight children into the present building, in this district would make effective school work absolutely impossible. It would be cheaper to transport the twenty-seven junior high school pupils to Safford than to provide a building and a teacher for them in Artesia.

d. The Graham School.

Transporting the eight junior high school pupils from the Graham district to Safford would not affect the number of teachers needed in this district. The probability is, however, that most of the eight pupils would quit school rather than con-

tinue another year of the same kind of work they had already done.

The provision for transportation to a real junior high school would encourage the ten additional students of junior high school grade actually in the district to go on to school.

#### (5) Junior High School Costs.

But what of the extra cost of teaching these boys and girls after they are all brought together in Safford?

The building and equipment that would adequately care for the one hundred eighty students already in the Safford school would be adequate under a properly arranged course of study and daily program, to care for the additional eighty-nine students, with very little, if any, extra expense.

There is now in the Safford district a splendid junior high school building. Through a plan for equalizing the cost of this plant, and its future maintainance on the basis of the assessed valuation of the new and larger district, the building problem would not be difficult.

#### a. Teacher cost.

With classes of sixty, seventy and fifty, in each of the three years, at present in the Safford district junior high school, there would have to be at least two sections in each of the required subjects. The addition of the eighty-nine pupils from the surrounding districts, would merely add another section in each of these subjects.

In the elective classes there would be a sufficient scattering to reduce the size of the classes so that the eighty-nine additional students would not make additional sections in these courses necessary.

To be more specific, in English, in Mathematics, in History and Geography, and in Science, one additional section for each year would be necessary. This would add four new sections per year, or twelve in all. This is about two additional teacher's work and would amount to about \$3600 or \$3800.

b. Additional Costs under Consolidation.

Recapitulating and measuring saving against additional costs under consolidation approximately the following figures would hold:

	Saving	Additional Cost.
<u>Lone Star</u>		
One teacher....	\$1450	
Transporting of 18 pupils.....		\$215.90
<u>Lee</u>		
One teacher ....	1450	
Transportation cost.....		690.88
<u>Artesia</u>		
Teacher cost	1450	
Transportation cost.....		863.60
<u>Graham</u>		
Transportation cost.....		152.52
Additional teachers in junior high		3600.00
-----		
Total saving.....	\$4350.00	Added cost \$5543.10
Net increase in cost	\$1193.10	

This net additional cost may seem unusually low and it is possible that the actual cost would exceed this, for the first few years under consolidation. However, after the plan has time to adjust itself to the new program, and to meet the initial cost, the actual maintainance cost would be proportionally less.

(6) Comparison of Present Organization and Consolidation.

Comparison may again serve to clarify the actual merits of the two plans: Under the present district organization the addition of the ninth grade in each of the present schools would be quite impossible for financial reasons, and utterly indefensible from an educational standpoint.

So that under these conditions the ninth grade pupils living in these districts would either drop out of school at the end of the eighth grade--if indeed they remained this long-- or their parents would have to meet the expense of sending them away to school. Neither of these conditions is in harmony with democratic principles, and practices in a truly democratic country.

As a matter of fact the present school program does not reach even a majority of the fourteen to twenty year old boys and girls of these small districts.. The United States Census Report for 1920 shows Lee and Artesia districts to have a combined total of seventy persons between fourteen and twenty years of age. According to the school register for 1922 only thirty-seven of these pupils were actually in school. The plan for giving these boys and girls an opportunity of attending a

well equipped, well organized school would undoubtedly appeal to a much larger percentage of them.

a. School Program.

Previous reference to the courses of study provided under the two plans showed conclusively that even if the percentage of attendance were equal under the two plans, the actual educational opportunities offered are almost incomparable.

A small class of three to five pupils, crowded into the same class room with the other grades, and forced to read and recite only, is neither efficient, democratic, nor economical.

b. Other Districts Similar.

Detailed discussion of the transportation routes, equipment and cost-problems of each of the other four consolidated units is really not necessary. A brief note should be sufficient to show that the same advantages at about the same costs would be had in these other districts.

c. Thatcher District Unit.

Thatcher already has the nucleus of a good junior high school plant. The forty-four junior high school pupils from Central would add very little if any additional teacher expense.

The transportation item would not be more than half as much here as in the Safford unit. A haul of two and one-half miles all on paved highway, would be most easy, safe and economical.

d. Pima Unit.

Consolidation is not new in the Pima district.

Already three small districts have been consolidated with Pima district.

One new route now reaches out seven miles and brings all the children, including the beginners, to the Pima school.

The three additional districts yet to be united with Pima are all closer than the route already established. The steel bridge across the river, eliminates the river crossing problem in these additional districts.

One truck operating in each direction from the river bridge would furnish ample transportation for all the junior high school pupils available in the three districts outside the Pima Unit. The greatest distance from the Pima school would be not over five miles.

e. Ft. Thomas Unit.

Plans are already under way for effecting the consolidation of the schools in this district, at least for the high school work. The districts in this unit lie in a straight line along an excellent graded highway, east and west of the Ft. Thomas school.

One truck operating east for five miles and one operating west for four miles could bring the thirty seven students in the three outlying districts into Ft. Thomas for junior high school work.

f. Eden Unit.

This unit is the smallest of the six. Owing to the distance between this district and Pima on the east, and to

the poor and sometimes dangerous river crossing at Ft. Thomas on the west, this unit of necessity would have to remain with Eden as the center.

The students in the two small districts outside of Eden district could easily be brought to Eden in one truck. The maximum distance from the Sunnyside school through the Coon district to the Eden school is only six miles, and the road is always open and usually good.

#### G. Administrative Problems.

As pointed out earlier in this paper, the lack of either state or county or local supervision in the small district schools is perhaps the weakest point in our present school program in Arizona.

The right to maintain as good a school as the people of any single district want and can afford, is also the right to maintain as poor a school as these same factors may determine.

