

*Michigan Commission of Inquiry Into  
County, Township and School District Government*

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**School Organization**

in the

**Detroit Metropolitan Area**

by

**DON S. MILLER**

*Wayne University*

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**MICHIGAN LOCAL GOVERNMENT SERIES**

A Report to the Commission of Inquiry

LENT D. UPSON, *Director of Inquiry*

FEBRUARY, 1934

STATE COMMISSION OF INQUIRY

Into County, Township and School  
District Government

936 National Bank Building

DETROIT

February 15, 1934

Mr. Clarence L. Ayres, Chairman

Commission of Inquiry into County,  
Township and School District Government,  
600 Griswold Street,  
Detroit, Michigan

My dear Mr. Ayres:

There is transmitted herewith a study of local government in Michigan by Assistant Dean Don S. Miller, Wayne University, entitled "School Organization in the Detroit Metropolitan Area." This study is one of several made in accordance with the instructions of the Commission by resolution of January, 28, 1932, and are designed to serve as basis of the reports of the Commission to the Governor and the Legislature.

The series of studies will cover in detail the following subjects:

- Social and Economic Background of Local Government.
- Organization and Cost of County and Township Government.
- Rural School Government.
- Local Government in the Metropolitan Area.
- School Government in the Metropolitan Area.
- Local Finance and Procedure.
- Local Public Works Administration.
- Local Relief to Dependents.
- Local Public Health Administration
- Local Justice Courts.
- Local Miscellaneous Services.

In these studies the surveyors have endeavored to prepare a long term program, portions of which it may be impossible to accomplish immediately. It is left to the Commission to recommend the legislative steps that appear expedient at this time.

Very truly yours,

Lent D. Upson,  
Director of Inquiry

## **SCHOOL ORGANIZATION IN THE DETROIT METROPOLITAN AREA<sup>1</sup>**

The proposal to consolidate the school districts Of Wayne County into a single organic unit involves consideration of both the educational and financial aspects of the problem.

At present there are one hundred one<sup>2</sup> mutually independent school districts in the county, each under the control of a board of education responsible to the people of the district. For convenience the school districts of Wayne County may be arranged into three groups, the urban, suburban, and rural units, The urban group includes the cites of Detroit, Ecorse, Fordson, Hamtramck, Highland Park, Lincoln Park, and Wyandotte. The suburban group includes the districts in the townships of Dearborn, Grosse Ile, Grosse Pointe, Monguagon, and Plymouth. The rural group includes the districts in the townships of Brownstown, Canton, Huron, Livonia, Nankin, Northville, Redford, Romulus, Sumpter, Taylor, and Van Buren. Professional supervision of the schools of the urban and the larger suburban districts is conducted by superintendents of schools employed by the several boards of education of those districts. Educational supervision in the smaller suburban and rural districts is in charge of the county commissioner of schools. In general, the latter officer supervises the schools in all districts which do not employ superintendents of schools. In all districts the local boards of education determine school policy within the limitations imposed by the state law.

Organization of a county limit presumably would involve consolidation of the districts of the county and creation of a single small county board of education responsible to the people of the county. This board would determine the plans and policies of the public schools within the county limits. The numerous local districts would be abolished and the several existing boards of education, one hundred one in number, would cease to exist. The responsibility for the administration and supervision of the county district would be delegated by the county board of education to a superintendent of schools who would be the chief executive of the public schools of the county.

In 1932 the writer undertook to study the probable effects of unification upon the educational and financial aspects of the public school problem so far as they could be estimated from available data. Although several months have been consumed in the study the work has not yet been completed and a final report cannot be made at this time. It is possible, however, to summarize many of the most significant facts and to draw certain conclusions regarding the general problem.

### **Educational Aspects of the Problem**

Under the existing multiple district system there is, of course, wide variation in the educational services rendered in the several school districts of the county. These differences involve the range and richness of the curricula and the adequacy of instruction and supervision. In range of service the curriculum of the Detroit district extends from the kindergarten through the municipal university. In Highland Park the range is from the kindergarten through the junior college,

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<sup>1</sup> This is a study of the advantages and disadvantages of a single consolidated school district for Wayne County. A study of county consolidation of rural school exclusive of urban districts by F. M. Thrun, "Rural School Organization in Michigan" is one of the Michigan Local Government Series.

<sup>2</sup> Parts of 46 additional districts are in Wayne County.

while in the other urban and suburban districts it is from the kindergarten or the first grade through the high school. In the rural townships the curricula in most of the districts extend from the kindergarten or the first grade through the eighth grade. Several of the districts in the rural townships conduct high schools but a great majority of them do not and the children of high school age residing in the latter districts attend high schools in other localities. Since districts that do not maintain elementary or high schools of their own pay tuition for the children residing therein who attend schools in neighboring districts, the range of educational service in all rural districts may be said to extend from the kindergarten or the first grade through the high school.

