

● Commonwealth of Kentucky ●  
**EDUCATIONAL BULLETIN**

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**PUPIL TRANSPORTATION**  
**Facts 1935-48**

**Suggestions For**  
**Safety, Comfort, and Efficient Operation**



Published by

Ky. DEPARTMENT OF EDUCATION

**BOSWELL B. HODGKIN**  
Superintendent of Public Instruction

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## FOREWORD

This publication contains suggestions for more efficient operation of school buses and for providing more safety and comfort for the children being transported. There is being presented, for the first time, suggestions for the erection of waiting stations for pupils who have to walk some distance before they reach the bus in the morning. During inclement weather this will make it possible for the children, in case they have to wait a few minutes for the arrival of the bus, to enter the bus without undue exposure.

Because the question is so often asked whether buses should be publicly owned or privately owned, the latest information available for the department of education has been presented. The suggestions for school bus maintenance are those that have proven of value in those shops where boards of education are operating their own buses.

Two tables on general information concerning operation of school buses are presented. Their contents have been tabulated from reports filed with the department of education by county school district boards of education. It may be noted that one table contains facts for the ten-year period 1935-36 through 1945-46. These facts are taken at the beginning, middle, and close of this period. Another table containing information for 1947-48 is presented in a separate tabulation. The facts contained therein are for the operation of school buses under conditions which resulted from World War Number Two. Conditions under which these facts are presented are not comparable to the facts contained in the table for the ten-year period 1935-36 through 1945-46.

I recommend for careful consideration this publication to superintendents, boards of education, and citizens concerned with the ever increasing problem of pupil transportation. The information contained herein was prepared by Mr. J. M. Dodson, Director Pupil Transportation, State Department of Education.

BOSWELL B. HODGKIN,  
Superintendent Public Instruction.

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## I INTRODUCTION

The pupil transportation program in various counties throughout the state has become one of the major phases of the education program with which the school administrator has to deal.

Because pupil transportation has become such an important factor in equalizing educational opportunities in the county school districts of the state, the demand has exceeded the ability of many boards of education to conduct properly a suitable program of transportation. Its rapid growth has made it more necessary that school administrators give more thought to planning the transportation program in order that the best service can be obtained in the most economical manner. Since most school boards must do the big task of transporting the children in their districts on a limited amount of money, it is becoming more and more important that they have available more detailed facts than they now have. These facts should be collected on particular phases and for a period of years. This can best be done by a system of records and reports in order that each individual may have comparable data with his neighbor. Plans are now under way to improve and make more uniform the present system of records and reports for the school transportation program in the state.

It is becoming more apparent, yearly, that parents are not satisfied with any type of a transportation program. They are more and more demanding that their children be transported safely and comfortably. The board of education is faced with the problem of doing this economically.

School buses are safer and more comfortable now than they were a few years ago. The school bus driver is an important factor in both the safety and economical phase of school bus operation.

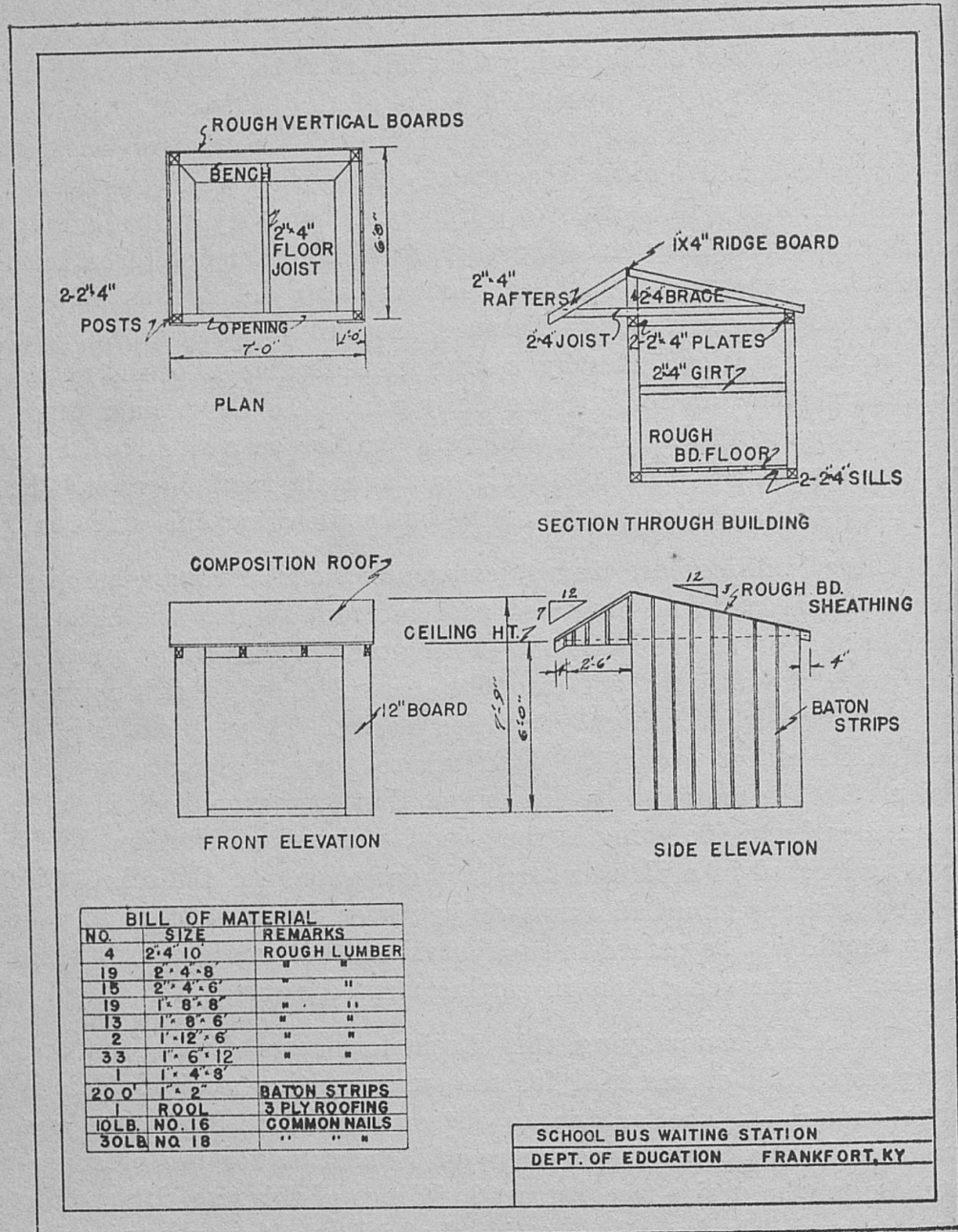
The following parts of this publication will give suggestions for improving conditions in safety, comfort, and economy of the school program which will be applicable to most of the school districts of the state which operate a pupil transportation program.

## II WAITING STATIONS

With the view of improving the comfort of the children and the safety and economy of operation, some of the boards of education in the State have found it to be practical to erect along the bus routes some small buildings commonly known as waiting stations. These buildings will serve two purposes. First, they will eliminate series of stops coming close together, as well as keep children from exposure to inclement weather. Instead of a school bus making several stops along a given distance, the children will assemble at the waiting station; thereby saving considerable expense to the board and time on making the daily route. In the second place, it has been found that if the children who live on a side road have a more comfortable place to wait on the main road, there will be less pressure for an extension of the bus route down this side road.

These buildings are usually constructed out of rough, inexpensive material, with an extended roof in front so that the children may watch for the bus without getting wet during rainy weather. The posts are usually put into the ground deep enough to keep the building from being overturned easily. They should not be erected in places along the road where they might obscure the vision of other motorists to the extent that they would not be able to see clearly traffic going in the opposite direction. Neither should they be located in a place where it is dangerous for the school bus to stop; such as on a bad curve, or just over the crest of a hill, etc. They should not be placed in such locations that would cause undue handicap to the school bus in getting started again.

The cut accompanying this discussion gives dimensions and a suggested bill of material for the small waiting station. This is large enough to shelter ten to fifteen children. Blueprints are available in the State Department of Education for use of superintendents who desire to construct buildings of this size. Blueprints are also available for a larger size that will shelter twenty-five to thirty children. Upon request, the State Department of Education will furnish blueprints for each size waiting station.



BILL OF MATERIAL		
NO.	SIZE	REMARKS
4	2' x 4' x 10'	ROUGH LUMBER
19	2' x 4' x 8'	" "
15	2' x 4' x 6'	" "
19	1' x 8' x 8'	" "
13	1' x 8' x 6'	" "
2	1' x 12' x 6'	" "
33	1' x 6' x 12'	" "
1	1' x 4' x 8'	" "
20 0'	1' x 2"	BATON STRIPS
1	ROOF	3 PLY ROOFING
10 LB.	NO. 16	COMMON NAILS
30 LB.	NO. 18	" " "

SCHOOL BUS WAITING STATION  
 DEPT. OF EDUCATION FRANKFORT, KY

### III PUBLIC OWNERSHIP VS. PRIVATE OWNERSHIP

Another experience of boards of education for safety and economy of pupil transportation is that of public ownership and operation of school buses. This change will eventually take place in all school districts if the present trend continues. It must be said, however, that public ownership is not a cure-all for the problems that are involved in pupil transportation. A poorly managed program under school ownership can be more expensive and more unsatisfactory than a well-managed program under the management of an efficient contractor. Public ownership places a greater responsibility on the school administrator. He must purchase buses and supplies, employ and supervise drivers, and operate a maintenance program.

Information available in the State Department of Education, as well as experience of those in charge of school transportation in other neighboring states, indicate that there are certain definite advantages to school ownership over private ownership of school buses. Some of these are as follows:

1. Many examples may be found where large school buses are being operated over routes with unoccupied seats, while smaller buses are operating in other sections of the district with overcrowded conditions under a system of private ownership. When buses are publicly owned, the larger buses can be sent to those sections of the district where the smaller overcrowded buses are being operated. This exchange has two advantages, economy of operation and safety to the pupils being transported. Under private ownership such an exchange is practically impossible unless the owner goes with the bus. If the buses are publicly owned, it is a matter of changing buses. This change does not affect the driver since the one operating the smaller bus should be able to drive the larger bus as efficiently as he does the smaller bus.
2. In public ownership boards of education operate buses without any idea of profit. They are exempt from paying certain taxes which are required of private owners. They may purchase supplies, equipment, repairs, etc., at wholesale prices, while the private owner usually must pay retail.

3. Public ownership usually provides a situation which makes possible a more efficient maintenance program. Experience has usually shown that when boards of education operate as many as fifteen buses, they can afford to operate these under a program of public ownership and can provide an excellent maintenance program in a board operated garage. It is sometimes found that this may be done with as few as ten publicly owned buses when the mechanic serves as a driver. Some are of the opinion that under a system of contract operation of buses the owners will take better care of the property than would be possible when buses are publicly owned and operated. Experience in North Carolina tends to disprove such belief. In that state the buses are state owned but operated by school districts. The mechanics are trained and imbued with the idea that it is their primary job to prevent break-down by a preventive maintenance before the bus must be taken off the road because of need of repair. By such a program an interruption of service is prevented. It is of no interest to the mechanic of publicly owned buses to have the buses come for repairs. Their chief interest is to keep buses from coming to the garage. This interest will result in a more thorough inspection of the buses while they are in operation and when they are being repaired. Not only will an efficient maintenance program under public ownership cost less, but it will provide more satisfactory service to the children being transported.

4. Information available from reports made by different districts for the school year 1947-48 disclose some interesting facts in connection with private and public ownership of school buses. Some of the items which appear to be of most interest in this connection are:

- a. Total current expense of operation was:  
8.27% in districts where all buses are publicly owned  
10.30% average for all of the districts in the state  
12.04% in districts where all buses are privately owned
- b. The average cost per pupil transported was:  
\$19.21 per pupil in districts where all buses are publicly owned  
\$21.10 per pupil which is the average for all of the districts in the state  
\$26.37 per pupil in districts where all buses are privately owned
- c. Cost per bus mile was:  
\$0.178 in districts where all buses are publicly owned  
\$0.187 which is the average for all of the districts in the state  
\$0.362 in districts where all buses are privately owned



d. Cost per pupil mile was:

- .0020 in districts where all buses are publicly owned
- .0025 which is the average for all of the districts in the state
- .0062 in districts where all buses are privately owned

It may be seen from the above that whether we consider the percent of current expense of transportation, the cost per pupil mile, the cost per bus mile, or the annual cost per pupil transported, publicly operated buses were cheaper in Kentucky during the school year 1947-48. The above facts were derived from reports made by the school districts and filed with the State Department of Education.