The economical management and the proper direction of a school system, under modern conditions, requires as careful, efficient and skilled leadership, as does any other professional or business organization.

The attempt to maintain the efficiency, and to promote the best interests of any business organization employing ninety workers, distributed in twenty-eight different districts, without a strong, well-trained, efficient and responsible management would be predestined to failure.

It would be almost equally dangerous to attempt to safeguard such an institution and still to carry on the business by creating twenty-eight separate, independent boards to manage such a business.

The sensible, practical, business-like thing to do would be to organize the company on sound, sane business principles, and then to provide one board of directors for the entire organization. This board would then employ a trained, dependable, experienced business man to head the management of the business.

Local directors, and employees would be answerable to this central Board of Directors, through its manager. But it is wholly unnecessary to continue this outline of management for business organizations.

Every business organization, even every cooperative community enterprise the country over--except the public school--has long been handled by such an organization and under such a system of administration as outlined above.

Every city school system in the United States has been operating under this plan for almost a century. Every year a great many more rural school systems adopt this same sort of organization and administration for the carrying out of their educational program.

It is simply a matter of time and of education, till every community in the United States, city and country alike, will be a member, a proud and contented member, in a school system organized and administered along the same lines, and with

quite as much economy and efficiency as any of our well known business institutions.

It seems a pity that the largest public business, and certainly the most important business in a democracy, should be the last to benefit by the experience, the training and the education that has made America the foremost business nation in the world.

#### Chapter V.

##### Graham County must Adopt a New Plan.

It is a fact that none can or would care to deny, that Graham County's schools have a good record in the past. They deserve and they have been given first place in the hearts and minds of the people. The people do believe in education, and they do know that it offers the safest and surest foundation for the future success and development of our great civilization. All these things make it unmistakably clear that as a people they should be willing to meet the problems of education in a fair, thoughtful, loyal, democratic manner.

Personal feelings, local prejudices and selfish interests must have no place in the planning for the education of the future citizens, the boys and girls of this country.

A chance, as far as may possibly be, an equal chance for every boy and every girl to prepare himself and herself to live the richest life and make the greatest contribution to our civilization of which he or she is capable. This should

be the educational slogan of every man, woman and child who shares the protection and benefits of our great nation.

It is one of the foundation principles of our democratic civilization that every citizen, no matter where he may live, should have equal protection under our laws and have equal opportunity for an education.

A. Present School Laws and Equal Educational Opportunities.

Arizona's law maker have already recognized the truth of the arguments presented above, and they have made these things possible, to a marked degree. The state law provides a minimum of \$25 for each pupil in school to be raised from a tax on all the property of the state.

In addition to this the law requires all the county as a whole to raise at least \$20, thus making \$45 for each child in school in the state.

To make doubly sure that every child shall have access to a good public school, the law provides from general county levy, a minimum of fifteen hundred dollars (\$1500) for each one room school, and three thousand dollars (\$3000) for each two room school in the state.

(1) Law alone not Sufficient.

Educational advantages are always dependent upon taxable wealth; but education cannot be bought. It is not a matter of so much money spent on every child. Education is a matter of experience, of activity, of social contacts, and of acquaintance with and use of up-to-date materials, equipment and methods.

It is a question of rich, wholesome, varied, happy active, responsible, useful living in a clean, wide-awake progressive community.

(2) Small Isolated Schools Not Efficient.

Few of these things can come to boys and girls who must spend their entire school life in a small poorly equipped school where classes seldom have more than six or eight pupils.

If their school life is to help them to get an education it must provide the opportunities enumerated above. To do this these small, isolated districts must unite to form a larger unit.

B. Administrative Machinery.

As suggested above, it would be readily recognized as very poor business practice to have a number of small independent boards of directors for a modern business concern. It should be equally clear that to carry out a definite, progressive, efficient program that would provide even an approach to equality of educational opportunity and efficiency, these little, isolated, inadequately financed, poorly equipped, unsupervised districts must unite to form larger units; units that will assure pupils enough to make possible the establishing of up-to-date school programs, and that will have sufficient taxable wealth to raise the money necessary for carrying out such a program.

C. Consolidation Laws.

A bill, known as Senate bill #104, providing for complete county consolidation, was passed by the legislature of

1920. It was discovered later, however, that the bill lacked the necessary enforcement agencies.

An attempt was made to pass the corrected bill by referendum vote, but it failed of passage.

The only means of affecting the consolidation proposed at the present time is for the local districts to consolidate and form larger districts.

Chapter VII paragraph 2723 of the revised statutes of Arizona provides for the consolidation of two or more districts into one district.

This law provides that upon petition to the County Superintendent, signed by fifteen per cent (15%) of the school electors of the districts desiring to consolidate, an election shall be called for the purpose of voting upon the proposed consolidation. If a majority of the votes favor the plan, then the districts so voting automatically become one district.

The law further provides for the election of a board of three trustees, who shall have all the powers possessed by any school district board.

All the property, real and otherwise, of the several districts thus uniting becomes the property of the newly formed district. All balances, or deficits, in the funds of the original districts become the balance or the deficit of the newly formed district. All bonded indebtedness of the several original districts becomes the bonded indebtedness of the new district.

D. The Consolidation Law Applied.

To make clear just how this law may be carried out, let us apply it to the proposed Safford unit. This proposed unit would be made up of the present districts of Safford, Lone Star, Lee, Artesia and Graham.

In order to affect the consolidation, a petition would have to be presented to the County Superintendent from each of these districts. These petitions would set forth the proposed consolidation lines and ask for an election on the matter in each of the districts. If the election returns favored the consolidation, a new district would take the place of all the old districts in which the vote favored consolidation.

Three trustees would then be elected from the district at large and when this new board had been organized they would have full charge of all school matters within the new consolidated district.