Below the college level, therefore, the range of educational service is approximately the same in all parts of the county, but the municipal university in Detroit and the junior college in Highland Park render services to the young people of those districts that are not shared on the same terms by residents of other districts. The tuition charged by these colleges for attendance by non-residents of the districts in which they are located is much higher than that charged for resident students. Consequently the young people who reside in the cities where colleges are maintained have a great advantage over non-resident students as if areas opportunity to attend college is concerned. Under the county unit plan the colleges would serve all areas of the county equally, thereby equalizing the range of educational service throughout the county.

### **Richness of Curricula**

One of the criteria for the appraisal of educational service is richness of the curriculum. In the larger cities, in several of the suburban districts, and in a very few of the rural districts the school curricula have been expanded and differentiated to meet many of the major physical, intellectual, emotional and social needs of children who must grow and develop in the complex and exacting environment of modern life. In Detroit and to a greater or less degree in the other urban and suburban areas the courses of study include work in home economics, manual training, art, auditorium, health education, nature study, and music in addition to the traditional subjects. On the other hand few of the schools in the rural districts attempt an expansion of their curricula beyond the state course of study and the children are denied the stimulating influences of the newer school activities unless they experience them in club work after school hours or in their homes.

The schools of the urban districts have made great progress in differentiating the school work to meet the needs of individual children. In Detroit, special schools and classes are provided for those who are physically handicapped. Classes are so organized that a pupil's progress in school may harmonize with his natural abilities, children who develop slowly, advancing more slowly than the average, and those developing rapidly, advancing with greater rapidity. This differentiation is provided for through the curricula of the intermediate and high schools. In the cities other than Detroit and in the suburban districts, differentiation of curricula to meet individual needs has been developed with varying degrees of completeness but in the rural areas this has not been possible except in rare instances.

The enrichment and differentiation of curricula can be provided at reasonable cost only when school units are relatively large, when teachers with special training can be employed, when close supervision can be maintained and when a common administrative control is exercised over a relatively large system.

These conditions prevail in the largest cities of Wayne County, particularly in Detroit. Doubtless no one would contend that the school children of Detroit would enjoy the opportunities they now have if each ward or precinct of the city had a school system of its own controlled, by a separate board. The question arises, therefore, whether the smaller cities, the villages, and the rural districts of the county can develop an adequately enriched and differentiated program under the present system of multiple district control without increasing costs to prohibitive levels. Certainly a complex and integrated school organization can be maintained only when a system is relatively large.

### **Adequacy of Instruction and Supervision**

The value of a school rests primarily upon the quality of instruction and leadership. Assuming the native abilities of the average teachers in the several districts of the county to be equal the districts having the higher standards of teacher training and supervision should in the long run provide the better educational service to children. In the larger cities of the county, teacher training requirements are higher than those in the smaller districts. In Detroit and some other cities a college degree in addition to adequate professional preparation is necessary for appointment to a teaching position. In the smaller districts the teacher's life certificate is the only formal educational prerequisite. Teachers of special subjects in the larger cities must have adequate special training, while in the smaller districts this kind of training cannot be required. In the large systems moreover the work of the teachers is closely supervised by agents who are trained for this purpose. In addition, to the school principals, supervisors are employed in the several fields of instruction, whose entire time and attention are devoted to improving the efficiency of instruction. The supervisors are familiar with the results of educational research and of the most fruitful methods of instruction as demonstrated in the most successful educational systems of the county. They are able to bring to the teachers and principals the benefits of advice and counsel relative to their most difficult problems and technical procedures. The smaller cities, villages and rural districts cannot employ supervising service comparable with that of the larger cities.

It is true of course that the office of the county commissioner of schools of Wayne County provides competent supervision, so far as conditions permit, for the schools of the rural and some of the suburban districts. In this county the supervision of rural schools probably is superior to that of most of the counties of Michigan, but conditions prevailing in the county make it impossible for a small staff in the commissioners' office to render the most efficient service to teachers. In rural areas one and two room school buildings predominate, and small school buildings are scattered over a wide area. Each teacher conducts the entire instructional service for a grade or for several grades, the function of the teacher being generalized rather than specialized. Under these conditions effective supervision of instruction is difficult even when the ability of the supervisors is of a high order. Moreover the control of school policies rests with the numerous local school boards and the county supervisory staff is handicapped by the absence of unified administrative control. In view of the foregoing facts it is apparent that supervision of instruction in the rural areas and villages cannot become comparable with that of the larger city systems.

To be sure some of the specialized educational services of the larger city school systems are shared by the smaller districts through cooperative arrangements between the districts. Children with physical handicaps living outside Detroit may be sent to a special school maintained by that city, children of high school age

residing in districts that do not maintain secondary schools may attend the city high schools, and teachers in any part of the county may attend the municipal colleges in Detroit without the payment of the additional fees required of other non-resident students. Under the present system some of the benefits of the superior services of the city district are spread among the small school districts of the county. It is obvious however that this form of cooperation is not equivalent to the integration, of the county's schools in a single unified educational system under a common board of control and a centralized coordinating administrative agency.