#### IV SCHOOL BUS MAINTENANCE

##### Some Factors Related to Efficiency in School Bus Maintenance

It is desirable that boards of education keep publicly owned buses to one or two makes insofar as is practical. This will be economical since the greater the number of makes and models in a school bus fleet, the greater amount of money that must be invested in parts and the more complicated the maintenance program will become.

The bus should be large enough to do the job that is expected of it. A chassis for a 36-passenger body cannot be expected to carry the load of a 48-passenger body through mud and snow without excessive cost for maintenance. It is poor economy to operate a school bus which is too light to do the job required of it.

The success of a school bus maintenance program will depend, to a large extent, upon the ability and training of the persons who are responsible for the maintenance and operation of the buses. The cooperative efforts of a number of individuals are required if the maintenance program is to function in the highest possible degree of efficiency. Each of these individuals should be capable of carrying his part of the responsibility.

Another important factor in school bus maintenance is the care of garage facilities and equipment used. Any individual who is in charge of the school bus garage should have a knowledge of what is really needed to make the program a success. It is usually regarded as poor economy to attempt a school bus maintenance program in quarters which are neither arranged nor equipped for satisfactory work.

The operation of the maintenance program should follow a definite procedure. Bus drivers should take the time to report

indications of trouble in order that many repair jobs can be prevented. Bus inspection should be regular and follow a set pattern. Preventive maintenance is one of the keys to lower transportation costs. The work program in the garage should be well organized in order that the maintenance program will obtain maximum efficiency.

### **Purchasing Parts and Supplies**

The purchase of parts and supplies is a complicated problem when there are a number of makes of buses operated. It is usually regarded as good practice to keep the stock of major parts to a minimum if parts can be purchased as needed. This practice cuts down the investment in parts, prevents unnecessary deterioration, and simplifies the problem of storage. A board of education which operates a maintenance program must utilize efficient business procedure if it is to furnish transportation service at the lowest possible cost. A district which operates a number of publicly owned school buses should give consideration to the following purchasing procedures:

1. The person responsible for the purchases should have thorough knowledge of the parts and supplies used in the operation and maintenance program. It may be possible to buy more than one part that will fit into a given place. Frequently the service of one of these parts will be more satisfactory than that of another.
2. Definite specifications for the parts and supplies to be purchased should be used. In many cases, specifications are set up by the chassis manufacturer; but unless the buyer is familiar with them, they are of little value. In other cases the manufacturer may make no recommendation at all. In that event it would be wise for the purchaser to make up a list of exact specifications to be used in buying parts and supplies.
3. One of the chief objectives of the development of effective purchase procedure is to obtain parts and supplies that meet specifications at the lowest possible price. Quantity purchases such as the year's requirement for gasoline, oil, and tires should be followed. This should be done through bid procedures. When the board of education decides that the quantity to be purchased is too small for bid procedures they may agree with a dealer on discounts to be allowed on parts or supplies.

4. The purchasing of parts and supplies should be handled so there will be a record of what has taken place. The request for bids should be in writing and should state clearly the specifications of the material to be purchased, the condition of sale and delivery, and the plan of payment. When such a procedure is followed, there should be no ground for misunderstanding. Records will permit accurate budgeting, accounting, and reporting.
5. In the payment of parts and supplies, bills should be inspected to see that they do not include taxes from which the school district is exempt.

### **Care of the Bus in Summer**

When buses are stored for the summer, it is recommended that a plan be adopted whereby each bus would have the motor started at least once in each two weeks and that the bus be driven a short distance in order that lubricants may be recirculated to all moving parts.

In school districts which find it necessary for publicly owned school buses to remain inactive for several weeks, the buses should be prepared for dead storage. The following are recommended steps:

1. Remove the spark plugs and insert a small quantity of light oil on the top of each piston.
2. Push down the clutch and insert a board of sufficient thickness under side of the floor board to hold the clutch in a slightly released position.
3. Drain the gasoline tank. If this is not practical, a gasoline tank that is filled with gasoline will develop less moisture from condensation than a partly filled tank.
4. Remove the gasoline line at the fuel pump and substitute a short line that is submerged in light oil. Crank the motor and allow it to operate until the gasoline in the fuel pump and carburetor is exhausted and replaced by the light oil.
5. Drain the cooling system thoroughly, wash out, and fill with water to which a rust inhibitor has been added.
6. Remove the battery and store in a dry place, keeping charged at intervals of at least four weeks in order to bring the specific gravity of the electrolyte up to normal.
7. Inflate the tires to slightly more than the factory recommended pressure.
8. Store tires in dark areas where they are less likely to deteriorate.<sup>1</sup>

<sup>1</sup>Developing a Transportation Program for Florida Schools, Florida School Bulletin, 9:26-28, April-May, 1947.

## General Information on School Bus Maintenance

Most of the detailed procedures concerned with the maintenance of a particular bus chassis should be based on the recommendations of the chassis manufacturer. The manufacturer will have developed these recommendations after long experience, research, and study; and no user, particularly one operating on a small scale, is likely to have sufficient information to justify deviation from the recommended practices. Therefore, the manuals and charts furnished by the manufacturer should serve as the guide for the maintenance of a particular chassis. Nevertheless, general procedures and practices apply to almost any make of bus. Information and suggestions related to some of these general procedures and practices are given below.<sup>2</sup>

### Cooling System

If either antifreeze solution or water, depending upon the season, drains out rusty or rust or grease deposits are found in the radiator, the cooling system should be cleaned. Should the use of standard cooling system cleaning compounds prove ineffective the system should then be reverse-flushed. When preparing for, and during the use of antifreeze solutions, oil hoses and connections require particularly careful inspection for leaks.

Clean the dirt, insects, and other accumulations from the exterior of the radiator core by blowing out with compressed air or with a stream of water applied carefully from the rear side of the core.

**CAUTION:** When straightening radiator cooling fins, use only a suitable shaped piece of wood or blunt instrument to avoid puncturing tubes.<sup>3</sup>

### Engine Oil Pressure

Too much emphasis cannot be made to the maintaining of proper oil pressure in engines. Failure of the engine oiling system can almost instantly cause serious damage to the bearings and even to the crankshaft and needless destruction of these items may cause indefinite loss of use of the vehicle.

Permitting a vehicle to run with low oil pressure can cause damage to the engine. Some of the principal causes of low oil pressure are:

1. Oil pump screen clogged.
2. Excessive crankshaft and connecting rod bearing clearance.
3. Oil pump worn excessively.

<sup>2</sup> School Bus Maintenance, Glen E. Featherston, p. 32.

<sup>3</sup> Preventive Maintenance Program. Washington, D. C., Navy Department, 1944, p. 13.

Drivers should be carefully instructed on the need for watching oil pressure.<sup>4</sup>

### Engine Oil and Filters

Engine oil does not "wear out" in 1,000, 2,000, or 10,000 miles. It does, however, become more or less rapidly contaminated with the following materials:

1. Dirt drawn in through crankcase system or carburetor.
2. Unburned fuel, particularly due to choking in cold weather.
3. Water from combustion gases passing pistons and from air drawn in through crankcase ventilating system.
4. Carbon and soot from combustion, especially during idling or if the carburetor or ignition system is not performing properly.
5. Lead compounds from burning gasoline sometimes cause the oil to become gray or brown in color.
6. Metal particles from engine surfaces.
7. Products of oil oxidation or deterioration which may form gummy or sticky deposits of "varnish" or sludge which tends to clog oil lines and screens.

Because of these contaminants, some of which no filter can eliminate, it is sound economy to replace the oil at regular intervals. Under average conditions, where dust is not too great a factor, the changing of oil at the monthly (1,000-mile) inspection is recommended. The changing of oil at the monthly period is advisable even when the mileage run is substantially less than 1,000 miles per month. In such cases the oil will often be particularly contaminated because of excessive idling and choking.

Certain of the engine oils now being produced contain additives and are generally known as "detergent" oils. Oils of this type have the ability to keep finely divided materials dispersed and prevent their forming sludge deposits. In addition, this quality may exert a washing or flushing action on existing engine deposits, tending to gradually remove or take them into suspension. Should this type of oil be put into excessively dirty engines clogging of oil lines and pump screens may occur, causing bearings to burn out soon after changing the oil. Caution should be exercised in watching such engines. Several frequent changes of both oil and filters should be made to insure the cleaning up of dirty engines. Detergent type oils will discolor more rapidly than nonadditive oils because of their holding material in suspension.

Care should also be exercised in using the proper viscosity (SAE No.) of oil in engines. The engine manufacturer's recommendations should be observed.

<sup>4</sup> Ibid., p. 25.

The purpose of an oil filter is to remove all foreign solid particles from the oil, thus giving better lubrication and longer engine life. Since the efficiency of a filter depends entirely on its ability to remove solids from the oil, the filtering elements must be changed at intervals. When the oil on the dipstick is dirty, the filter element should be changed.<sup>5</sup>

### **Engine Operating Temperatures**

Engines in vehicles used in short run or stop and start work will often run cold almost continuously. Such a condition will contribute to excessive fuel dilution and sludging with consequent increased engine wear. This cold operation condition occurs not only in the coldest weather, but also in cool weather and even in warm weather, if the engine does not run sufficiently long to permit the proper warming up. The use of high temperature range thermostats is essential in this type of operation.<sup>5</sup>

### **Air Filters**

The air cleaner is provided to keep road dust out of engine and carburetor. This dust is loaded with minute particles of abrasive which if permitted to enter the engine will cause rapid wear of cylinder walls, pistons, and rings. Rapid engine wear necessitates the use of more replacement parts and it also increases oil and fuel consumption.

If the air cleaner is allowed to become clogged with dirt and left in that condition, the flow of air to the carburetor will be restricted thus causing increased fuel consumption, engine heating up, crankcase dilution, and otherwise prevent good engine performance. Air filters must be cleaned and served at every monthly maintenance period. Under severe dust conditions, the filter should be cleaned more frequently.

There are two types of air cleaners in general use: the wire gauze type and the oil bath heavy duty type. The oil bath filter is the more efficient type and is definitely recommended. The manufacturer's instruction manuals should be consulted for specific information on the servicing of the filters.

Where crankcase filler caps are equipped with gauze filters, these caps should be washed in kerosene and reoiled with motor oil at frequent intervals.<sup>6</sup>

### **Spark Plugs**

Because of the differences in engine design (compression ratio, range of engine speed, etc.) there are wide differences in operating

<sup>5</sup> Ibid., p. 25.

<sup>6</sup> Ibid., p. 26.

temperatures within the combustion chambers of different makes of engines. This variation in temperatures has necessitated the design of spark plugs that will function in the individual makes and types of engines. Spark plug manufacturers have available Recommendation Charts which show the proper spark plugs and their correct gap setting. The correct plug is the one which will remain hot enough at low speeds to prevent fouling (building up deposits which will short out the plug) and also remain cold enough at high speeds to prevent preignition (firing of the fuel prior to spark discharge).

If the spark plug is not drawn down securely on a clean gasket, the flow of heat from the spark plug is restricted, thus causing it to operate at a temperature higher than that for which it was designed.<sup>6</sup>

### **Brakes**

#### **1. Cleaning of Drums, etc.**

When operating vehicles under severe conditions of mud, dust, or water, the cleaning of brake drums and shoes may be necessary more frequently than at the semi-annual service periods. Dirt or sand that is allowed to remain inside brake drums acts as an abrasive, causing rapid wear of drums and linings. Excessive moisture causes rapid corrosion of all moving parts of the brake system.

#### **2. Hydraulic Brake Fluid**

Only standard types of hydraulic brake fluid should be used. Substitute fluids may have a severe action on rubber parts, causing them to become sticky, preventing proper piston action, or due to expansion of the rubber parts, cause them to lose their sealing qualities. Other types of fluid may cause vapor lock, or, due to extreme thinness, leak past the rubber cups in the wheel cylinders and saturate the brake linings.<sup>6</sup>

### **Battery**

The battery is an extremely critical unit in a motor vehicle. Since it is the device for storing electrical energy, it controls the starting of the engine, the entire ignition system, and all lighting. It can be thought of as the heart of a motor vehicle. The principal factors affecting battery life are:

#### **1. Lack of Water**

Water is lost as the result of charging and should be replenished as soon as the liquid level falls to the top of the separators. If water is not replaced, and the plates become exposed, the acid will reach a dangerously high concentration that will char and disintegrate the wood separators, thus impairing performance of the plates. Plates cannot take full part in the battery action unless they are completely covered by the electrolyte. Sulphuric acid need never be added to a cell unless spillage has occurred.