They could then establish kindergartens, primary schools, junior high schools, or regular senior high schools or all of these at as many places in the district as they saw fit. Or they could close any of the original schools and provide transportation to any other school in the district.

It is the recommendation of this thesis, that this action described above, be taken in the six proposed consolidated units in the county. This action would reduce the present twenty-two districts in the Gila Valley to the six consolidated districts of Solomonville, Safford, Thatcher, Pima, Ft. Thomas, and Eden.

### E. Immediate Need for Junior High School Organization.

It is further proposed that a three year junior high school be established in each of these six districts.

The conditions in the present school districts as described in the opening chapters of this thesis show most conclusively that some such plan of organization is really necessary in Graham County. It was also shown that immediate action should be taken in order that small districts may not attempt further building plans on their own responsibility and along the present ineffective district organization lines.

## Chapter VI

### Senior High School Plan.

One other step in the reorganization of the public school system of Graham County is necessary. As pointed out on earlier pages, there is at present no high school available to the majority of the communities in the Gila Valley.

The Gila Academy at Thatcher will not be open to new high school students after 1923, and the only other high school in the county is the Safford district high school.

### A. Attitude of People.

#### (1) People Favor County Union High School.

A questionnaire was sent to sixty-five representative citizens of the valley. Thirty-five of the questionnaires were answered and returned. The questionnaire, together with representative answers is given on the following page.

(Questionnaire)

University of Arizona

To The School Patrons of Graham County:

The United States Census Report for 1920 shows that Graham County had a population of 1,546 boys and girls between the ages of 14 and 20. Of this number 842 were enrolled in school.

What of the 704 who were not enrolled in our schools? No doubt the great majority of these boys and girls are of High School grade, and in a Country and a County which both believe in Education, they should be in High School.

In many sparsely settled rural communities no high school can be made available, except where several such communities unite and establish a Union High School. When this is done there is no special tuition or transportation expense to the individual student, all this is provided by the Union District.

Through the Department of Education of our State University a special survey is being made of the Rural High School situation of the County. Since this problem is my special study, this questionnaire is being sent out over my name.

Please answer the questions listed below and return this sheet in the envelope inclosed herewith. Your signature is not urged unless you are perfectly willing to give it.

Yours very truly,

(Signed) M. Mortensen, Jr.

-----  
Would you favor the establishment of a County Union High School in which students from all parts of the County would be educated without special tuition or transportation cost to either students or individual parents? \_\_\_\_\_

Name any advantages you see in such a plan.

Give any objections you would have to such a plan.

Post Office \_\_\_\_\_ Name \_\_\_\_\_

Of the thirty-five answers received, seven were opposed to the County Union High School, and twenty-eight were in favor of it.

(2) Objections To the Plan.

(The objections are given just as they appeared on the questionnaire sheets.)

#1. "My objections are that we are taxed now in Graham County till we can hardly live, and that would just add a little more taxes. I think it would cost more money than it would for each individual to pay his tuition."

#2. "I do not want a County High School as it will have to be paid for by the heavy burdened tax-payer."

#3. "High School students need all the association of their parents and their home that is possible. The closer the contact with the home, mingled with all the work and chores possible the better the student.

The most successful and helpful people are those who have come through the rural schools where theory is perhaps 20% and practice 80%. The larger school is like the factory, the students are never rounded out, however, the social or butterfly is over developed."

The other objections conform to one or another of these listed above.

Analyzing these objections it is clear that only two are presented. First, the objection to public education at public expense because taxes are already high; second, preference for small schools and much home work, because larger schools turn out machine made products and over do the social in life.

As to the first objection, little need be said. This point of view is so completely undemocratic, and so thoroughly antiquated that one wonders how such ideas have been able to resist the forward march of civilization and democracy.

Fortunately **such ideas** are held by so few people today that little fear need be entertained that they will be able to stay the onward march of progress.

The second objection is really not an objection to the County High School plan proposed here. We all agree with the first part of the argument. But I must insist that no such separation of children and home is necessary under the plan proposed. It is the experience of thousands of homes where pupils are transported to and from consolidated schools, that children have more time at home, than when they walked to the little district school.

The point that the most successful people have come through the rural schools is not according to facts. Even if it were true, however, it would not be a valid objection to the Graham County High School, because such a school would be a rural high school.

From the two courses of study presented in this paper, the one from a so-called rural school and the other from a city school, the percentages of theory and practice should be reversed.

The last point, that large schools are objectionable because they manufacture something, and because they stress the social in life, is one of the best reasons that can be given in favor of large schools over small ones.

Every objection given--and there are only seven objectors to twenty-eight who are in favor-- is simply the daily

cry of the stand-patter, and the reactionary. This of course is in itself no valid reason for not answering these objections, but action should be taken in harmony with the wishes of the majority, who are doubtless fully as conscientious and trustworthy as the objectors.

(3) Advantages of the Plan.

Among the advantages listed in the answers the following were most common:

I. "Gives High School advantages to many boys and girls who do not have them under present conditions."

II. "Equalizes the cost of high school education, by distributing it over a larger taxable wealth."

III. "One large school would be able to provide better building and equipment, better prepared teachers, and much broader and more practical course of study than would be possible in a small district school."

IV. "It would reduce the per pupil cost of education, and ultimately it would reduce the school taxes of the average citizen in the county."

V. "By giving excellent high school advantages to all communities alike, many more boys and girls would attend high school than do now."

These advantages are all vital, and they far outweigh all the objections that can be justifiably raised against the consolidation plan.

The very positive sentiment and the overwhelming majority in favor of the plan, indicate that what is needed is

Someone to start the action. General indifference to public school advantages and needs is not so marked in Graham County that a well organized movement would be difficult.

(4) Hindering Factors.

With such a strong sentiment favoring the organization of the County Union High School, one wonders why action has not already been taken.

One important reason why no action has been taken in the past has been the opportunity offered by the Gila Academy. So long as students from all parts of the county might come to the Academy, it was thought that no further educational provision was necessary.