## **Conclusion**

In spite of the many satisfactory features of the school activities of Wayne County under the present multiple unit system, it is apparent that a consolidation of districts into a single unit under a single board of control and a common administrative head would result in improved educational services for the children of the county. Under the county unit, high school graduates could attend the municipal university without paying the excess tuition required of non-residents, uniform standards of educational service could be maintained more easily throughout the county, children in the smaller districts could have the advantages of the enriched and differentiated curricula now enjoyed by those who live in the larger cities, supervision of instruction undoubtedly would be more adequate, the standards of teacher training in many areas would be raised, and the entire educational function would become articulated and integrated so that the needs of children could be met more efficiently and adequately than under the present system.

In order to effect this improved service, of course, a board of education controlling the public schools of the county would need to be guided by wisdom in the framing of educational policy. Changes in educational procedure should be made gradually since radical innovations on a comprehensive scale undoubtedly would disrupt the existing system and destroy many of its valuable features. A ten or twenty year program of reorganization should be planned and the desired changes should be made as rapidly as conditions permitted. It would be necessary to adopt a building program for the consolidation of many of the small one and two room school buildings into a few larger units located at strategic points in the rural areas. These units should be large enough for efficient operation and administration. Such a building program should be undertaken only after a careful study of rural school highways, and other facts bearing on the size and location of consolidated schools. Otherwise, the expense would be prohibitive. The schools should include sufficient numbers of children and teachers to justify enriched and differentiated curricula on the elementary and secondary school levels. Educational service should be equivalent to that of the best schools in the urban areas, bearing in mind the difficulties of furnishing certain special services in small units, and the fitting of the curriculum to the social needs of the group.

The objection has been raised that the unification of the public schools of Wayne County under centralized control would create a system so large that it would be inefficient because of its size, so inflexible that it would fail to meet the needs of children of widely differing social environments, and so far removed from popular control that it would become insensitive to local feeling and influence. This, indeed, would be a valid objection if the suggested results were to be realized, but one may be justified in doubting that they would be in view of the following facts:

1. The City district of Detroit now has 80% of the children in the public schools of the county. The Detroit school system has a single board of control and a centralized administrative organization yet there is little or no evidence that the organization is so large and inflexible, or so insensitive to local influences that it renders inefficient service to the children of the city. On the contrary many of the advantages of the Detroit system would be lost were the unit broken into smaller autonomous parts; this fact is almost universally recognized by the people of the city. It appears presumptuous to assume that on expansion of the district to include the additional 20% of the children of the public schools of the county would produce the unfortunate conditions suggested by those who fear the change to a county unit.
2. The artificial boundaries between the school districts of the county are not natural barriers between communities with dissimilar social interests. Although the environment of the rural areas differs in some respects from that of the urban districts, the needs of the children in both groups are fundamentally the same. Whatever the differences, they are trivial compared with this similarity. There are greater differences between the social environments of children within the city boundaries than there are between those of urban and rural regions. The assumption that a common board of control could not legislate in the interest of all children of the county seems a little far fetched.
3. Every huge organization must make provision for flexibility and partial autonomy in its administration; a school system is no exception to this rule. Whether those in control of a county unit would recognize or ignore this principle depends entirely upon the wisdom of the board but there is no reason to assume that a county organization would become too highly centralized and standardized. In the long run experience will serve as a guide and adjustments should be expected to meet the needs for flexibility of administration. Centralized control does not necessarily result in identity of function in all parts of a school system. Indeed, experience has shown that unification of control and the integration of systems usually have resulted in greater differentiation and diversification of function.
4. A county board of education, elected by the voters of the county, should be no less sensitive to the needs of children or to intelligent public sentiment in the various localities than are the existing boards in the several independent school districts. A central board should be less subject to the influence of selfish local interests than are the local boards of control. A comparison of the educational services in the larger districts of Wayne County with those of the small districts does not indicate a general superiority of the representative function on the part of the officials in the smaller districts.

Without doubt there is a limit to the size and complexity that an educational administrative organization should attain. Certainly the principle of home rule is as valid in the administration of education as it is in that of other government services. If this were not so the state would be justified in administering the details of educational procedure from the seat of government without the intervention of local control. It is true that traditions of America run counter to the latter policy,

and that there appear to be many valid reasons for insisting upon local autonomy and control within areas of reasonable size where cohesive social forces are dominant; yet with modern facilities for transportation and communication and modern techniques of organization and administration an enlargement of local governmental units seems justified on the grounds of better educational service. How far this consolidation should go in a particular instance may be debatable, but from the standpoint of educational efficiency there appears to be little justification for a multiple unit school system in Wayne County.

### **Financial Aspects of the Problem**

In the foregoing paragraphs it was suggested that the establishment of a single county unit would tend to improve educational services and to equalize educational opportunities for public school children of Wayne County. There remains for discussion the financial aspects of the problem. What effect would the reorganization have upon the cost of public school services? What readjustments in tax rates for school purposes would result from the change of organization?