<sup>6</sup> Ibid., p. 26.

2. Loose Hold-down

Hold-downs if not properly adjusted will allow the battery to bounce in the cradle. This will not only crack battery cases but also do severe damage to the plates by causing the active material in the grids to drop to the bottom of the battery.

3. Overcharging

A high generator charging rate burns up the plates and separators; and the violent gassing action forces the active material from the plates so that it collects in the bottom of the cell and thus is lost.

4. Undercharging

A battery operated with insufficient charge over a long period of time may develop a coating of the plates which will permanently reduce the battery capacity. In addition, a partially charged battery is liable to freeze during severe winter weather. The electrolyte of a battery in various stages of charge will start to freeze at temperatures indicated below:

Specific gravity	Freezing temperature °F.
1.280 (fully charged) .....	-90
1.220 .....	-31
1.200 .....	-16
1.100 .....	+18

5. Battery "Dopes"

No satisfactory substitute electrolyte has been found for the simple mixture of sulphuric acid in water. Use no substitutes. To do so may injure the battery and void the manufacturer's guarantee. Pure water for use in automotive batteries should be either distilled water or a good grade of chemically analyzed drinking water approved for battery use. Battery water should be kept in a covered glass, earthenware, hard rubber, or lead container. Watch for batteries that require excessive water. The need for excessive water may be an indication of a charging system which is out of adjustment, or that there is a crack in the case.<sup>7</sup>

**Tire Care**

1. Tire Wear Characteristics Due to Misalignment

When inspecting tires or front end alignment, the existence of certain tire wear characteristics will indicate the need for alignment work as follows:

(a) Incorrect toe-in

Tire wears from outside to inside of tread, leaving feather edge on inside edges of ribs. It is usually more pronounced on the right wheel than on the left.

(b) Incorrect toe-out

Tire wears from inside of tread to outside, leaving feather edge on outside edges of ribs. Most wear will appear on inside half of tread. It is usually more pronounced on the left wheel than on the right.

(c) Incorrect camber

Wear on the outside half of tread with excessive camber, wears inside half of tread when camber is not enough. Does not leave a feather edge. This wear takes the form of deep depressions or waves or "heel and toe."

(d) Incorrect tracking

Wear will resemble toe-in or toe-out wear. A feather edge wears similar to toe-in or toe-out, but less pronounced.

<sup>7</sup> Ibid., p. 26.



(e) Unbalanced wheels

In the case of static unbalance there is usually one large spot with one or two small spots on back side. In the case of dynamic unbalance, it is generally spotty wear not limited to one area as in case of static unbalance.

(f) Incorrect caster

Caster in itself does not cause tire wear, but may cause an error in camber, toe-in or steering geometry, thus resulting in a wear characteristic of that of misalignment.<sup>8</sup>

2. Tire Inflation

The table below shows the inflation recommended for the size of tires that are most commonly used on school buses. The inflation pressure shown are those recommended by the Tire and Rim Association.

TIRE		RIM SIZE	
Size and Ply Rating	Load and Inflation and Pounds	Present	Advanced
6.50-20-6 .....	1700 @ 50	3.75P	5.0
6.50-20-8 .....	1950 @ 65	3.75P	5.0
7.00-20-8 .....	1950 @ 55	4.33R	5.0 or 5.5
7.00-20-10.....	2250 @ 70	4.33R	5.0 or 5.5
7.50-20-8 .....	2250 @ 55	5.00S	5.5 or 6.0
7.50-20-10.....	2700 @ 75	5.00S	5.5 or 6.0
8.25-20-10.....	2750 @ 60	5.00S	6.0 or 6.5
8.25-20-12.....	3150 @ 75	5.00S	6.0 or 6.5
9.00-20-10.....	3450 @ 65	6.00T	6.5 or 7.0
9.00-20-12.....	3850 @ 80	6.00T	*6.5 or 7.0

\* Minimum Standards for School Buses, Washington, D. C., National Commission on Safety Education National Education Association, 1946, p. 20.

3. Tire Rotating

Tire should be changed from one side to the other and from front to rear every 5,000 miles. If a spare is carried, it should be worked into the rotation.

When dual tires are used in the rear, new tires should be used first on the front wheels of the vehicle for one-third of the expected mileage and then moved to the rear wheels. It is important that dual tires on the same side be closely matched as to wear.

Painting

The maintenance of painted surfaces is of vital importance to prevent rusting of steel and general deterioration of wood. Painting is also of importance from a general appearance standpoint.

In certain localities very extreme corrosion conditions are experienced. In such localities particular trouble has been encountered in preserving running gear and underfender surfaces. The spraying of an asphalt emulsion on the under surfaces, after a

<sup>8</sup> Ibid., p. 28.

thorough sand blast or cleaning, has been found to be very effective protection against severe corrosion.<sup>9</sup>

It can be seen from the information below that there is a wide difference in the amount of effort put forth in the various counties to transport their children. The per cent of current expenses varies from 33.79 to practically nothing. Examination of the other items will show that there is just as much variation between the counties in each of these as there is in the per cent of current expenses. For instance, several counties in the state are transporting more than seventy-five per cent of their census; while other counties fall as low as one or two per cent. Many of the counties operate their buses with more than one hundred pupils per bus; while others drop down to as low as twenty-five. This would indicate that in some counties the board of education is endeavoring to transport most of the pupils in their county; while in other counties not as much effort is being put forth. This might be due to bad roads, the lack of a consolidation program, or, in many cases, to parents having paid a part of the transportation expense.

The information below was taken from the 1947-48 transportation reports made by the county school superintendents.

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<sup>9</sup> Ibid., p. 30.

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TABLE A—MISCELLANEOUS INFORMATION CONCERNING TRANSPORTATION IN KENTUCKY 1947-48

County	Total Current Expenses	Transportation Costs	Per Cent Current Expenses Trans.	Average Number Trans. Daily	Per Cent Census Trans.	Number Vehicles	Total Daily Mi.	Pupils per Bus	Length of Term	Annual Cost Pupil Transp.	Cost	
											Per Pupil Mile	Per Bus Mile
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Adair	\$ 188,379.52	\$ 18,676.81	4.60	244	6.31	5	459	48.8	175	\$35.56	\$0.003	\$0.145
Allen	157,440.26	31,414.33	19.95	1,184	45.0	22	1,184	53.8	176	26.53	.003	.151
Anderson	114,051.56	12,619.29	11.06	518	32.8	12	606	43.1	164	24.36	.002	.127
Ballard	172,185.01	22,728.10	13.19	1,036	56.1	23	1,060	45.0	156	21.93	.003	.137
Barren	331,217.80	39,819.18	12.02	1,735	37.9	31	1,731	55.9	174	22.95	.002	.132
Bath	168,147.57	25,085.02	14.91	1,421	52.6	19	1,224	74.7	178	17.65	.002	.115
Bell	415,563.63	23,060.77	5.54	515	5.90	12	436	42.9	176	44.77	.006	.300
Boone	190,723.04	33,078.37	17.34	1,427	66.2	28	1,435	50.9	175	23.18	.003	.132
Bourbon	266,130.36	38,852.67	14.59	1,933	69.6	20	1,334	96.6	174	20.09	.002	.167
Boyd	166,563.17	27,110.94	16.27	1,781	65.4	13	825	137.0	174	15.22	.001	.189
Boyle	196,599.32	19,371.30	9.85	1,357	60.2	14	708	96.9	174	14.27	.002	.157
Bracken	154,184.50	35,092.54	22.76	1,191	69.9	23	1,321	51.7	174	29.46	.003	.154
Breathitt	294,872.51	19,523.88	6.62	1,181	19.0	8	634	147.6	165	16.53	.001	.187
Breckinridge	248,517.53	22,035.71	8.86	1,112	30.5	20	763	55.6	166	19.81	.003	.174
Bullitt	159,990.47	23,426.03	14.64	1,216	58.7	15	837	81.0	163	19.26	.002	.172
Butler	178,498.51	10,987.57	6.15	420	13.4	10	430	42.0	155	26.16	.004	.165
Caldwell	103,538.72	11,844.42	1.43	635	32.9	8	485	79.3	171	18.65	.002	.143
Calloway	224,630.96	36,674.25	16.32	1,572	57.1	19	895	82.6	156	23.32	.003	.263
Campbell	189,525.00	31,197.59	16.46	1,349	63.4	20	740	67.4	173	23.12	.004	.244
Carlisle	118,687.68	15,933.10	13.42	766	54.7	7	461	109.4	175	20.80	.002	.197
Carroll	85,695.86	21,352.94	24.91	657	55.3	17	783	38.6	161	32.50	.004	.169
Carter	445,688.90	30,475.97	6.83	1,334	18.9	17	932	78.4	174	22.84	.002	.188
Casey	No Transportation by Board of Education except five colored students at a cost of \$110.00 per month.											
Christian	313,160.71	37,782.65	12.06	1,554	33.6	31	1,345	50.1	168	24.31	.003	.167
Clark	200,828.99	29,577.09	14.72	1,676	65.0	19	1,117	88.1	176	17.64	.002	.150
Clay	314,301.42	10,280.46	3.27	254	3.4	10	392	25.4	165	40.47	.006	.159
Clinton	119,442.84	6,135.15	5.13	194	7.9	4	249	48.5	166	31.62	.003	.148
Crittenden	94,728.95	12,591.39	13.29	420	20.0	13	233	32.3	156	29.97	.010	.346
Cumberland	130,764.12	9,766.14	7.46	290	12.3	7	384	41.4	165	33.67	.004	.154

TABLE A—MISCELLANEOUS INFORMATION CONCERNING TRANSPORTATION IN KENTUCKY 1947-48—Cont.