It has been shown, however, that many students are really unable to take advantage of the education offered at the Academy. The tuition of \$30 per year, together with transportation or boarding expenses is more than many boys and girls in a new agricultural community can afford.

By distributing the expense of such a school over the entire taxable wealth of the county, the rural boys and girls would have as good educational opportunities as their city cousins.

What is more important even than this, these rural students would have in their own home communities, the very things for which they now leave the farm and go to the city.

Like most pioneer sections the people of the various communities look upon their towns as very definite and very important entities. In some instances this "small town" loyalty has expressed itself in serious disagreements between the citizens of the respective towns. Even today, these petty jealousies offer a serious handicap in matters of larger community interest.

There are many points, however, on which these narrow, restricted interests have already been completely broken down. Such cooperative enterprises as the large consolidated canal systems, the County Farm Bureau, and the recent county road building program have done a great deal toward developing a larger and broader community attitude.

By a wise and careful program of education and management, this "little community" pride and loyalty can be extended to include the larger community.

When the people are led to see and realize that to have a small part in a big program, is better than to have all the say in no program, then they will gladly join in such movements as school consolidation, community centers, and union high schools.

#### B. Action Is Imperative.

It should be said again, that the present high school facilities in Graham County are absolutely inadequate to meet the needs of the young people in the county. It is inconceivable that the people of this county will be content to do nothing about this matter.

Definite reports from every section of the county are unanimous in declaring that some plan for public high school education must be developed. If the county does not unite and provide a county high school, each of the several districts will attempt to do so.

The disadvantages, and the tremendous tax burden, that such small high schools would involve have already been clearly pointed out. Likewise the many advantages and the much less per capita expense that would be assured by the establishing of but one county high school have also been thoroughly discussed.

All these reasons, and many more, make it plain that the best plan, the only feasible plan, is for the county to unite in establishing and maintaining a County Union High School.

#### C. County Union High School Law.

An act has already been passed by the state legislature which provides for county consolidation for high school educational purposes. The act is entitled, "An Act Providing for One or More County High Schools in Counties of the Fourth Class."

It provides that the Board of Supervisors may, whenever they deem it necessary, or on petition signed by fifteen percent (15%) of the school electors of the county, they must call an election to determine if one or more county high schools shall be established. The act also provides for the location of the schools in the same manner.

If the majority of the votes cast in such election favor the plan, the entire county becomes one district for high

school purposes.

The law further provides for the election of a board of five members, not more than two of whom shall be residents of any one school district, to be elected by the qualified school electors of the county.

This County High School Board becomes the administrative head of all high schools in the county. They possess all the powers and have all the responsibilities that belong to any school board.

The funds for establishing and maintaining the high school or schools are raised by taxes levied by the Board of Supervisors on all the taxable property in the County.

The full control, management and direction of such school or schools, is vested in the County High School Board.

Section seventeen of the act provides that any district high school previously established in the district designated by the election as the location of the county high school shall automatically become a county union high school and shall be conducted, managed and maintained as other county union high schools.

It further provides that should the election fail, any and all existing district high schools shall continue in all respects as though said election had not been held.

#### D. Location of County High School.

The election ballot provides for two propositions,

stated as follows:

"The ballots in such election shall contain the words, "For County High School to be located at \_\_\_\_\_," (giving the name of the proposed location) and the voters shall write after the said words, the word "yes" or "no".

Thus the establishment of the high school and also its location are matters for the majority of the people of the county to decide.

It is not within the province of this thesis to determine where the people of the county shall elect to establish the high school. Some plan, however, must be chosen in order that transportation problems may be discussed intelligently.

(1) Guiding Principles in Selecting Location.

- a. The center of Population.
- b. Geographical and Physical Features.
- c. Civic, Educational, Social and Commercial considerations.
- d. Probable development in the future.

Application of these factors to the community concerned should be very helpful in discovering the best location for the county high school.

d. Future Development.

It is a fairly well established principle that at some future date storage reservoirs will provide water for the reclamation of the arid lands in the valley.

The greatest amount of this arable land lies toward the west end of the valley.

This reclamation would build up the Thatcher, Pima and Redlands districts most. But when this development does come there will be need for and wealth sufficient to justify the establishment of two or more high schools. These schools should then be in the new centers. But at present, and for several years to come, the real center of the valley is around Safford or Thatcher.

#### Civic center.

The civic center of the valley is naturally at the county seat. The county court house is the headquarters for all official governmental business. Every citizen finds it necessary to come to the court house at least once or twice each year.

#### Educational Center.

Educational and social life in the valley is so well taken care of by each of the local units that no one place stands out preeminently as the social or educational center.

The fact that the headquarters of the dominant church of the valley has long been at Thatcher, has given this town something of a central position in educational and social matters. But the development of educational and social activities in several other towns of the valley has already become quite equal to if not greater than at Thatcher.

The consolidation plan proposed for the valley would make six educational and social centers, each of which would equal the present development at Thatcher.

### Commercial and Industrial Center.

The start that Safford already has, in commercial and industrial leadership is not approached by any other section in the valley. Later on Pima will undoubtedly occupy a prominent place in the commercial life of the west half of the valley. But for several years to come, Safford will be the undisputed commercial center of the valley.

### Geographical and Physical Features.

The lay of the valley is so uniform that no one section stands out as the real geographical center.

The territory on the north side of the river, is too small and too far from the railroad ever to become the leader or leading section, either economically or geographically.

With the completion of the twenty miles of paved road in the valley, practically all the towns along the highway will have equal geographical and physical advantages.