For the purpose of answering these and other questions, the writer analyzed the official reports of the school districts of Wayne County for the year 1930-1931 and from these data has made certain deductions and estimates relative to the financial side of the problem. It is realized, of course, that statistics for a single year may not adequately portray the normal financial policies of a district. In a particular district, in any given year, abnormal expenditures may be made for one or more purposes and exceptional tax levies may be imposed, but when statistics from a large number of districts are compiled the variations from the normal in particular districts tend to compensate one another and the data for the group represent reasonably well the financial policies and practices of the whole group. The study has not been completed, but certain deductions, estimates and conclusions may be drawn which appear to be justified by the information at hand.

To answer the question concerning the relative cost of the present system and that of a reorganized county unit organization, it is necessary to determine present expenditures and estimate the probable changes in these that would be caused by the reorganization. For the latter purpose, three assumptions are made with respect to the policies of the proposed county board of education:

1. School facilities and services in less favored districts would be improved in order to equalize, so far as practicable, the educational service for all public school children in the county.
2. Average standards of service would not be lowered, but rather would be improved. Improvements in less favored districts generally would not be made at the expense of those highly privileged although, in exceptional cases, unnecessarily expensive practices in a few places might be modified for the benefit of the other districts.
3. The tax burden for school support would be spread uniformly throughout the county in proportion to assessed valuations of property.

**The Cost of the Present System**

The expenditures for the present school system in Wayne County were reported as follows for 1930-1931:

	<u>Maintenance</u> <u>Expenditures</u>	<u>Capital Outlay</u> <u>Expenditures</u>	<u>Debt Service</u> <u>Expenditures</u>	<u>Total</u> <u>Expenditures</u>
Rural group	\$ 673,624.24	\$ 66,787.34	\$ 368,621.98	\$ 1,109,033.56
Suburban group	1,330,297.41	463,537.07	1,162,227.09	2,956,061.57
Urban group	<u>31,440,262.52</u>	<u>9,647,442.08</u>	<u>11,817,021.33</u>	<u>52,904,725.93</u>
Total County group	\$33,444,184.17	\$10,177,766.49	\$13,347,870.40	\$56,969,821.06

The total expenditures for maintenance in the above table do not include those of the office of the county commissioner of schools. Since the services of that office, in the main, are rendered to the districts of the rural townships, the amount of \$46,972.25 which is the approximate cost of the services, should be added to the total expenditure for maintenance for the rural group. This would make the total maintenance expense for the county \$33,490,976.42 and the total school expenditure for the county \$57,016,613.31.

The available data do not permit a detailed analysis of school expenditures for the year in most of the districts. Except in a few of the cities, books are not kept on an accrual basis hence, it is impossible to make comparisons of costs in detail. Sufficient information is at hand, however, to classify the expenditures for maintenance into the following groups: teacher expense, library expense, transportation expense, and general expense. The latter term covers most of the expenditures for general control, for auxiliary and co-ordinate activities except those of library and transportation, and for operation and upkeep of school plants. It is impossible in a brief summary of this kind to present in detail all the facts bearing upon the problem but in the following paragraphs the most significant data are introduced, and estimates of cost and of the probable effects of reorganization are made.

**Teacher Expense and Teacher Cost per Child**

Expenditures for teachers were reported as follows:

*Districts in rural townships	\$ 419,567.42
Districts in suburban townships	837,331.89
Urban districts	<u>21,927,880.59</u>
*Total for county	\$23,184,779.90

An important factor in the teacher cost per child is the pupil-teacher ratio which is as follows for each of the three groups:

Average pupil-teacher ratio in rural township .....	29.7
Average pupil-teacher ratio in suburban township .....	18.8
Average pupil-teacher ratio in urban districts .....	29.0

The establishment of a single county board of control probably would result in an increase in the average pupil-teacher ratio in suburban districts and a slight decrease in rural and urban districts. Since pupil-teacher ratios in the urban and rural townships probably would not be greatly affected by the reorganization it is unlikely that the total number of teachers employed in the county would be changed

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\*Salaries of the supervisory agents of the county commissioner's office are not included. Expenditures for this purpose were approximately \$32,252.00 and to obtain the complete expenditure, this amount should be added to the totals for the rural districts and of the county.

materially. Doubtless a program of rural school consolidation would be undertaken by a county board of control but, since the average pupil-teacher ratio in rural districts is already high the consolidation would not reduce the number of teachers.

The teacher costs per child vary considerably in the several districts as indicated by the following data:

Average cost per child in rural townships .....	\$52.51
Average cost per child in suburban townships .....	84.37
Average cost per child in urban districts .....	73.80
Average cost per child in county .....	73.37

In the above table the salaries of county supervisory agents have been added to those of the teachers in the rural group of townships. Differences in teacher costs in the several districts are explained by variations in salary schedules and the somewhat lower pupil-teacher ratios in suburban districts. The establishment of a single county board of control probably would result in an increase in the teacher cost per child in rural districts and a reduction in the suburban areas.