County	Total Current Expenses	Transportation Costs	Per Cent Current Expenses Trans.	Average Number Trans. Daily	Per Cent Census Trans.	Number Vehicles	Total Daily Mi.	Pupils per Bus	Length of Term	Annual Cost Pupil Transp.	Cost	
											Per Pupil Mile	Per Bus Mile
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Daviess	\$ 483,345.10	\$ 77,485.96	16.03	3,064	51.1	43	2,326	71.2	173	\$25.28	\$0.003	\$0.193
Edmonson	149,538.18	19,140.01	12.79	783	26.9	19	1,116	41.2	165	24.44	.003	.104
Elliott	186,314.09	6,671.07	4.89	240	7.9	5	400	48.0	175	27.79	.002	.095
Estill	154,467.65	1,876.55	1.21	270	8.1	1	70	270.0	154	6.95	.0006	.174
Fayette	744,672.66	70,670.24	9.49	3,753	55.9	35	2,077	107.2	176	18.83	.002	.193
Fleming	226,131.82	38,791.05	17.15	1,701	60.3	30	1,161	56.7	179	22.80	.003	.187
Floyd	811,117.10	40,606.78	5.00	4,626	30.2	21	896	220.2	174	8.77	.001	.260
Franklin	340,913.63	40,429.80	11.85	2,392	34.1	30	1,100	79.7	172	16.90	.003	.214
Fulton	112,186.74	13,062.89	11.64	930	54.3	8	448	116.2	165	14.04	.002	.177
Gallatin	64,056.08	10,338.78	16.14	456	54.2	10	461	45.6	163	22.67	.003	.188
Garrard	195,012.38	36,800.78	18.87	1,317	61.4	24	1,058	54.8	168	27.94	.004	.207
Grant	201,087.01	33,282.34	16.55	1,373	77.2	24	1,368	57.2	171	24.24	.002	.142
Graves	402,978.15	90,937.20	22.56	3,144	62.8	46	2,051	68.3	176	28.92	.004	.252
Grayson	200,543.38	10,453.51	5.21	492	12.6	8	750	61.5	164	21.24	.001	.085
Green	116,440.70	3,252.00	2.79	69	2.9	2	149	34.5	168	47.13	.004	.130
Greenup	238,734.90	37,051.00	15.51	603	15.2	13	653	46.3	154	61.44	.008	.368
Hancock	116,908.01	13,989.27	11.96	569	38.9	13	660	43.7	173	24.58	.003	.123
Hardin	402,544.57	48,640.98	12.08	2,306	48.2	31	1,390	74.3	173	21.09	.003	.202
Harlan	951,148.63	28,895.41	3.03	3,471	18.6	18	1,329	192.2	173	8.32	.0006	.126
Harrison	223,691.44	37,540.50	16.78	1,434	70.3	23	345	62.3	177	26.17	.009	.615
Hart	186,127.59	25,801.32	13.86	439	14.4	14	900	31.3	165	58.77	.006	.174
Henderson	313,551.66	50,451.34	16.09	2,700	82.4	32	2,150	84.3	173	18.68	.002	.136
Henry	216,658.49	28,088.17	12.96	1,211	55.2	24	918	50.4	173	23.19	.004	.177
Hickman	143,371.44	18,182.92	12.68	780	46.4	13	684	60.0	174	23.31	.003	.153
Hopkins	301,593.70	45,899.32	15.21	1,909	38.6	24	1,217	79.5	174	24.04	.003	.217
Jackson	217,361.35	8,939.34	4.11	577	13.9	6	314	96.1	163	15.49	.002	.175
Jefferson	2,149,296.51	178,200.04	8.29	7,543	38.1	73	3,892	103.3	176	23.62	.003	.260
Jessamine	206,220.48	22,853.45	11.08	1,109	43.6	14	1,032	79.2	173	20.60	.002	.128
Johnson	289,755.90	27,004.38	9.31	860	14.8	12	632	71.6	166	31.40	.004	.257
Kenton	338,386.04	36,873.08	10.89	2,258	55.8	30	1,312	75.2	173	16.32	.002	.162
Knott	326,011.03	12,019.06	3.68	1,099	16.9	5	355	219.8	166	10.93	.0009	.203
Knox	365,006.08	26,419.73	7.23	2,350	31.1	17	744	138.2	174	11.24	.001	.204
Larue	154,447.82	16,019.71	10.37	400	22.4	8	528	50.0	162	40.05	.004	.187
Laurel	322,577.96	18,673.29	5.78	764	11.9	11	580	69.4	176	24.44	.003	.183
Lawrence	229,534.41	18,574.99	8.09	1,244	23.2	8	340	143.0	168	14.93	.002	.326
Lee	162,352.86	6,734.42	4.14	300	9.4	4	215	75.0	170	22.44	.002	.184
Leslie	211,744.64	4,820.27	2.27	273	5.8	3	192	91.0	168	17.65	.002	.149
Letcher	510,642.67	23,826.99	4.66	567	5.7	10	490	56.7	176	42.02	.005	.276
Lewis	226,995.54	38,329.15	16.88	1,922	53.2	31	775	62.0	165	19.94	.005	.300
Lincoln	282,411.53	38,455.27	13.61	2,297	43.9	22	1,276	104.4	176	16.74	.002	.171
Livingston	117,426.36	25,664.00	21.85	649	35.3	19	457	34.1	163	39.54	.010	.345
Logan	335,654.97	42,438.16	12.64	2,170	52.5	29	1,665	74.8	175	19.55	.002	.146
Lyon	106,389.57	10,948.74	10.29	596	39.6	7	496	85.1	166	18.37	.002	.133
Madison	365,488.91	56,832.99	15.54	2,830	55.1	28	2,072	101.1	168	20.08	.002	.163
Magoffin	217,598.27	8,671.74	3.98	342	7.4	4	207	85.5	166	25.35	.003	.252
Marion	221,479.55	27,451.60	12.39	1,747	51.1	17	982	102.7	176	15.71	.002	.159
Marshall	192,219.78	16,624.37	8.64	887	35.3	15	650	59.1	165	18.74	.003	.155
Martin	173,029.19	12,232.89	7.06	744	21.6	5	291	143.8	166	16.44	.002	.253
Mason	278,727.90	38,496.17	13.81	1,835	63.2	37	1,776	49.5	174	20.97	.002	.125
McCracken	253,831.06	22,762.09	8.96	1,917	55.5	16	1,136	119.8	162	11.87	.001	.124
McCreary	243,435.29	11,256.77	4.62	639	12.4	8	370	79.8	174	17.61	.002	.175
McLean	171,265.63	23,760.40	13.87	1,064	47.7	12	1,024	88.6	173	22.33	.002	.134
Meade	157,690.77	24,443.85	15.50	970	44.0	18	760	53.8	156	25.19	.004	.206
Menifee	102,140.96	9,606.45	9.40	279	17.2	5	278	55.8	166	34.43	.004	.208
Mercer	168,176.89	28,440.66	16.00	1,368	70.4	18	1,177	76.0	173	20.78	.002	.140
Metcalfe	162,750.62	14,163.86	8.70	529	19.9	7	639	75.5	163	26.77	.002	.136
Monroe	289,695.58	8,071.25	2.99	275	6.9	5	324	55.0	161	29.35	.003	.155
Montgomery	189,920.34	12,719.08	9.09	853	40.8	11	934	77.5	175	14.91	.0009	.078
Morgan	248,607.90	9,138.00	3.67	797	17.7	6	257	132.8	166	11.46	.002	.214
Muhlenberg	376,652.05	23,860.15	6.33	2,114	30.1	15	918	140.9	174	11.28	.001	.149
Nelson	321,744.90	41,080.25	12.76	1,322	35.0	23	1,169	57.4	173	31.07	.004	.203
Nicholas	124,902.43	26,104.75	20.90	950	74.3	17	1,060	55.8	175	27.47	.003	.141
Ohio	350,344.37	39,076.01	11.15	1,547	29.8	28	1,520	55.2	164	25.25	.003	.157
Oldham	206,533.74	33,694.37	16.31	1,129	58.6	16	628	70.5	174	29.84	.004	.308
Owen	139,153.87	47,030.34	33.79	1,395	79.1	25	1,084	55.8	161	33.71	.005	.279
Owsley	129,128.52	5,404.61	7.18	477	19.2	4	223	119.2	163	11.33	.001	.149
Pendleton	147,363.28	27,361.80	18.56	1,217	69.7	24	1,155	50.7	164	23.48	.003	.144

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TABLE A—MISCELLANEOUS INFORMATION CONCERNING TRANSPORTATION IN KENTUCKY 1947-48—Cont.

County	Total Current Expenses	Transportation Costs	Per Cent Current Expenses Trans.	Average Number Trans. Daily	Per Cent Census Trans.	Number Vehicles	Total Daily Mi.	Pupils per Bus	Length of Term	Annual Cost Pupil Transp.	Cost	
											Per Pupil Mile	Per Bus Mile
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Perry	\$ 542,336.27	\$ 18,807.58	3.46	542	4.48	7	620	77.4	175	\$34.70	\$0.002	\$0.173
Pike	1,255,277.19	86,661.48	6.90	5,088	21.8	34	2,012	149.6	175	17.03	.002	.245
Powell	104,106.28	9,972.72	9.57	253	12.6	8	260	31.6	166	39.41	.007	.231
Pulaski	418,223.07	22,686.18	5.42	847	11.2	13	872	65.1	170	26.78	.002	.153
Robertson	64,785.18	7,571.37	11.68	340	50.0	7	303	48.5	165	22.26	.003	.151
Rockcastle	179,091.87	10,215.98	5.70	378	10.3	5	392	75.6	176	27.02	.002	.148
Rowan	196,610.30	12,348.81	6.28	753	18.4	8	365	94.1	173	16.40	.002	.196
Russell	213,559.63	1,869.00	.87	287	7.4	4	462	71.7	176	6.51	.0003	.023
Scott	267,440.53	42,226.45	15.78	1,535	74.2	19	1,530	80.7	164	27.50	.002	.168
Shelby	314,292.24	49,110.71	15.62	2,250	77.9	31	1,860	72.5	173	21.82	.002	.153
Simpson	214,981.66	26,546.62	12.34	1,207	47.2	18	868	67.0	175	21.99	.003	.175
Spencer	114,494.23	17,845.31	15.58	398	27.8	11	270	36.0	175	44.83	.010	.378
Taylor	137,294.39	1,367.50	.99	60	2.3	5	94	12.0	167	22.79	.007	.087
Todd	208,410.94	16,799.81	8.06	1,038	39.36	9	657	115.0	175	16.18	.001	.146
Trigg	188,440.95	20,954.70	11.12	1,052	40.2	18	919	58.4	176	19.91	.002	.130
Trimble	92,075.78	14,905.81	16.18	817	65.4	14	560	58.3	155	18.24	.003	.172
Union	267,709.77	36,981.54	13.81	1,953	61.1	18	1,349	108.5	170	18.93	.001	.161
Warren	373,475.62	63,754.05	17.07	2,383	43.7	46	2,527	51.8	163	26.75	.003	.155
Washington	177,067.44	35,292.28	19.93	1,581	63.7	30	1,133	52.7	175	22.32	.003	.178
Wayne	207,792.62	14,422.55	6.94	503	11.9	12	498	41.9	163	28.67	.004	.178
Webster	185,187.72	23,333.74	12.60	1,050	58.3	18	836	58.3	176	22.22	.003	.159
Whitley	314,364.26	12,549.31	3.99	835	12.4	11	487	75.9	156	15.02	.002	.165
Wolfe	165,238.28	7,026.03	4.25	455	15.7	4	333	113.7	176	15.44	.001	.120
Woodford	137,699.00	24,616.92	17.87	1,183	77.1	23	1,032	51.4	175	20.81	.003	.136
TOTALS	\$30,690,177.93	\$3,163,742.54	10.30	149,994	31.3	2,004	104,848	77.0	162	\$21.10	\$0.0025	\$0.137

TOTALS	\$30,690,177.93	\$3,163,742.54	10.30	149,994	31.3	2,004	104,848	77.0	162	\$21.10	\$0.0025	\$0.187
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TABLE B—SCHOOL TRANSPORTATION INFORMATION FOR SCHOOL YEARS ENDING 1935-36, 1940-41 and 1945-46

County	1			2			3		
	1935-36			1940-41			1945-46		
	Total Current Expenses	Transportation Costs	Per Cent Current Expenses Transp.	Total Current Expenses	Transportation Costs	Per Cent Current Expenses Transp.	Total Current Expenses	Transportation Costs	Per Cent Current Expenses Transp.
Adair	\$ 66,096.00	\$ 967.20	1.4	\$ 75,881.60	\$ 1,266.75	1.6	\$ 133,101.49	\$ 7,241.50	5.4
Allen	65,563.61	8,795.43	13.4	72,070.04	12,307.26	17.0	101,706.91	17,682.21	17.4
Anderson	40,670.21	—	—	47,168.12	5,608.48	11.8	70,911.79	11,577.88	16.3
Ballard	72,830.15	4,570.53	6.2	77,401.04	11,826.22	15.2	123,763.08	21,722.39	17.5
Barren	88,563.64	3,731.50	4.2	109,290.67	12,088.40	11.0	175,412.38	26,848.53	15.3
Bath	52,170.04	4,101.06	7.8	80,114.40	17,999.88	22.4	104,344.81	19,964.96	19.1
Bell	141,584.93	7,476.86	5.2	161,340.01	11,784.78	7.3	271,525.83	14,191.95	5.2
Boone	61,730.42	13,040.47	21.1	85,843.03	21,524.51	25.0	127,763.10	30,702.49	24.0
Bourbon	97,319.91	15,991.50	16.4	132,292.89	32,627.29	24.6	172,110.56	30,870.43	17.9
Boyd	64,321.52	3,255.53	5.0	81,323.85	15,758.33	19.3	113,674.01	23,338.55	20.5
Boyle	61,748.44	7,881.02	12.7	77,720.14	9,850.18	12.6	119,024.15	15,588.56	13.0
Bracken	49,209.09	8,097.47	16.4	78,041.70	19,331.00	24.7	96,037.24	23,112.86	29.2
Breathitt	99,756.33	3,738.25	3.7	120,895.90	7,896.22	6.5	207,142.97	24,272.16	11.7
Breckinridge	75,732.26	5,378.42	7.1	101,004.37	12,938.19	12.8	126,165.34	17,868.22	14.1
Bullitt	38,971.32	6,069.95	15.5	71,026.45	14,235.63	20.0	100,158.32	20,117.36	20.0
Butler	62,547.02	—	—	71,281.72	3,315.79	4.6	118,446.87	10,123.09	8.5
Caldwell	50,628.68	6,092.41	12.0	53,271.10	4,975.54	9.3	68,511.75	8,550.80	12.4
Calloway	79,374.44	3,950.64	4.9	81,812.82	9,734.19	11.8	124,301.11	20,677.36	16.6
Campbell	56,597.78	6,179.50	10.9	90,858.17	24,520.76	26.9	130,893.29	26,390.53	20.5
Carlisle	34,535.89	1,278.05	3.7	56,595.04	7,365.27	13.0	60,866.76	9,398.14	15.4
Carroll	41,814.16	13,565.15	32.4	42,207.36	15,628.97	37.0	54,085.08	17,457.96	32.2
Carter	132,394.41	1,834.50	1.3	152,031.28	5,647.21	3.7	313,530.77	33,932.30	10.8
Casey	72,342.51	—	—	85,227.84	—	—	146,395.23	825.00	.5
Christian	102,889.73	3,088.97	3.0	122,760.27	11,186.43	9.0	169,866.35	24,229.50	14.2
Clark	94,569.96	10,345.70	10.9	105,342.05	20,779.24	19.7	135,488.48	26,046.16	19.2
Clay	105,171.38	—	—	126,367.30	—	—	215,989.79	445.00	.2
Clinton	33,372.95	—	—	41,127.20	—	—	87,806.51	3,226.72	3.6
Crittenden	43,403.53	2,245.20	5.1	43,462.88	3,557.48	8.1	66,713.80	12,309.72	18.4