### Center of Population.

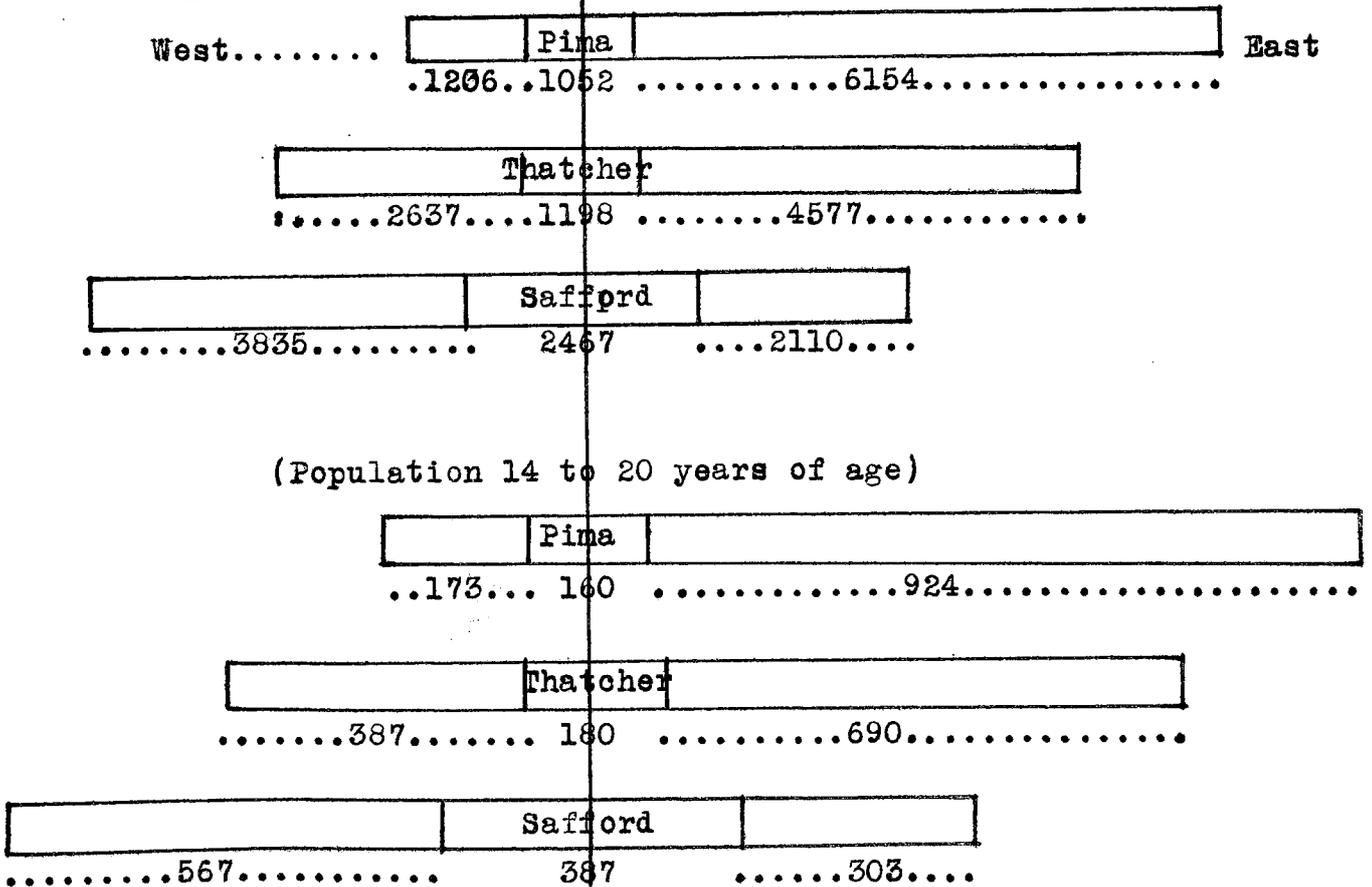
As any one familiar with the valley it is quite evident that the center of population is now at Safford.

The accompanying diagrams show clearly just where this center of population is. They also show equally plainly where the high school should be located, if it is to be the most accessible to the greatest number of available pupils.

The U.S.Census report of 1920 gives the population of the valley as 8,412. In order to show graphically where the center of population is located, the number of people east and the number west of different locations is shown. The bars for total population are drawn to one scale, and those showing the distribution of the high school population are drawn to one scale.

It will be noted that neither town actually divides the people or the high school students into two equal groups, east and west. The actual or exact center would be between Thatcher and Safford.

GRAPHIC REPRESENTATION OF CENTER OF POPULATION



To be in the exact center of population the high school would have to be located about midway between Thatcher and Safford, but surely no one would recommend locating a school at such a point. It is perfectly evident then that Safford would be the most accessible to all the students at present and whenever there are students enough to justify it, another school could be established at the most central point in the west end of the valley.

(2) Two County High Schools.

From the school population chart above it will be seen that if a high school were located at Pima for the west end of the valley, it would have a total of three hundred eighty-seven (387) students of fourteen to twenty (14 to 20) years of age from which to draw.

Another Union High School at Safford for the rest of the valley would have eight hundred seventy (870) pupils in its district.

It might be urged that either of these schools would be large enough to justify its existence. If the communities involved had large corporate property holdings, the necessary funds might be raised. But under present taxable property values the two schools would be more than the taxpayers of the county could stand.

Again, it should be noted that a school at Pima, would still have to transport more than half its pupils over routes averaging about thirteen miles in length.

Each of these two schools would cost practically as much for building and equipment, and nearly as much for maintenance as would the one larger school.

It costs practically as much to house, and as much to teach a school with an average of ten pupils per class as it does to maintain a school with an average of twenty-five students per class. So the cost of the high school education in the county would be practically doubled if two schools were established.

a. Costs Compared.

The actual figures for two neighboring high schools plainly show the truth of the previous statement.

The Safford High School and the Gila Academy each have about the same amount of money invested in buildings and equipment.