The magnitude of the increase in rural townships maybe estimated if it is assumed that teacher cost per child in those units would be raised to the level of the county average. This would amount to an added cost of \$20.86 per child or an increase of 39.7% over the cost in 1930-1931. Since the teacher expense of the rural group is 67.1% of the total school maintenance expense in the same districts an increase of 39.7% in the former would increase the latter by 26.63%. A change of this magnitude in maintenance expense in rural townships means an increase of 0.54% in the total maintenance expense for the public schools of the county.

The estimated decrease in teacher cost per child in suburban districts is \$11.00 which is a saving of 13.0%. This change calculated in terms of total maintenance cost for those districts, would amount to 8.22%; and for the county as a whole it amounts to a decrease of 0.32% in total maintenance expense for schools of the county.

Since the average teacher cost per child in urban districts is nearly the same as the average for the county, and since the proposed reorganization probably would not materially affect the teacher cost in cities, the conclusion may be drawn that the net result of the reorganization, so far as the influence of teacher cost is concerned, would be a small increase in total maintenance cost for the public schools of the county. The magnitude of the change would be the difference between 0.54% and 0.32% or an increase of 0.22%.

### **Library Expense**

The library expenditures represent 0.44% of total maintenance expenditures in rural townships and 0.30% in suburban and urban districts. It is inconceivable that a reorganization of school control in the county would cause radical changes in these percentages, especially since a large part of the revenue for library support comes from the penal fines and cannot be used for other purposes. Even relatively large changes in library cost would be insignificant in their effects upon total maintenance expenditures.

### **Tuition Expense**

Under the present district school system districts that do not maintain schools of their own send children to other districts and pay their tuition from school district

income. Districts receiving the tuition money use it for maintenance purposes and report it among their expenditures. When, therefore, the maintenance expenditures for the several districts are totaled the amount is counted twice, once as tuition expenditures by the paying districts and again as expenditures for other purposes by the districts receiving the tuition payments. Under the county unit plan of organization tuition payments between districts would be eliminated and no expenditures would appear more than once in the totals. This results in an apparent saving under the latter system of an amount equal to the expenditures for tuition. In reality, however, the expenditures for the county as a whole are the same in both cases since total maintenance expenditures for the county school system as a whole are not affected by the shifting of tuition funds from one district to another within the county. For this reason the elimination of tuition payments between districts would have no bearing on the total maintenance costs for the county.

### **Transportation Expense**

In urban districts expenditures for transportation of children are very small. Since they represent service to handicapped children who are physically unable to walk to school, the expense may be considered irreducible and unlikely to be affected by any kind of reorganization. With the exception of Plymouth all suburban townships reported some expense for transportation, the total for the group being \$34,108.22. The ratio of transportation expense to total maintenance for the group was 2.56% with a maximum of 9.86% in Grosse Ile township. Since Grosse Ile has only one school center to which most other children living on the island are carried the transportation cost there is an indication of the probable costs in sparsely settled areas should a program of consolidation of small schools be adopted. In rural areas consolidation of schools would increase the average distance between the homes of the children and their schools, and transportation expense would increase. The ratio of transportation expense to total maintenance for the rural group was reported as 2.24%, with a maximum of 11.73% in Van Buren township where a single township school unit is maintained and where children are transported to the school from all parts of the township. Transportation costs per child are estimated as \$1.76 for the rural group as a whole and \$11.34 in Van Buren township where complete transportation service is maintained over a large area. If the condition now existing in Van Buren township may be considered typical for rural areas under a consolidated program the change would greatly increase transportation costs in many sections of the county. One may estimate the increase at 544% of the present expenditure for transportation in rural areas. Since the present transportation expense is 2.24% of total maintenance for those areas the latter would be increased 12.18% by the added transportation services. This would increase total maintenance costs for the county 0.24%.

### **General Expense**

The term general expense as used here includes all maintenance expense except that for teacher service, library service, tuition, and transportation. General expense in rural districts includes the expense of the county commissioner's office other than salaries and amounts to 30.0% of the total maintenance for those districts. In suburban districts it is 33.59% and in urban districts 29.49%, the lower percentage in the latter being due to the influence of Detroit where expenditures for general purposes are low. The general expense per child has been calculated as follows:

Average for rural districts .....	\$23.80
Average for suburban districts .....	45.04
Average for cities other than Detroit.....	47.85
Average for Detroit .....	28.29
Average for County .....	31.42

The low cost in rural districts is explained by the meagre non-instructional service rendered by the schools. The relatively low cost in Detroit is due apparently to the larger average capacity of school buildings and greater concentration of children in such buildings, these conditions resulting in low operating expense. Consolidation of rural schools should increase rather than diminish the general expense per child, if the services now rendered in the cities were extended to the consolidated rural schools. Assuming this item of expense in consolidated rural schools were raised to the level of the average for the county, \$31.42 per child, it would represent an increase of 32% in the item of general expenditures for rural schools. This would augment their total maintenance expense 9.60% which would be reflected in an increase of 0.19% in the total maintenance expense for the county.