TABLE B—Continued

County	1			2			3		
	1935-36			1940-41			1945-46		
	Total Current Expenses	Transportation Costs	Per Cent Current Expenses Transp.	Total Current Expenses	Transportation Costs	Per Cent Current Expenses Transp.	Total Current Expenses	Transportation Costs	Per Cent Current Expenses Transp.
Cumberland	\$ 44,558.57	\$ 810.50	1.8	\$ 53,453.92	\$ 4,418.03	8.2	\$ 89,944.65	\$ 7,695.18	8.5
Davies	154,613.99	26,377.22	17.0	183,240.52	38,708.64	21.1	281,912.67	52,732.48	18.7
Edmonson	58,874.15	2,927.91	4.9	67,071.56	6,299.20	9.3	104,199.33	13,002.18	12.4
Elliott	35,357.96	687.80	1.9	48,167.88	594.30	1.2	102,128.07	5,200.08	5.0
Estill	53,885.62			76,296.50	994.07	1.3	98,377.84	1,487.39	1.5
Fayette	232,372.02	40,530.11	17.4	353,116.74	47,373.30	13.4	467,832.73	58,729.46	12.5
Fleming	51,250.35	8,960.20	17.4	98,255.31	22,743.59	23.1	121,018.26	28,533.00	23.5
Floyd	297,231.99	398.46	.1	353,874.57	14,935.30	4.2	538,129.33	33,217.08	6.1
Franklin	70,059.11	14,021.77	20.0	116,036.31	15,764.50	13.5	224,191.53	37,326.65	16.6
Fulton	42,629.58	2,874.57	6.7	47,129.50	4,795.83	10.1	70,914.09	11,191.72	15.7
Gallatin	21,013.14	3,479.22	16.5	32,767.31	7,245.70	22.1	46,281.10	9,153.30	19.7
Garrard	71,892.76	11,685.92	16.2	81,833.92	19,822.92	24.2	115,846.08	30,414.64	26.2
Grant	73,967.52	10,964.95	14.8	91,546.15	15,953.20	17.4	117,511.02	30,510.56	25.9
Graves	134,216.83	19,506.95	14.5	139,005.70	23,872.80	17.1	203,932.77	48,350.63	23.7
Grayson	73,484.04			93,336.63	6,741.51	7.2	119,694.48	9,355.89	7.8
Green	44,726.01	229.50	.5	56,488.09	2,117.00	3.7	88,336.48	3,096.65	3.5
Greenup	89,061.61	2,228.38	2.5	105,010.76	6,045.20	5.7	154,705.74	23,901.06	15.4
Hancock	41,566.73	2,273.05	5.4	50,559.05	5,485.85	10.8	66,969.57	10,089.69	15.0
Hardin	91,085.68	11,820.02	12.9	133,827.89	23,467.99	17.5	227,207.43	39,467.10	17.3
Harlan	270,793.69	9,758.17	3.6	359,649.17	23,844.02	6.6	669,956.38	21,843.54	3.2
Harrison	81,997.65	15,677.76	19.1	93,269.51	19,822.68	21.2	139,358.85	32,761.33	23.5
Hart	76,448.24	8,197.45	10.7	84,594.28	8,433.50	10.0	106,439.83	17,853.98	16.7
Henderson	128,575.78	25,076.05	19.5	133,418.56	31,394.11	23.5	196,639.03	38,656.00	19.6
Henry	39,115.45	9,974.89	11.1	102,133.93	16,088.31	15.7	142,110.40	19,316.84	13.5
Hickman	57,395.10	2,746.29	4.7	71,826.25	8,865.82	12.3	83,931.60	14,062.10	16.7
Hopkins	124,664.21	7,769.66	6.2	111,312.51	12,815.43	11.5	187,949.26	30,481.85	16.2
Jackson	58,413.57	462.50	.7	73,482.36	630.00	.8	135,859.25	5,706.00	4.1
Jefferson	435,741.49	48,637.39	11.1	563,483.31	82,952.51	14.7	1,108,963.84	121,521.35	10.9
Jessamine	55,381.06			68,027.17	9,287.94	13.6	105,560.64	17,467.56	16.5
Johnson	103,368.75	2,791.95	2.7	117,003.63	8,832.64	7.5	193,726.06	16,115.29	8.3
Kenton	118,430.27	20,378.88	17.2	243,074.25	22,908.71	9.4	219,932.14	32,831.05	14.9
Knott	96,943.29	2,369.48	2.4	133,283.47	4,221.38	3.1	212,736.15	12,156.76	5.7
Knox	95,276.85	4,738.67	4.9	140,593.33	16,075.76	11.4	251,237.21	17,538.14	6.9
Larue	33,630.29	1,633.50	4.8	46,261.36	2,244.96	4.8	85,053.71	9,275.53	10.9
Laurel	98,535.39	3,833.54	3.8	129,466.09	12,027.58	9.2	191,818.28	16,052.57	8.3
Lawrence	84,061.40	5,666.39	6.7	144,699.57	16,502.23	10.7	172,779.47	15,842.42	9.1
Lee	53,608.99	781.70	1.4	77,886.13	2,053.02	2.6	97,506.63	5,152.96	5.2
Leslie	67,250.63	715.64	1.0	79,327.52	2,440.00	3.0	143,100.64	3,118.91	2.1
Letcher	160,931.22	5,693.72	3.5	189,852.74	15,095.15	7.9	334,339.59	16,547.80	4.9
Lewis	79,961.54	13,015.47	16.2	113,440.51	25,476.25	22.4	144,962.53	35,278.56	24.3
Lincoln	77,917.64	8,421.76	10.8	118,307.24	16,988.83	14.3	168,775.45	26,511.98	15.7
Livingston	46,186.66	1,844.15	3.9	52,577.24	6,844.70	13.0	72,447.42	16,742.50	23.1
Logan	111,180.71	5,665.00	5.0	130,886.74	14,931.25	11.4	190,042.33	35,817.99	18.8
Lyon	26,172.76			29,134.71	79.00	.2	31,282.94	243.70	.7
Madison	124,277.68	9,108.64	7.3	167,165.86	27,875.05	16.6	224,117.18	35,750.77	15.9
Magoffin	88,449.67			109,813.10	860.06	.7	160,346.26	5,414.32	3.3
Marion	70,234.11	4,044.89	5.7	83,886.26	13,833.18	16.4	123,078.49	22,282.40	18.1
Marshall	61,621.72	20.00	.03	82,885.34	6,153.67	7.4	92,324.54	8,564.65	9.2
Martin	59,747.76	537.43	.8	88,951.84	5,164.88	5.8	114,828.32	6,426.44	5.5
Mason	120,486.44	27,674.73	22.9	132,693.55	27,684.58	20.8	199,466.13	40,179.47	20.1
McCracken	102,491.64	12,888.47	12.5	107,970.10	17,093.01	15.8	152,477.55	19,322.98	12.6
McCreary	76,859.73	3,031.63	3.9	95,136.08	3,326.57	3.4	181,181.79	6,674.84	3.6
McLean	55,491.57	7,193.81	12.9	60,507.24	7,231.00	11.9	96,756.87	15,377.07	15.8
Meade	56,268.39	6,170.14	10.9	68,343.50	12,717.00	18.6	100,618.29	17,885.50	17.7
Menifee	33,001.74			34,076.31			56,839.05	3,189.00	5.6
Mercer	81,888.48	14,089.60	17.2	85,492.45	20,075.97	23.4	108,485.11	23,848.09	21.9
Metcalfe	47,544.19	2,340.00	4.9	60,238.07	5,348.86	8.8	98,216.20	9,095.84	9.2
Monroe	53,105.17	1,908.76	3.5	82,059.14	3,120.55	3.8	136,480.76	5,558.60	4.0
Montgomery	49,350.69	5,526.18	11.1	66,253.80	12,813.90	19.3	74,916.38	11,332.81	15.1
Morgan	82,455.05			94,213.51			172,933.28	4,113.32	2.3
Muhlenberg	145,209.63	8,517.40	5.8	149,691.63	12,955.27	8.6	247,570.87	19,469.83	7.8
Nelson	68,082.23	2,698.50	3.9	96,357.68	12,996.07	13.4	184,274.99	28,110.57	15.2
Nicholas	46,853.76	8,789.80	18.9	51,632.96	16,642.14	32.2	77,668.15	20,582.56	26.5
Ohio	127,916.78	5,011.99	3.9	166,070.43	13,278.30	7.9	203,837.01	24,505.36	12.0
Oldham	63,831.47	7,962.37	12.5	68,037.79	9,827.56	14.4	114,139.23	16,447.98	14.4
Owen	46,722.84	9,411.80	20.1	55,946.60	19,247.49	34.4	83,425.52	30,293.67	36.3

TABLE B—Continued

County	1			2			3		
	1935-36			1940-41			1945-46		
	Total Current Expenses	Transportation Costs	Per Cent Current Expenses Transp.	Total Current Expenses	Transportation Costs	Per Cent Current Expenses Transp.	Total Current Expenses	Transportation Costs	Per Cent Current Expenses Transp.
Owsley	\$ 38,872.25			\$ 45,739.18	\$ 210.00	.4	\$ 92,139.53	\$ 6,328.21	6.8
Pendleton	65,186.25	14,455.75	22.1	70,876.88	14,373.09	20.2	94,298.60	21,844.74	23.1
Perry	157,800.28	3,855.18	2.4	213,299.79	7,233.42	3.3	365,830.36	11,550.12	3.1
Pike	373,609.27	1,144.90	.3	444,009.24	35,612.42	8.0	704,301.40	75,446.63	10.7
Powell	44,652.68	1,789.44	4.0	42,307.83	2,331.50	5.5	72,893.66	9,676.40	13.2
Pulaski	134,156.27	6,058.67	4.5	156,447.86	4,401.77	2.8	270,723.21	14,412.57	5.3
Robertson	16,852.58	1,014.25	6.0	22,533.29	4,719.74	20.9	32,561.93	7,127.74	21.8
Rockcastle	62,406.90	840.40	1.3	70,622.79	181.00	.2	122,236.86	6,090.37	4.9
Rowan	71,688.89	3,851.00	5.3	90,942.74	8,123.50	8.9	116,620.74	8,522.18	7.3
Russell	56,642.12			69,433.95	758.95	1.0	138,645.54	422.24	.3
Scott	91,258.60	15,267.60	16.7	122,151.17	30,285.58	24.7	166,321.16	39,469.59	23.7
Shelby	99,849.69	16,210.83	16.2	129,314.74	28,662.66	22.1	198,422.57	42,338.64	21.3
Simpson	37,346.77	1,579.86	4.2	54,224.43	13,903.31	25.6	148,859.38	22,218.58	14.9
Spencer	39,032.06	581.05	1.4	47,064.96	2,233.01	4.7	61,782.35	4,014.61	6.4
Taylor	46,029.18			48,852.92			79,802.38		
Todd	48,205.62	2,315.50	4.8	64,865.57	7,191.00	11.0	105,702.45	11,214.28	10.6
Trigg	58,423.72	2,861.71	4.8	68,647.58	8,852.85	12.8	76,722.86	10,923.92	14.2
Trimble	33,934.45	3,004.00	8.8	35,771.36	6,912.06	19.3	44,907.04	5,983.42	13.3
Union	64,428.61	8,765.52	13.6	124,596.78	15,115.37	12.1	161,530.81	25,106.70	15.5
Warren	131,847.84	17,441.28	13.2	160,917.66	29,493.95	18.3	220,617.39	42,434.47	19.2
Washington	58,202.58	2,163.61	3.7	77,234.52	11,669.94	15.1	105,631.10	21,029.45	19.9
Wayne	72,523.53	1,891.97	2.6	84,563.46	7,801.72	9.2	146,934.52	10,965.06	7.4
Webster	77,024.84	10,928.30	14.1	69,595.34	8,465.00	12.1	77,067.81	11,353.57	14.7
Whitley	99,645.98	4,439.00	4.4	123,934.55	9,351.10	7.5	217,101.88	9,299.27	4.2
Wolfe	41,964.94			58,401.96	311.78	.5	87,814.78	1,409.85	1.6
Woodford	55,594.78	12,235.01	22.0	58,889.17	15,499.07	26.3	74,789.85	21,428.28	28.6
TOTALS	\$10,037,962.02	\$776,922.82	7.7	\$12,594,483.04	\$1,483,932.61	11.7	\$19,349,724.70	\$2,351,601.34	12.1