The Academy pays a somewhat higher average salary to its teachers and offers a few more courses than does the Safford High School. The maintenance cost of the Academy for 1921 was slightly over twenty six thousand dollars (\$26,000).

The same year the Safford High School cost for maintenance, approximately twenty one thousand five hundred dollars, (\$21,500).

The difference in the maintenance cost of the two schools was about four thousand five hundred (\$4500) dollars. Yet the attendance at the Academy was two hundred fifty (250) while the attendance at Safford was but one hundred seven (107).

Many other cases might be cited which would show with equal clearness that a small school is almost as expensive as a large school. Surely two small schools would cost a great deal more than one large school.

Graham County cannot afford to build and maintain two county high schools at this time, especially since it is not at all necessary.

### (3) Transportation Problems.

Taking for granted then that the county high school is to be located at Safford, let us see how the transportation problem could be worked out and also what the probable cost would be.

#### a. Transportation Routes.

The completion of the cement highway through the valley will make the transportation problem comparatively simple, and economical for most of the districts involved.

Transportation on the paved road will reach all the students in Solomonville, Lone Star, Safford, Thatcher, Central, Pima, Glenbar, and Matthews ville.

Those living at San Jose, Artesia, Lee, Graham, Hubbard, Bryce, and Enterprise, are all connected with the cement highway by good roads. All these are also within easy and economical transportation distance from the highway.

Many union high school transportation routes in the United States are longer than even Ft. Thomas, Geronimo, and Eden.

By an arrangement with the railroad company an auto coach could easily make the run to and from Geronimo each day. This arrangement would also provide transportation for all students from Ft. Thomas, Redlands, Mathews, Glenbar, Pima, Central, and Thatcher.

From Geronimo to Safford the distance is listed by the railroad as twenty-six miles. A special motor driven coach could be operated over this route with safety and economy.

C. Number and Location of Students.

If even fifty percent (50%) of the high school population of the county should go to the county high school, the valley would have five hundred fifty (550) students at present. With this number of students a most excellent institution could be established.

The school would be sure to grow in popularity until it would be safe to predict an enrollment to six or eight hundred students within a period of five or six years. With such an institution standing at the head of the common and junior high schools of the Gila Valley, Graham County would have almost ideal educational advantages for the training of its citizens.

SENIOR HIGH SCHOOL STUDENTS AVAILABLE

Present school districts	Population 14 to 20 years of age	60% of junior high school enrollment **
Alger*	80	3
Sanchez*	125	6
San Jose	80	2
Solomonville	125	25
Lone Star*		10
Artesia	50	16
Lee*		21
Graham*		5
Thatcher	180	65
Central	54	26
Pima	160	69
Hubbard	28	12
Bryce	24	11
Geronimo	29	7
Emery*		9
Ft. Thomas	42	20
Redlands*		6
Eden	48	23
Safford	375	108
Total	1195	444

\*Census population included in other districts.

\*\* Junior high school enrollment based on actual public school enrollment in sixth, seventh, and eighth grades, 1922.

C. Transportation Costs.

In attempting to compute transportation costs it should be noted that the schools readily fall into groups such that a truck starting at one district would pass directly through several other district on its way to Safford. This grouping is follow below, and the length of the route is taken from the starting point to the high school at Safford.

Truck No.	Present Schools	Number of pupils	Length of haul one way
-----------	-----------------	------------------	------------------------

#1	Solomonville	36	12 mi.
#2	Lone Star	10	2 "
#3	Artesia & Lee	37	10 "
#4	Graham	5	3
#5 & 6	Thatcher	65	3
#7	Central	26	5
#8 & 9	Pima	69	8
#10	Hubbard & Bryce	23	10
#11	Geronimo, Emery and Redlands	22	26
#12	Ft. Thomas	20	22
#13	Eden	23	20
----		-----	-----
Total 13		336	148

With the paved highway extending ten miles each way from the high school and with good roads connecting all districts with the highway, the transportation cost in Graham County would not exceed the general average for the United States.

From figures issued by the U.S. Bureau of Education the average cost of transportation of school pupils in the United States in 1920 was 17¢ per day per child, over an average route of thirteen miles.

Using this general average the cost of transportation for the 336 pupils living outside of Safford would be \$57.12 per school day. This would be \$1,142.40 per month or \$10,291.60 per year of nine months.

This may seem like a large item, but when it is remembered that the extra cost of maintaining a second high school

Would be over twice this amount, it is plain that this expenditure is more than justified.

And when the cost of transporting the children to the two high schools, instead of one, is added to this double maintainance cost, it shows conclusively that the one school is far more economical than the two.

a. Data on Transportation.\*

During the school year 1920-21 sixteen states transported 233,606 pupils at an average monthly cost of \$3.50 per pupil. This cost in most instances includes, besides all operating expenses, the first payments on the original cost of the conveyances.

The average length of all these transportation routes was between ten and fifteen miles each way.

\*U.S. Bureau of Education, Rural School Leaflet, No. 2, 1922.

Transportation Data, Monte Vista Consolidated School, Monte Vista, Colorado.\*\*

Report for three months ending November 26, 1920.

Number busses.....	8
Days operated.....	59
Number children carried.....	180
Average round trip mileage.....	115.57
Total cost, oil, gas, repairs.....	\$660.60
Total cost drivers & Mechanic.....	1237.50
Depreciation on busses.....	545.50
Depreciation on tires.....	\$400.66
Total cost per mile.....	.194
Cost per child per day.....	.141

\*\*Consolidated Schools of the Mountain Valleys and Plains of Colorado, by C. G. Sargent, 1921.

Data on Transportation in Preble County, Ohio\*

In this county the auto driver own their own auto trucks.

Children transported by motor truck.....					725
Total number busses.....					20
Average length of bus route (one way).....					7.14
Cost per child per day.....					\$0.264
Road conditions.....	bad	poor	rough	fair	good
Number bus routes (26)	3	1	2	12	8

\*Transportation and the Motor Truck, 1920.