It may be noted that the item of general expense is considerably higher in suburban towns and the smaller cities than in Detroit. Should the unification of districts result in a scaling down of these costs from \$45.04 and \$47.85 per child respectively to the county average it would mean a saving of 30% in the suburbs and 34% in the cities other than Detroit as regards expenditures for general purposes. Rural schools are probably under maintained on the other hand suburban schools usually do not benefit from a consolidated maintenance service. The possible saving in maintenance costs is predicated upon a properly organized maintenance division. Calculating this saving in terms of total maintenance expense for these districts the reduction amounts to 9.9% for suburban districts and 12.92% for the smaller cities. Since the maintenance expenditures for the suburban districts are substantially 3.9% and those for the cities other than Detroit are about 16% of the total for the county, the decreases in cost for the county as a whole would amount to 0.38% and 2.16% respectively.

Subtracting from these percentages in urban and suburban districts the increase of 0.1970 in rural townships there appears to be a possible saving of 2.35% in the total maintenance cost of the public schools of the county provided expenditures for general purposes in the districts outside of Detroit could be reduced to the average for the county, which is a little greater than that for Detroit.

It is not to be expected that a decrease of this magnitude could be made in practice. Expenditures for operation of plants and for general purposes probably will be higher in the less congested portions of the county than in Detroit under any form of school organization. For this reason one can hardly assume a decrease in total maintenance cost of more than 1.5% due to reduction of expenditures for general purposes..

**Total Maintenance Expense**

Summing up the discussion of the various items of maintenance expense one can make the following estimates and deductions from available data: unification of school districts in Wayne County may be expected to result in

1. An increase of 0.22% in total maintenance, due to higher teacher costs.
2. An increase of 0.24% in maintenance because of increased expenditures for transportation of children.

3. No appreciable change in maintenance expense due to expenditures for library services and tuition.
4. A decrease of 1.50% in maintenance cost on account of savings in items of general expense.
5. A net saving of 1.04% in total maintenance cost -for the county due to the change in type of organization.

It is obvious from the estimates presented above that maintenance costs for the public schools of Wayne County would not be effected greatly by the organization of a county unit. Whatever economies resulted from the change probably would not exceed 1.04% of the present cost.

### **The Cost of a Construction Program**

To gain the educational advantages of a reorganized educational system with the county as a unit, a construction program would be indispensable. Small school units of one or two rooms would be abandoned and new buildings would be constructed at strategic points in rural and suburban townships. These buildings should be of sufficient size to permit organization of educational service, adequate supervision, and efficient operation of school plants.

The 1930-31 school district reports show a total of 84 one and two room buildings and 71 structures of three or more rooms in the rural and suburban townships of the county. In a number of cases the buildings with those or more school rooms are small and should be classed as inadequate structures. It may safely be assumed that at least one hundred existing buildings housing approximately 10,000 children should be replaced by about ten modern units. This would mean an average enrollment approximately 1,000 children in each new unit. Since the average distance between the home and the school under this plan would be greatly increased, it would be necessary to expand the transportation services for children, but in view of the improved highway system in Wayne County, this would not be impracticable.

It is understood of course that this discussion relates only to that part of the construction program that would be affected by a reorganization of the public school system on a county unit basis. The normal annual capital outlay for educational purposes would continue regardless of the type of district organization. The assumption is made that the establishment of a county unit would inaugurate a policy of consolidation of small schools into larger units, thereby necessitating expenditures for capital outlay and debt service beyond the normal requirement its under the present multiple system. The probable cost of this unique construction program may be roughly estimated from data relating to the cost of school plants now in service.

The value of school property per child in the existing districts is reported as follows:

Average for rural townships .....	\$351.15
Average for suburban townships .....	972.63
Average for urban districts .....	454.90

The relatively large value for the suburban school property is due to high land values in some of the districts, costly buildings, and low pupil concentration. It is an indication that children from many of the adjacent rural and city districts could be accommodated in these buildings without additional capital outlay. The relatively low value per child of the school property in rural townships is due to

low land values, and poor buildings in many districts. The value of buildings per child in the cities is comparatively low in spite of high land values because of the relatively large number of children housed in these buildings.

Assuming that the value of ten new school plants, which should be constructed to accommodate the 10,000 children now housed in one hundred inadequate buildings in rural and suburban areas, would be \$450.00 per child, the total value of the new structures would be \$4,500,000.00. Assuming also a salvage value of \$300,000.00 for the existing properties which would be abandoned, that amount should be deducted from the construction cost of new buildings leaving a net cost of \$4,200,000.00.

This amount represents a probable increase in the capital outlay expenditures for the county as compared with that of 1930-1931 of 41% provided the buildings were to be paid for in a single year. Spread over a period of twenty years the annual charge against capital outlay would be \$210,000.00. If the construction program were financed by loans the annual debt service may be estimated at \$105,000.00 for the twenty-year period. Since the expenditure for capital outlay for all school districts in the county in 1930-1931 was \$10,177,766.49 and for debt service \$13,347,870.40, the suggested construction program would increase the former 2.0% and the latter 0.78%. Since capital outlay in the year under consideration represented 17.8% and debt service 23.4% of total school costs, the latter would be increased to the extent of 0.53% by the Building program.