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TABLE B—Continued



TOTALS	\$10,037,962.02	\$776,922.82	7.7	\$12,594,483.04	\$1,483,932.61	11.7	\$19,849,724.70	\$2,351,601.34	12.1
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TABLE B—Continued

County	4						5			6		
	1935-36		1940-41		1945-46		1935-36	1940-41	1945-46	1935-36	1940-41	1945-46
	Av. No. Pupils Transp. Daily	Per Cent Census Transp.	Av. No. Pupils Transp. Daily	Per Cent Census Transp.	Av. No. Pupils Transp. Daily	Per Cent Census Transp.	Number Vehicles	Number Vehicles	Number Vehicles	Total Daily Mileage	Total Daily Mileage	Total Daily Mileage
Adair			6	.1	263	6.5		1				
Allen	350	9.42	411	10.8	779	29.5	9	16	14	304	611	650
Anderson			426	24.4	472	30.6		9	10		346	572
Ballard	410	16.5	1,600	76.7	953	50.0	9	25	23	396	1,216	990
Barren	85	1.4	589	9.9	1,177	24.6	4	12	24	65	449	1,143
Bath	258	0.8	1,463	49.8	1,409	51.8	5	18	17	155	864	900
Bell	350	4.07	475	4.9	452	5.2	4	10	12	280	451	503
Boone	1,321	64.0	1,260	60.1	1,442	72.4	22	27	23	792	1,109	1,010
Bourbon	1,152	55.8			1,529	53.9	19	24	18	907		1,396
Boyd	235	9.4	1,004	39.1	1,303	51.4	3	12	11	105	540	680
Boyle	872	34.4	1,169	46.3	1,041	47.3	8	13	12	450	610	655
Bracken	762	45.9	1,204	68.8	1,173	69.1	18	24	23	231	611	900
Breathitt	444	6.3	617	8.1	776	12.6	3	6	6	128	562	570
Breckinridge	410	9.1	658	12.9	860	22.9	7	13	15	186	433	522
Bullitt	468	25.0	868	40.9	1,137	57.5	17	21	13	255	416	800
Butler			208	5.0	278	8.7		6	7		293	408
Caldwell	350	15.6	493	21.9	1,522	27.3	4	6	8	144	625	361
Calloway	445	10.7	1,140	31.7	1,551	56.2	11	18	24	113	765	891
Campbell	281	14.5	910	44.1	1,159	57.8	8	21	16	264	530	797
Carlisle	79	4.5			682	46.9	2	8	7	58	501	488
Carroll	950	72.6	665	44.3	578	51.1	20	23	16	312	474	794
Carter	45	.59	681	8.9	1,403	20.0	1	9	14	24	452	734
Casey					5	.1			1			18
Christian	235	4.19	800	15.6	1,027	22.6	5	14	18	100	630	870
Clark	1,018	40.1	1,425	57.2	1,599	64.9	14	22	19	560	950	977
Clay					20	.2				2		
Clinton					149	6.1				2		172
Crittenden	150	5.75	326	12.0	403	19.3	2	11	9	76	406	402

TABLE B—Continued

County	4						5			6		
	1935-36		1940-41		1945-46		1935-36	1940-41	1945-46	1935-36	1940-41	1945-46
	Av. No. Pupils Transp. Daily	Per Cent Census Transp.	Av. No. Pupils Transp. Daily	Per Cent Census Transp.	Av. No. Pupils Transp. Daily	Per Cent Census Transp.	Number Vehicles	Number Vehicles	Number Vehicles	Total Daily Mileage	Total Daily Mileage	Total Daily Mileage
Cumberland	80	2.5	235	7.1	257	10.6	1	4	5	60	250	322
Daviess	1,785	29.1	2,723	44.6	2,961	51.7	26	43	44	1,092	1,891	2,380
Edmonson	262	7.3	552	15.1	728	24.1	11	16	14	132	525	710
Elliott	50	1.9			144	4.7	1		3	16		240
Estill			171	3.8	263	7.7		1	1		32	70
Fayette	3,053	52.6	3,800	56.5	3,425	51.9	29	35	35	1,392	2,543	2,220
Fleming	600	20.3	1,624	48.9	1,298	47.9	17	37	30	198	510	1,265
Floyd			2,007	11.5	2,476	16.1		14	12		776	635
Franklin					2,344	33.0	21	23	23	840	850	1,150
Fulton	365	14.9	741	33.0	667	36.9	4	6	7	80	362	459
Gallatin	120	13.7	486	44.8	388	47.4	3	11	9	96	384	426
Garrard	1,469	50.9	1,268	47.3	1,236	58.3	20	25	23	360	619	1,010
Grant	710	31.9	1,371	68.7	1,220	74.2	18	26	25	540	970	1,128
Graves	1,421	21.0	2,378	40.5	2,520	51.2	43	49	39	796	1,211	2,165
Grayson			350	7.5	374	11.0		6	8		225	650
Green			78	2.2	49	2.0		5	2		91	149
Greenup	206	4.37	241	5.0	344	9.0	2	6	10	96	407	703
Hancock	225	12.7	586	32.8	573	39.9	2	12	11	100	430	510
Hardin	841	18.8	1,944	40.1	2,186	46.1	14	29	29	420	1,109	1,331
Harlan	875	4.93	1,250	6.1	1,752	9.1	8	13	16	1,000	1,402	1,074
Harrison	1,653	60.9	1,439	60.2	1,296	66.1	18	22	23	954	1,039	1,233
Hart	405	9.5	617	14.8	802	25.8	8	17	17	280	520	864
Henderson	1,484	35.1	1,973	42.3	2,467	76.4	32	39	33	640	1,376	1,619
Henry	600	21.9	1,119	41.9	997	43.7	10	19	20	300	1,100	892
Hickman	290	11.1	832	34.8	739	42.3	8	13	10	250	545	543
Hopkins	345	5.4	1,160	18.6	1,557	31.1	6	21	23	170	658	1,116
Jackson	16	.3	38	.7	141	3.5	2	2	4	40	112	265
Jefferson	2,264	17.6	5,130	34.8	5,565	31.2	34	58	64	802	2,955	3,011

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Jessamine			884	35.1	1,000	50.6		11	12		806	921
Johnson	340	3.8	603	9.1	433	8.3			4	100		325
Kenton	1,603	46.5	2,371	55.3	2,087	53.8	2		31	1,015	1,076	1,141
Knott	173	2.6	515	7.2	980	15.5	2	3	5	136	220	245
Knox	545	7.1	2,538	29.0	2,020	27.1	5	12	13	270	668	600
Larue	53	2.6	40	2.0	252	13.3	2	3	3	22	57	347
Laurel	70	1.0	570	7.9	515	8.1	1	5	6	89	520	570
Lawrence	200	3.9	751	12.5	951	21.1	3	6	8	90		455
Lee	66	2.2	200	5.3	134	4.1	3	2	4	30	120	192
Leslie	35	.7	282	5.5	277	6.2	1	3	2	28	173	192
Letcher	377	3.7	610	5.8	509	5.0	6	10	8	247	693	490
Lewis	995	25.0	1,802	42.2	1,341	34.8	25	38	32	375	768	955
Lincoln	858	20.0	1,680	31.9	2,126	42.8	18	25	21	470	1,129	1,084
Livingston	100	4.5			469	28.1	5	12	15	53	250	375
Logan	400	7.5	1,493	27.9	1,546	37.8	8	17	23	288	712	1,265
Lyon			3	.1	7	.6		2	1		20	20
Madison	976	15.4	2,710	42.3	2,276	43.9	16	22	26	230	1,689	2,071
Magoffin					225	4.8			4			358
Marion	217	5.2	806	18.9	1,221	36.4	6	15	13	120	650	800
Marshall			379	10.2	480	18.3		9	14		298	468
Martin			134	3.4	514	15.0		8	6		160	199
Mason	1,961	59.4			1,708	58.4	44	43	37	748	1,413	1,736
McCracken	1,090	28.9	1,691	46.0	2,088	60.8	12	18	12	708	1,160	949
McCreary	121	2.5	387	6.9	548	10.9	4	4	5	88	278	238
McLean	581	21.3	1,105	43.6	1,262	60.6	4	10	11	340	719	909
Meade	273	9.9	631	29.9	939	44.7	9	16	15	216	435	760
Menifee					140	8.7			4			132
Mercer	1,366	47.5	1,291	53.5	1,267	67.7	15	14	16	675	1,036	1,122
Metcalfe	172	5.5	289	8.8	278	10.2	3	5	6	115	300	466
Monroe	135	3.3	250	5.2	238	5.7	3	5	5	35	200	324
Montgomery	205	8.1	828	31.1	920	42.9	9	15	11	200	533	652
Morgan			80	1.4	532	11.3		2	3			192
Muhlenberg	593	6.9	1,757	20.0	1,720	24.8	8	14	12	232	633	914
Nelson	165	4.5	655	17.4	1,088	30.2	5	12	19	175	535	763
Nicholas	578	35.6	971	64.1	1,118	84.5	11	18	18	297	650	1,057
Ohio	411	5.6	1,151	16.7	1,714	32.3	19	19	24	200	425	1,335
Oldham	571	32.9	900	51.7	892	51.0	14	16	15	516	114	654
Owen	777	35.9	1,510	65.1	1,267	68.5	12	19	25	444	1,009	988

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TABLE B—Continued

County	4						5			6		
	1935-36		1940-41		1945-46		1935-36	1940-41	1945-46	1935-36	1940-41	1945-46
	Av. No. Pupils Transp. Daily	Per Cent Census Transp.	Av. No. Pupils Transp. Daily	Per Cent Census Transp.	Av. No. Pupils Transp. Daily	Per Cent Census Transp.	Number Vehicles	Number Vehicles	Number Vehicles	Total Daily Mileage	Total Daily Mileage	Total Daily Mileage
Owsley			25	.9	276	11.0		1	3		16	122
Pendleton	1,473	65.7	1,297	59.9	1,059	62.9	33	25	20	1,128	1,328	1,139
Perry	160	1.3	620	4.6	515	4.3	3	7	7	170	274	620
Pike	75	38.6	2,967	13.1	4,518	20.4	3	26	29	24	1,332	1,864
Powell	185	7.6	113	4.4	164	8.2	2	2	3	170	108	154
Pulaski	461	5.1	673	7.1	496	6.5	6	11	11			678
Robertson	111	14.6	205	26.0	284	42.5	2	8	8			330
Rockcastle	119	2.6			292	7.7	1		5			494
Rowan	234	5.2	599	12.0	628	15.3	6	9	7	88	297	283
Russell			10	.2	132	3.4		2	2		64	160
Scott	1,100	39.6	1,523	60.0	1,511	72.3	12	28	20	400	1,519	1,282
Shelby	1,214	43.4	1,862	62.3	2,127	73.1	16	26	28	640	1,465	1,512
Simpson	150	7.2	884	41.7	1,036	40.3	4	17	17	70	783	1,000
Spencer	18	.9	44	2.3	84	5.5	1	2	5	22	65	204
Taylor												
Todd	193	8.1	592	20.5	784	33.1	4	6	7	120	437	567
Trigg	210	5.8	488	13.9	550	26.3	6	8	12	180	350	538
Trimble	326	28.2	507	31.8	663	52.0	6	9	11	180	370	474
Union	575	19.7	1,416	33.8	1,274	39.4	20	24	14	180	773	778
Warren	1,850	31.1	2,027	33.9	1,955	38.6	52	49	41	500	1,325	2,129
Washington	60	1.8	902	23.7	1,203	47.9	1	18	18	24	730	807
Wayne	165	3.4	314	6.2	340	8.0	4	9	9	120	350	385
Webster	1,053	32.6	975	31.9	900	44.4	11	15	16	242	590	824
Whitley	286	4.1	382	4.9	567	8.1	5	4	9	220	400	356
Wolfe					54	1.8			2			66
Woodford	1,072	55.8	1,361	72.7	1,059	67.9	21	23	23	740	880	1,032
TOTALS	56,896	11.0	104,164	19.0	122,574	25.9	1,056	1,713	1,725	30,329	69,796	90,405