Types of Transportation. \*

So varied are the types of transportation in use in the U. S. that it would be almost impossible to describe them all. The most common types are trolley cars, gasoline driven auto busses and horse-drawn hacks.

The auto bus which is so rapidly coming into use is of three general types: an ordinary five or seven passenger car, used where but a few pupils are to be transported. A small truck, with seats along the sides, with a capacity of ten to twenty pupils; finally the large auto school bus with seats down the center and on the sides, with a carrying capacity of fifty or sixty pupils.

Auto transportation costs depend upon the salary of drivers, the care of the machines, the road conditions and the type of machines used. In many cases the teachers themselves drive the busses, and in this way the costs are reduced.

The better types of conveyances, whether horses or motor-driven, cost more in the beginning but give much greater satisfaction and it is very likely that such conveyances are really more economical in the long run.

\* U.S.Bureau of Ed. Rural School Leaflet #2-1922.

As mentioned above, of the 336 pupils who would have to be transported to Safford, 192 could be picked up without driving off the paved highway.

Forty-two (42) others would be within a maximum of ten miles from Safford and all of this distance on good roads. Thirty six (36) others would be within a maximum of six miles from the paved road, and a distance of six miles on the highway would bring them to Safford.

The twenty-three students at Eden would be seven miles from the pavement and eight miles more on the highway would bring them to Safford.

The remaining forty-three would be a maximum of fourteen miles off the paved road, and an additional twelve miles on the cement highway from Safford.

By providing motor driven railroad coaches from Geronimo, running a total distance of twenty-six miles, 202 of the 336 transported pupils could be brought to Safford without using any other means of transportation.

Forty-six (46) additional pupils could reach the car line over a good road with a maximum truck route of ten miles, and a railroad ride of eight miles would bring them to Safford.

Under such conditions, it cannot be reasonably maintained that the transportation problem is impossible, either economically or physically.

With such transportation facilities as are now available these early morning rides over good roads would be more

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With such transportation facilities as are now available these early morning rides over good roads would be more

beneficial by far and certainly less inconvenient than the present four or three, or even two mile walks that are so common in these districts.

Advantages of Such Transportation.

1. Protection for pupils from wind, rain and cold.
2. More time at home in the morning and evening.
3. Greater regularity in attendance.
4. The handicap of distance removed.
5. An equal opportunity for every child to attend a good school.

E. Administration.

After voting for the plan and fixing the location of the school, the next step is the provision for administration.

(1) County Board.

The law provides for the election of a board of three members, who shall be elected from the county at large. The only limiting factor is that not more than one of whom shall be from the same school district. Under the district organization proposed in the previous chapters, there will be but six districts.

The matter of representation on the county high school board, should give even less trouble than representation on the Board of Supervisors. No board member would think of representing one section or one district as against another. He is a County Board Member and owes equal consideration to all parts of the County.

The board would be organized in the same way that other school boards and would bear the same relation to the

schools in their districts.

The real problem in providing high school education in Graham County is not in making out the details of administration. The important step is the provision for such an organization. When the school is voted and the board elected the other problems will be as readily and as efficiently handled as they are in any other high school.

a. Executive Officers.

The Board would select a principal, fix his salary and term of office, and hold him responsible for the details of administration.

The budget would be prepared by the principal and presented to the Board for final action, and presentation would be by them to the Board of Supervisors.

The Board of Supervisors would then levy a tax upon all property in the County to raise funds to meet the educational needs of the high school.

Provision for new buildings or building sites would be made through county bond election, the burden for the same resting upon all property in the county at the same rate.

b. Faculty.

The faculty of the school would be determined by the course of study offered and the number of students in attendance.

The members of the faculty would be selected by the principal, with the consent and approval of the Board.

c. Course of Study.

The county high school would be a senior high school, a three year school because provision is made for the first year of regular secondary education program to be done in each of the six consolidated districts.

The course of study should offer three lines of work:

1. Vocational courses, stressing Agriculture and Home Economics.
2. Commercial Education, providing training that would fit students for practical commercial positions.
3. Regular College Preparatory Course.

Many of the graduates will desire to go on to the State Normal Schools or to the University. The general high school course should enable these students to meet the entrance requirements of all standard colleges.

F. Buildings and Equipment.

The county now owns a large county fair grounds. This tract could easily be used for the county high school campus. The location of the school on this tract would not interfere in any way with any of the legitimate uses to which the fair grounds could be put.

It is recommended, however, that this present tract be exchanged for a tract of the same size in a more desirable location for the school.

The establishing of an up-to-date high school on such a tract would certainly be an improvement on the present condition of this "fair ground". Fine buildings, a beautiful park, commodious athletic grounds, and an up-to-date Community Center, would be possible on this tract as a campus.

While such a program would cost a considerable sum, it would represent a most wise and valuable and paying investment. And it should be noted in this connection, that economy-real economy-does not consist in hoarding wealth nor in the reckless spending of it, but in the wise use of it; in so spending it that the maximum of good will come out of it.

Unless our great democracy has been mistaken in its ideals; unless our greatest leaders have gone awry in their thinking; and unless our whole American civilization is tending in the wrong direction; unless all these things are worthless as guides, the very hope, the very promise of a bright future for our country and our people lies in just such an investment as these described on the previous pages of this treatise.

#### G. Cost Problems.

And what of the costs of such a program?