### **Expenditures for Debt Service**

The expenditures for indebtedness contracted prior to the reorganization would be the same under county unit as under the present multiple district plan. The debts must be paid in any case and the assumption of the district debts by the county unit would not alter their amount. For this reason service on previously acquired obligations has no bearing on the problem of the relative total costs of the two systems of organization. The significance of this factor lies in its effect on the distribution of burden among the several districts, a point that will be discussed in subsequent paragraphs of this discourse.

As for indebtedness contracted subsequent to the proposed reorganization the only obligations bearing upon comparative costs under the two systems would be those involved in financing the construction program already discussed above; these have been estimated already.

### **Total School Costs**

The total expenditures for the public schools of Wayne County in 1930-31 were \$57,016,613.31 of which \$33,490,976.42 were for maintenance, \$10,177,766.49 for capital outlay, and \$13,347,870.40 for debt service. In the foregoing analysis and discussion a probable reduction of 0.61% is indicated in total expenditure because of economies involving outlay for maintenance and a probable increase of 0.53% because of additional requirements for capital outlay and debt service. The net change in total annual expenditure due to the proposed reorganization of the public schools of the county therefore amounts to a reduction of 0.08%. Since this change is insignificant the conclusion appears to be justified that no material difference in annual cost should be expected from the organization of a county unit as compared with that of the present multiple unit system.

## Redistribution of the Burden of School Support

The second question involved in this part of the inquiry involves the redistribution of the burden of financing the schools among the several existing districts in case a single county unit were to be organized. It is assumed that the reorganization would produce the following effects:

1. The indebtedness contracted prior to the reorganization to the districts would be absorbed by the county unit and all parts of the county would contribute their proportionate rate shares in the liquidation of such indebtedness.
2. Subsequent to reorganization, annual charges for maintenance, capital outlay, and debt service, after deductions for income received from the State, would be met by taxation of property in the county in proportion to assessed valuation.
3. A uniform tax rate for school purposes would be established throughout the county.

With respect to the indebtedness already existing, the statistics show great variations in the several districts. The percentages of indebtedness to assessed valuations in the various groups of districts are as follows:

Rural Group .....	2.91%
Suburban Group .....	2.87%
Urban Group .....	2.32%
County .....	2.36%

It is apparent that rural and urban groups of townships have higher ratio is of indebtedness to valuation than have cities, although there are exceptions in many rural districts. In general the tax payers of rural and suburban townships would benefit by the pooling of the existing school indebtedness. The same general relationships are shown when the percentages of expenditures for debt service (1.930-31.) to assessed valuations are considered. They are as follows:

Rural group .....	0.52%
Suburban group .....	0.50%
Suburban group .....	0.26%
County .....	0.28%

With respect to expenditures for maintenance also there are wide variations. The percentages of maintenance expenditures to assessed valuations are as follows:

Rural group .....	0.96%
Suburban group .....	0.57%
Urban group .....	0.71%
County .....	0.71%

Maintenance expenditure in rural townships is a considerably higher percentage of assessed valuation than that in urban or suburban districts. The percentage is lowest in suburban townships and somewhat higher in the cities. Evidently the equalization of the burden of maintenance expenditure would benefit the tax payers of rural areas at the expense of those in suburban townships. Tax payers in the cities as a group would not be affected materially, although this generalization does not apply to all cities. Tax payers in Detroit would pay slightly more and those in Fordson would pay considerably more than at present, while those in the other cities would pay less.

With respect to capital expenditures, the percentage of outlay to assessed valuations are as follows:

Rural group .....	0.094%
Suburban group .....	0.200%
Urban group .....	0.219%
County .....	0.217%

Evidently capital expenditures in rural townships have been low in proportion to assessed valuation; those in suburban districts have been higher but below the county average; while those in the cities have been the highest and stand above the average for the county. Equalizing the burden of capital expenditures would impose a greater load upon rural and suburban townships and lighten somewhat the loads upon the cities.

In general, equalization of burden would work out about as follows:

Rural townships would benefit with respect to debt service and maintenance charges but would pay a larger proportion of capital outlay than in the past. The suburban group would benefit with respect to debt service expenditures but would bear a greater portion of the expense of maintenance and capital outlay. The city districts as a whole would benefit slightly with respect to capital outlay, would not be affected by the shifting of maintenance charges, and would bear a slightly greater debt service than before.

It should be understood that the above generalization does not describe the situation in all districts. Many examples can be cited of districts in which changes in the tax load would be exceptional. In some of the rural districts for example the payments in support of debt service would be increased whereas, for the rural group as a whole, they would be reduced. Also, in nearly all of the smaller cities, expenditures for maintenance would be reduced while the payments for the urban group as a whole would be unchanged.