TABLE B—Continued

TOTALS	56,896	11.0	104,164	19.0	122,574	25.9	1,056	1,713	1,725	30,329	69,796	90,405
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TABLE B—Continued

County	7			8			9			10			11		
	1935-36	1940-41	1945-46	1935-36	1940-41	1945-46	1935-36	1940-41	1945-46	1935-36	1940-41	1945-46	1935-36	1940-41	1945-46
	Pupils Per Bus	Pupils Per Bus	Pupils Per Bus	Length of Term	Length of Term	Length of Term	Annual Cost Pupil Transp.	Annual Cost Pupil Transp.	Annual Cost Pupil Transp.	Cost Per Pupil Mile	Cost Per Pupil Mile	Cost Per Pupil Mile	Cost Per Bus Mile	Cost Per Bus Mile	Cost Per Bus Mile
Adair				140	140	160	\$	\$211.12	\$27.53	\$	\$		\$	\$	\$
Allen	38	25	56	140	140	140	25.12	29.94	22.70	.005	.006	.003	.206	.143	.194
Anderson		47	47	140	140	160		13.16	24.53		.002	.003		.096	.127
Ballard	45	64	41	160	160	160	11.14	7.39	22.79	.002	.001	.003	.072	.061	.137
Barren	21	48	49	140	140	160	43.90	20.59	22.81	.020	.004	.003	.41	.192	.147
Bath	51	81	83	140	180	160	15.89	12.30	14.16	.004	.001	.002	.188	.116	.139
Bell	87	47	38	140	140	180	21.36	24.81	31.40	.002	.004	.004	.190	.187	.157
Boone	60	46	63	160	170	160	9.87	17.08	21.29	.002	.002	.003	.102	.114	.190
Bourbon	60		85	160	180	180	13.88		20.19	.002		.001	.11		.123
Boyd	78	83	118	180	180	180	13.85	15.69	17.91	.002	.002	.002	.172	.160	.191
Boyle	109	89	87	180	180	180	9.03	8.42	14.97	.001	.001	.002	.097	.089	.132
Bracken	42	50	51	160	180	180	10.62	16.05	23.96	.005	.004	.003	.219	.176	.174
Breathitt	148	102	129	140	140	140	8.41	12.79	31.27	.001	.001	.002	.208	.100	.304
Breckinridge	58	50	57	140	140	160	13.11	19.66	20.78	.004	.004	.004	.206	.213	.214
Bullitt	27	41	87	160	160	170	12.96	16.40	17.69	.005	.005	.002	.148	.214	.148
Butler		34	40	140	140	160		15.94	36.41		.002	.004		.081	.155
Caldwell	87	82	65	140	140	140	17.40	10.09	16.38	.003	.001	.003	.302	.057	.169
Calloway	40	63	65	140	140	140	8.87	8.53	13.33	.006	.001	.003	.249	.091	.166
Campbell	35	43	72	160	180	180	21.99	26.94	23.20	.004	.006	.003	.146	.257	.187
Carlisle	39		97	160	160	140	16.17		13.78	.004		.001	.137	.092	.138
Carroll	47	28	36	160	140	140	14.27	23.50	30.20	.006	.008	.004	.271	.235	.157
Carter	45	75	100	160	160	180	40.76	8.29	24.19	.011	.001	.003	.477	.078	.257
Casey			5	140	140	140			165.00			.065			.327
Christian	47	57	57	140	140	170	13.14	13.92	23.59	.005	.002	.003	.22	.126	.164
Clark	72	64	84	180	180	180	10.16	14.58	16.29	.001	.002	.002	.102	.122	.148
Clay				140	140	110			22.25						
Clinton			75	140	140	180			21.66			.001			.104
Crittenden	75	29	45	140	140	140	14.96	10.91	30.55	.003	.002	.005	.211	.063	.219

TABLE B—Continued

County	7			8			9			10			11		
	1935-36	1940-41	1945-46	1935-36	1940-41	1945-46	1935-36	1940-41	1945-46	1935-36	1940-41	1945-46	1935-36	1940-41	1945-46
	Pupils Per Bus	Pupils Per Bus	Pupils Per Bus	Length of Term	Length of Term	Length of Term	Annual Cost Pupil Transp.	Annual Cost Pupil Transp.	Annual Cost Pupil Transp.	Cost Per Pupil Mile	Cost Per Pupil Mile	Cost Per Pupil Mile	Cost Per Bus Mile	Cost Per Bus Mile	Cost Per Bus Mile
Cumberland	80	58	51	140	140	140	\$10.13	\$18.80	\$29.94	\$0.001	\$0.002	\$0.003	\$0.096	\$0.126	\$0.171
Daviess	68	63	67	160	160	160	14.77	14.21	17.81	.002	.002	.002	.150	.127	.138
Edmonson	23	34	52	140	140	140	11.17	11.41	17.86	.007	.002	.003	.158	.086	.131
Elliott			48	140	140	180	13.75		36.11			.003	.307		.120
Estill		171	263	140	140	140		5.81	5.66		.001	.001		.087	.152
Fayette	105	108	98	180	180	180	13.27	12.46	17.15	.002	.001	.001	.161	.103	.147
Fleming	35	43	43	140	160	160	14.93	14.00	21.98	.009	.006	.003	.323	.279	.141
Floyd		143	206	160	140	180		7.44	13.42		.001	.001		.137	.291
Franklin			102	160	180	180			15.92			.002	.104	.103	.180
Fulton	91	123	95	160	160	180	7.87	6.47	16.78	.002	.001	.001	.224	.083	.135
Gallatin	40	44	43	140	160	160	23.99	14.90	23.59	.006	.003	.003	.258	.111	.134
Garrard	73	50	54	140	140	140	7.95	15.63	24.61	.003	.005	.004	.231	.229	.215
Grant	39	52	49	180	180	170	15.44	11.63	25.01	.002	.002	.003	.011	.091	.159
Graves	33	43	65	140	140	140	13.72	10.03	19.19	.005	.003	.002	.175	.141	.160
Grayson		58	47	140	140	180		19.26	25.02		.004	.002		.214	.080
Green		15	25	140	140	160		27.14	63.20		.011	.005		.166	.130
Greenup	103	40	34	140	140	140	10.81	25.08	69.48	.002	.003	.007	.165	.106	.243
Hancock	112	48	52	140	140	160	10.10	9.36	17.61	.001	.002	.002	.162	.091	.124
Hardin	60	47	75	160	160	160	14.05	12.07	18.05	.003	.002	.002	.175	.132	.185
Harlan	109	96	110	140	140	180	11.15	19.07	12.47	.001	.001	.001	.069	.122	.113
Harrison	92	65	56	160	180	180	9.45	13.77	25.28	.001	.002	.003	.102	.101	.148
Hart	50	36	47	140	140	140	20.24	13.74	22.26	.004	.003	.003	.209	.116	.148
Henderson	46	50	75	160	140	160	16.89	15.91	15.67	.005	.002	.002	.244	.111	.149
Henry	60	58	50	140	180	180	16.62	14.37	19.37	.004	.001	.002	.237	.081	.120
Hickman	36	64	74	140	140	140	9.46	10.65	19.03	.002	.002	.002	.078	.117	.185
Hopkins	57	55	68	140	140	140	22.52	11.04	19.58	.006	.003	.003	.326	.139	.195
Jackson	8	19	35	140	140	170	23.90	16.57	40.47	.010	.002	.004	.082	.040	.127
Jefferson	66	88	87	180	180	170	21.40	16.17	21.84	.005	.002	.003	.336	.156	.237
Jessamine		80	83	180	180	180		10.50	17.47			.001		.064	.105
Johnson	170		121	140	140	180	8.21	14.64	33.36	.001		.002	.199		.275
Kenton	55	79	67	180	180	180	12.71	9.66	15.73	.002	.001	.002	.111	.118	.160
Knott	86	171	196	140	140	160	13.69	8.19	12.40	.001	.001	.002	.124	.137	.310
Knox	109	211	155	140	140	140	8.69	6.33	8.68	.001	.001	.001	.125	.172	.209
Larue	26	13	32	140	140	140	30.82	56.12	36.81	.020	.021	.006	.53	.282	.191
Laurel	70	114	86	140	140	150	54.76	21.10	31.17	.004	.001	.002	.307	.165	.188
Lawrence	66		119	140	160	160	23.33	21.97	16.66	.007		.002	.449		.218
Lee	22	100	33	140	140	140	11.84	10.26	38.45	.008	.001	.006	.186	.122	.192
Leslie	35	94	139	140	140	160	20.44	8.65	11.26	.005	.001	.001	.182	.101	.102
Letcher	62	61	63	160	140	180	15.10	24.74	32.51	.002	.003	.003	.144	.154	.188
Lewis	39	47	42	160	160	160	13.08	14.13	26.31	.006	.004	.005	.216	.207	.231
Lincoln	47	67	101	160	160	160	9.81	10.11	12.47	.002	.001	.002	.111	.094	.153
Livingston	20		31	140	140	140	18.44		35.70	.012		.010	.248	.196	.319
Logan	50	87	67	140	140	160	14.16	10.00	23.17	.003	.002	.003	.140	.149	.177
Lyon			7	140	140	100		26.33	34.81			.019		.028	.122
Madison	61	123	38	160	160	160	9.33	10.28	15.71	.004	.001	.001	.247	.103	.108
Magoffin			56	140	140	140			24.07			.002			.108
Marion	36	53	94	140	140	180	18.64	17.16	18.25	.007	.003	.002	.240	.152	.155
Marshall		42	34	140	140	140		16.23	17.84			.003		.147	.131
Martin		16	86	140	140	150		38.54	12.50			.014		.231	.215
Mason	44		46	160	180	180	14.11		23.52	.005		.003	.231	.108	.129
McCracken	90	93	174	160	140	140	11.82	10.10	9.25	.001	.001	.001	.113	.105	.145
McCreary	30	96	110	140	140	180	25.05	8.59	12.18	.008	.001	.001	.246	.085	.156
McLean	145	110	115	140	160	160	12.38	6.54	12.18	.001	.001	.001	.151	.063	.106
Meade	30	39	63	140	140	140	22.60	20.15	19.05	.007	.005	.003	.204	.208	.168
Menifee			35	140	140	170			22.78			.004			.142
Mercer	91	92	79	160	160	170	10.81	15.55	18.82	.001	.001	.002	.130	.121	.125
Metcalfe	57	57	46	160	140	140	13.60	18.50	32.72	.002	.002	.003	.127	.127	.139
Monroe	45	50	48	140	140	160	14.13	12.48	23.36	.009	.002	.002	.389	.111	.107
Montgomery	22	55	84	160	160	160	26.95	15.47	12.32	.008	.002	.001	.172	.137	.109
Morgan			177	140	140	140			7.73			.001			.153
Muhlenberg	74	125	143	160	150	180	14.36	7.37	11.35	.003	.001	.001	.229	.137	.118
Nelson	33	54	57	140	160	160	16.35	19.84	25.84	.003	.003	.004	.110	.152	.230
Nicholas	52	53	62	160	170	160	15.20	17.13	18.41	.004	.003	.002	.184	.156	.122
Ohio	21	60	71	140	140	160	12.19	11.53	14.30	.008	.004	.002	.178	.225	.115
Oldham	40	56	59	180	160	160	13.94	10.91	13.44	.002	.001	.003	.085	.054	.157
Owen	64	79	51	140	140	140	12.11	12.74	23.91	.002	.002	.004	.151	.136	.219