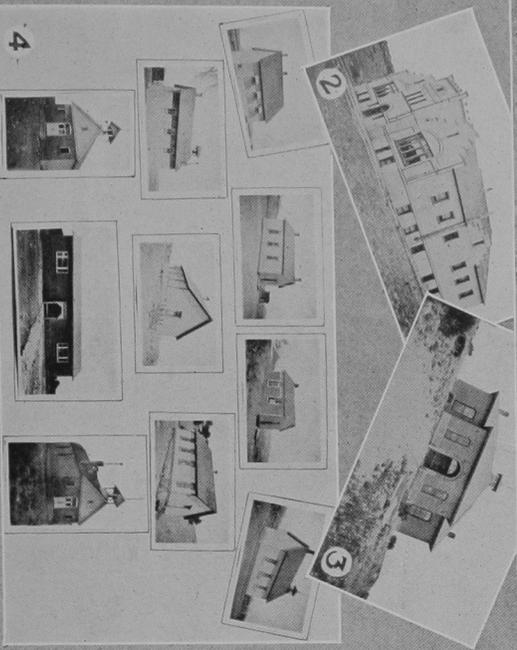
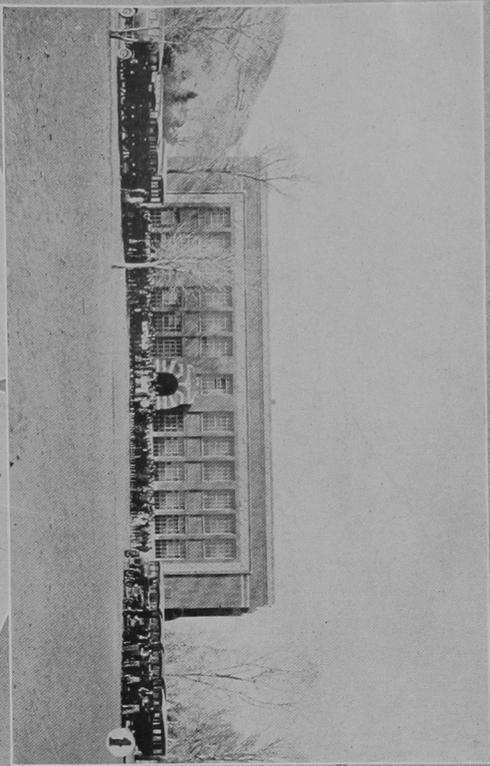
Were it not for the cost such a program would carry itself out. And after all, and in the last analysis most of the objections to this program resolve themselves into a question of cost, although many times they masquerade under a different name.

The opponents of progress always spell the word COST in capital letters. Of course, good schools cost money, the better they are the more they cost, no matter where they are located, and consolidated schools and Union High Schools are no exception in this respect.

However, the worst thing about the cost of such a plan is in the effect of the "first shock", caused by the sudden change from a one or two room school, built many years ago on a little barren patch of worthless land, equipped with a few seats and desks, provided with a few out-of-date text books, and taught by a young untrained, inexperienced, under-paid teacher, to an entirely new type of school. A school with enlarged and improved grounds, with expensive and well-equipped buildings, with a practical up-to-date course of study, and presided over by a competent superintendent, taught by capable teachers and having a nine months term of school.

We should not expect to trade a "forked stick" for a cultivator, a cycle for a combined-harvester, an ox cart for an automobile, nor need we expect to exchange a box-car type of school for an up-to-date educational institution, without paying the difference in the value of the articles exchanged.

FACTS AND FACTORS IN THE NEW RURAL AMERICA TO DAY



1. New Del Norte High School, pupils and auto trucks in foreground. 2. and 3. Original buildings now used for the lower grades. 4. The ten buildings abandoned at Del Norte as a result of consolidation.



1. One of the eleven auto busses used at Del Norte. 2. One of the Tim-platteville busses. 3. One of the Mead busses. 4. Platteville busses and brick school building.

EDUCATIONAL PROGRESS IN COLORADO



The eight buildings abandoned as a result of the Center consolidation. The log house is the original Center school.



Center Consolidated School. Dedicated March, 1920. Saguache County, Colorado. Mountjoy and Frewen, architects.

CAN GRAHAM COUNTY AFFORD TO BENY THESE THINGS TO ITS  
FUTURE CITIZENS ?

## Chapter VII

### Summary and Conclusion

The data presented herein shows most conclusively that Graham County must make some changes in its educational program if it is to succeed in its most important responsibility.

The history of educational progress in the county, also shows that its people do believe in the value of good schools. The struggles of pioneer life and the work of reclaiming an obstinate environment, have kept the people so completely occupied that little time or means have been left to other matters.

But the valley now gives promise of sustaining its people in comparative independence and luxury. More time, more thought, and more money can be, and no doubt will be, given to its educational and social development, than has been possible in the past.

The county has the basic necessities upon which good schools must always depend, viz., a progressive and worthy citizenship, a productive commonwealth, a high ideal of home life, and a bountiful crop of prospective citizens.

With these factors as a basis, there is every reason to believe that this much needed step in educational advancement will be taken in the very near future.

The handicaps enumerated, the disadvantages at present evident and the reluctance to take the new and difficult step, have all been the common heritage of our American rural life. But there are unmistakable signs of the approach of a New Day in rural American life.

The presence of so many problems in the life and education of rural America is not discouraging to those who really believe in the principle of equality of educational opportunity. They are but the proverbial challenge that sooner or later has always found acceptance, and has been the forerunner of progress.

The Mormon Church has been good to its people in the Gila Valley, perhaps too good in an educational way. The Church School at Thatcher has rendered a most excellent service in providing secondary education until the community was able to meet its own educational problems.

The logical, the imperative step now is for these communities to get together and do for themselves what every American community has done and is now doing, provide themselves with the best, the most up-to-date, the most efficient, the most thorough and still the most economical educational system that can be provided.

Most of the little inefficient and expensive, one, two, and three teacher schools must give way to the modern auto-bus and the consolidated school.

That strong, important and tenacious but restricted community loyalty that has served so well in the past, must be preserved and expanded to include the entire Valley. The whole county together is but a very small part of the State, and a much smaller part of the Nation.

The people must come to look "outward" to the larger fields and there is no better, no surer way to this larger view, than through large, well equipped, well supported public schools.

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