For the purpose of estimating the changes in tax rates in the several areas that would result from the organization of a county unit, one should compare the public school tax rates in the several districts with the rate the county would have established for the same year if the reorganization had been effected. Since a county tax rate does not exist, such comparisons cannot be made but approximately the same results can be attained by using the ratios of incomes from local taxation to assessed valuations. These ratios for the districts are nearly the same as the tax rates and their use has an added advantage in that it permits comparisons of groups of districts as well as of individual districts. For example the ratio of tax income to assessed valuation can be determined for a township and the ratio for the township can be compared with that for the county. Tax rates cannot be used in this manner because taxes are not levied for school purposes by townships or by the county.

The ratios of income from school taxes to assessed valuations for the townships and cities are given in the following table, expressed as percentages:

Township or City	Ratio %	Township or City	Ratio %
Brownstown .....	0.06	Dearborn.....	0.97
Canton .....	0.42	Grosse Ile.....	0.42
Huron .....	0.36	Grosse Pointe .....	0.56
Livonia .....	0.52	Monguagon .....	0.92
Nankin .....	0.91	Plymouth .....	0.64
Northville .....	0.80	Suburban Group .....	0.71
Redford .....	1.41	Detroit .....	0.66
Romulus .....	0.89	Ecorse .....	0.86
Sumpter.....	0.24	Fordson .....	0.82
Taylor .....	0.22	Hamtramck .....	0.82
Van Buren .....	1.33	Highland Park .....	1.00
Rural Group .....	0.76	Wyandotte .....	1.01
		Urban Group .....	0.69
		County .....	0.69

It will be noted that the ratio for the county is .69 which means that a tax rate of 6.9 mills, levied uniformly throughout the county would provide the same amount as was collected in 1930-1931 from local school taxes in the several districts.

Assuming an hypothetical county tax rate of 6.9 mills, it is obvious that in districts having lower ratios of tax income to assessed valuation than .69 the taxes would be increased by the establishment of a uniform county rate and in districts having a higher ratio the taxes would be reduced. The effect in Detroit would be an increase of from four to five percent in the tax rate for school purposes as compared with that of 1930. In all the smaller cities of the county, the rates would be reduced. In the suburban townships of Grosse Ile, Grosse Pointe, and Plymouth the tax rates would be increased, and in Dearborn and Monguagon they would be reduced. In the rural townships the general changes would be as follows: reductions in tax rates would predominate in the districts of Nankin, Northville, Redford, Romulus, and Van Buren and increases in rates would predominate in Brownstown, Canton, Huron, Livonia, Sumpter, and Taylor. The general effect would be the equalization of the school tax burden throughout the county.<sup>3</sup>

### Recapitulation

The following tentative deductions appear to be justified from a study of a valuable data relating to the financial aspects of the proposed reorganization of the schools of Wayne County:

1. An estimated saving of 1.04% in the annual expenditures for maintaining the schools would be offset by an estimated increase of 0.53% in expenditures for debt service and capital outlay. No material change in total costs would result from the reorganization of schools.
2. A redistribution of the burden of expense for maintenance, capital outlay, and debt service in existing districts would occur. The equalization of burden would produce higher rates than now exist in some localities and lower rates in others.

<sup>3</sup> See Loren B. Miller, "Local Finance and Procedure," Michigan Local Government Series.

## Conclusion

This study of the educational and financial aspects of the school system of Wayne County appears to justify the following conclusions:

1. A reorganization of the school system of Wayne County that would provide centralized control by a county board of education should improve educational facilities and service in many parts of the county, particularly in the rural areas, through the enlargement of the range, richness, and diversification of curricula, the construction of adequate buildings, the improvement of supervision, and the promotion of efficiency of organization. The facilities of the municipal colleges would be available to citizens throughout the county without the payment of excessive tuition fees; children in all parts of the county would have equal opportunities for training in art, auditorium, health education, home economics, manual arts, and music as well as in the more traditional branches of study; curricula in many of the intermediate and high schools would be modified to meet the needs of a greater number of children; rural schools would be consolidated and units of sufficient size constructed to make possible the economical operation of plants and the efficient administration and supervision of school work.

Local taxes for school purposes would be increased slightly in areas in which ratios are less than that for the county and reduced in areas in which ratios are higher.

2. The benefits would accrue to districts that are now underprivileged without sacrificing the services in the more highly favored districts except where such services are superfluous or extravagant. The schools in some of the wealthier suburban areas probably would accommodate children from adjacent districts.
3. The total cost of conducting the schools of the county would not be changed materially as a result of the consolidation of districts and the organization of a county unit.
4. A redistribution of the burden of school expense would occur among the several existing districts, taxes being increased in some localities and reduced in others. The equalization of tax rates would remove the incentive for the people of local areas, for economical reasons, to reduce the quality of the school service in their districts below the average standard for the county. On the contrary, since the tax rates for school purposes would be uniform throughout the county, the tendency would be for the people in all parts of the county to demand equalized school services.