TABLE B—Continued

County	7			8			9			10			11		
	1935-36	1940-41	1945-46	1935-36	1940-41	1945-46	1935-36	1940-41	1945-46	1935-36	1940-41	1945-46	1935-36	1935-36	1945-46
	Pupils Per Bus	Pupils Per Bus	Pupils Per Bus	Length of Term	Length of Term	Length of Term	Annual Cost Pupil Transp.	Annual Cost Pupil Transp.	Annual Cost Pupil Transp.	Cost Per Pupil Mile	Cost Per Pupil Mile	Cost Per Pupil Mile	Cost Per Bus Mile	Cost Per Bus Mile	Cost Per Bus Mile
Owsley		25	92	140	140	140	\$ 8.40	\$ 8.40	\$22.93		\$0.004	\$0.004		\$0.098	\$0.371
Pendleton	44	51	53	160	160	160	9.81	11.08	20.63	.002	.001	.002	.080	.067	.120
Perry	53	88	74	140	140	180	24.09	11.66	22.43	.003	.002	.001	.161	.198	.103
Pike	25	114	156	140	140	140	15.26	12.00	16.70	.014	.002	.002	.340	.191	.289
Powell	92	56	55	140	140	140	9.67	20.63	59.00	.001	.003	.008	.075	.154	.449
Pulaski			45	140	140	160	13.14	6.54	29.06			.003			.133
Robertson			36	140	140	160	9.13	23.02	25.10			.004			.135
Rockcastle			58	140	140	180	7.06		20.86			.001			.068
Rowan	39	66	90	140	140	160	16.45	13.56	13.57	.008	.003	.002	.312	.195	.138
Russell		5	66	140	140	140		75.89	3.20		.017	.0002		.085	.019
Scott	91	54	76	160	180	170	13.87	19.88	26.12	.003	.002	.002	.238	.111	.181
Shelby	75	71	76	180	170	170	13.35	15.39	19.91	.002	.002	.002	.140	.115	.165
Simpson	37	52	61	140	140	180	10.53	15.72	21.45	.004	.002	.002	.161	.126	.123
Spencer	18	22	17	160	160	160	32.28	50.86	47.79	.009	.010	.007	.165	.215	.123
Taylor				140	140										
Todd	48	98	112	160	160	160	11.99	12.14	14.30	.003	.001	.001	.120	.103	.124
Todd	35	61	46	140	140	140	13.62	18.14	19.86	.003	.003	.003	.113	.181	.145
Trigg				140	140	160									
Trimble	54	56	60	160	160	160	9.21	13.63	9.02	.002	.002	.001	.104	.117	.079
Union	28	59	91	160	180	170	15.24	10.67	19.71	.011	.002	.002	.304	.109	.190
Warren	35	41	48	140	140	140	9.42	14.55	21.71	.007	.004	.003	.249	.159	.142
Washington	60	50	67	140	140	140	36.06	12.93	17.48	.011	.002	.003	.643	.114	.186
Wayne	41	34	38	140	140	140	11.46	24.84	32.25	.003	.005	.005	.112	.159	.203
Webster	96	65	56	140	140	140	10.32	8.68	12.62	.003	.002	.002	.322	.102	.098
Whitley	57	95	63	140	140	140	15.52	24.47	16.40	.003	.002	.003	.144	.167	.187
Wolfe			27	140	140	150			26.11			.005			.142
Woodford	51	59	46	180	180	180	11.41	11.38	20.23	.002	.002	.003	.091	.098	.115
TOTALS	58	65	71	149	151	158	\$13.65	\$13.37	\$19.19	\$0.004	\$0.003	\$0.003	\$0.197	\$0.133	\$0.165

g p b l e i r i h i h i c p d a a b f t d p c f b v l i t

It may be of interest to note that in 1945-46, 1,725 buses traveled 90,405 miles daily with 122,574 pupils at a cost of \$0.165 per bus mile. They averaged 71 pupils per bus and the total cost was \$2,351,601.34 or \$19.19 per pupil transported. In 1947-48 2,004 buses traveled 104,849 miles daily, with 149,817 pupils at a cost of \$0.187 per bus mile. They averaged 75 pupils per bus at a total cost of \$3,163,742.54 or \$21.10 per pupil transported.

It will be seen in Table Number 2 that the annual cost per pupil transported has increased, but even though the cost per pupil has increased, the buses are transporting more pupils per bus, traveling more miles per day, and are being used more days in the year. In addition to the above, the condition of the time has been a contributing factor toward higher costs. Salaries of drivers and mechanics have increased, and the price of parts and supplies are higher than they were a few years ago.

The trend which is shown in Table Number 3 is toward more pupils per bus, which is an important factor in reducing cost per child under the same condition. It is also significant to note that in Table Number 4 a higher per cent of the census is being transported.

There has been an increase in the cost per bus mile as shown in Table Number 6. This does not necessarily mean that there was less efficient management in 1947-48 than in the preceding years, but might be due to the fact that more pupils are being transported per bus and to higher operating costs, but the increased operation costs do not appear to be out of proportion to the service rendered.

\$0.165
\$0.133
\$0.197
\$0.003
\$0.003
\$0.004
\$19.19
\$13.37
\$13.65
153
151
149
71
65
58
TOTALS -----

**Table 1—LENGTH OF TERM COUNTY DISTRICTS**

Number of Days	1935-36	1940-41	1945-46	1947-48
100	-----	-----	1	-----
110	-----	-----	1	-----
140	76	75	38	-----
150	-----	1	3	9
160	33	22	36	44
170	-----	3	10	66
180	11	19	30	-----
	120	120	119	119

**Table 2—ANNUAL COST PER PUPIL TRANSPORTED**

Range	1935-36 Number of Districts	1940-41 Number of Districts	1945-46 Number of Districts	1947-48 Number of Districts
\$ 0.00—\$ 4.99	-----	-----	1	-----
5.00— 9.99	14	17	5	4
10.00— 14.99	46	39	18	9
15.00— 19.99	18	25	32	29
20.00— 24.99	8	11	31	37
25.00— 29.99	6	7	11	21
30.00— 34.99	2	1	10	8
35.00— 39.99	1	1	5	3
40.00— 44.99	2	-----	1	5
45.00— 49.99	-----	-----	1	1
50.00— 54.99	-----	1	-----	-----
55.00— 59.99	1	1	1	1
60.00— 64.99	-----	-----	1	1
65.00— 69.99	-----	-----	1	-----
70.00— 74.99	-----	-----	-----	-----
75.00— 79.99	-----	1	-----	-----
- 211.00	-----	1	-----	-----
Total number of County Districts	98	105	118	119



**Table 3—AVERAGE NUMBER PUPILS PER BUS**

Range	1935-36 Number of Districts	1940-41 Number of Districts	1945-46 Number of Districts	1947-48 Number of Districts
0- 4	-----	-----	1	-----
5- 9	1	1	2	-----
10- 14	-----	1	-----	1
15- 19	1	3	1	1
20- 24	6	1	-----	-----
25- 29	4	4	2	1
30- 34	4	4	5	5
35- 39	13	2	6	2
40- 44	7	7	5	7
45- 49	8	8	14	8
50- 54	7	13	8	12
55- 59	5	12	10	16
60- 64	8	8	7	4
65- 69	3	4	9	4
70- 74	4	1	4	8
75- 79	3	3	6	13
80- 84	1	4	4	4
85- 89	3	4	7	4
90- 94	6	3	4	2
95- 99	1	4	3	3
100-109	5	3	3	7
110-119	1	3	6	5
120-129	-----	3	2	-----
130-139	-----	-----	1	3
140-149	2	-----	1	5
150-159	-----	-----	2	-----
160-169	-----	-----	-----	-----
170-179	1	2	2	-----
180-189	-----	-----	-----	-----
190-199	-----	-----	1	1
200-219	-----	1	1	2
-263	-----	-----	1	-----
270	-----	-----	-----	1
<b>Total number of County Districts</b>	<b>94</b>	<b>99</b>	<b>118</b>	<b>119</b>

**Table 4—PER CENT OF CENSUS TRANSPORTED**

Range	1935-36 Number of Districts	1940-41 Number of Districts	1945-46 Number of Districts	1947-48 Number of Districts
0- 4 per cent	23	12	8	3
5- 9 per cent	24	20	21	12
10-14 per cent	7	11	9	12
15-19 per cent	8	7	6	12
20-24 per cent	6	4	5	4
25-29 per cent	5	4	7	3
30-34 per cent	5	10	7	9
35-39 per cent	4	4	6	8
40-44 per cent	3	11	9	7
45-49 per cent	3	6	7	4
50-54 per cent	2	3	12	8
55-59 per cent	3	3	5	12
60-64 per cent	2	6	3	7
65-69 per cent	1	3	6	8
70-74 per cent	1	1	4	4
75-79 per cent	.....	1	1	4
80-84 per cent	.....	.....	1	2
85-89 per cent	.....	.....	1	.....
<b>Total number of County Districts</b>	<b>97</b>	<b>106</b>	<b>118</b>	<b>119</b>

**Table 5—PER CENT OF CURRENT EXPENSES USED FOR TRANSPORTATION**

Range	1935-36 Number of Districts	1940-41 Number of Districts	1945-46 Number of Districts	1947-48 Number of Districts
0- 4 per cent	35	20	15	20
5- 9 per cent	26	27	26	32
10-14 per cent	18	26	19	33
15-19 per cent	17	16	33	28
20-24 per cent	7	15	18	5
25-29 per cent	.....	7	5	.....
30-34 per cent	1	2	1	1
35-39 per cent	.....	1	1	.....
<b>Total number of County Districts</b>	<b>104</b>	<b>114</b>	<b>118</b>	<b>119</b>

**Table 6—COST IN CENTS PER BUS MILE**

Range	1935-36 Number of Districts	1940-41 Number of Districts	1945-46 Number of Districts	1947-48 Number of Districts
0- 4 cents	1	2	4	1
5- 9 cents	8	21	3	4
10-14 cents	23	45	45	33
15-19 cents	23	20	45	49
20-24 cents	18	13	13	14
25-29 cents	7	3	4	9
30-34 cents	10	.....	4	6
35-39 cents	1	.....	1	2
40-44 cents	1	.....	.....	.....
45-49 cents	2	.....	1	.....
50-54 cents	1	.....	.....	.....
55-59 cents	.....	.....	.....	.....
60-64 cents	1	.....	.....	1
<b>Total number of County Districts</b>	<b>96</b>	<b>104</b>	<b>120</b>	<b>119</b>

**Table 7—COST IN MILLS PER PUPIL MILE**

Range	1935-36 Number of Districts	1940-41 Number of Districts	1945-46 Number of Districts	1947-48 Number of Districts
0- 4	59	86	107	106
5- 9	27	8	10	10
10-14	6	3	1	3
15-19	.....	2	1	.....
20-24	2	1	.....	.....
25-29	.....	.....	.....	.....
<b>Total number of County Districts</b>	<b>94</b>	<b>100</b>	<b>119</b>	<b>119</b>

**Table 8—NUMBER OF VEHICLES OPERATED**

Range	1935-36 Number of Districts	1940-41 Number of Districts	1945-46 Number of Districts	1947-48 Number of Districts
0- 4	36	16	20	9
5- 9	25	23	26	27
10-14	11	21	24	22
15-19	11	18	18	23
20-24	6	11	16	16
25-29	4	11	6	4
30-34	3	1	4	12
35-39	.....	4	3	2
40-44	2	2	2	1
45-49	.....	2	.....	2
50-54	1	.....	.....	.....
55-59	.....	1	.....	.....
60-64	.....	.....	1	.....
-73	.....	.....	.....	1
<b>Total number of County Districts</b>	<b>99</b>	<b>110</b>	<b>120</b>	<b>119</b>

**Table 9—NUMBER OF PUPILS TRANSPORTED**

Range	1935-36 Number of Districts	1940-41 Number of Districts	1945-46 Number of Districts	1947-48 Number of Districts
0- 499	60	32	37	26
500- 999	18	33	30	30
1000-1499	12	20	26	29
1500-1999	6	11	12	16
2000-2499	1	4	10	9
2500-2999	.....	4	2	2
3000-3499	1	.....	1	3
3500-3999	.....	1	.....	1
4000-4499	.....	.....	1	.....
4500-4999	.....	.....	.....	1
5000-5499	.....	1	.....	1
5500-5999	.....	.....	1	.....
-7543	.....	.....	.....	1
<b>Total number of County Districts</b>	<b>98</b>	<b>106</b>	<b>120</b>	<b>119</b>