A COMPARATIVE ANALYSIS OF THE COST OF EDUCATION
FOR THE YEAR BEFORE AND THE YEAR AFTER
WORLD WAR II

A Thesis
Presented to the
Faculty of the School of Education
Indiana State Teachers College

In Partial Fulfillment
Of the Requirements for the Degree
Master of Science in Education

By
Charles L. Watson
August, 1947
The thesis of Charles L. Watson, Contribution of the Graduate School, Indiana State Teachers College, Number 572, under the title A Comparative Analysis of the Cost of Education For the Year Before and Year After World War II is hereby approved as counting toward the completion of the Master's degree in the amount of 4 hours' credit.

Committee on thesis:

[Signatures]

Chairman

Representative of English Department:

[Signed]

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<td>II</td>
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CHAPTER I

INTRODUCTION

Boards of education, educators, taxpayers, and all who are connected with public-school education are aware of the fact that the process of educating our future citizens is a costly business and absorbs a large portion of public funds—a portion that has always been limited and inadequate. Those people, especially, who are chosen to administer school finances know what a complex problem it is to obtain sufficient funds and to distribute those funds in the most equitable manner to assure the maximum educational opportunities for all.

Unfortunately, far too few people know how much our school systems are actually handicapped by the limitations of these funds. The general apathy of the public at large toward providing adequate funds for public-school education is probably due to lack of information on a detailed analysis of the actual costs of school operation, more than to any other one thing. Too few people are made aware of the amount of funds received, the source of these funds, and the amount and necessity of each item of expenditure. Although most people know approximately how much general living costs have increased as a result of World War II, very few know what the increase in the cost of education has been, or what have been the contributing factors to this increase. In most cases the public is too far removed from school operation to appreciate the enormous problems involved in school financing.
It is the contention of the author that if all local school systems would make a complete analysis of the cost of education and present the facts to the general public, much of this apathy and opposition to increased levies for school operation on the part of the taxpayer would be removed. If we are to receive the fullest cooperation from the tax-paying public, then every school system should publish annual reports with complete and detailed analyses and full explanation of increases and decreases in income and expenditures.

I. Purpose

It is the purpose of the author in this report to make a complete analysis of the cost of education of one local system for the year before World War II (1941) and the year after the War (1946) and make a comparison of these findings in order to determine:

1. The cost of education for each year
2. The proportionate relationship of each item of income and expenditure to the total for each year
3. The increases or decreases of each item over the five-year period, and
4. The cost per pupil for each year, and the contributing factors to the increase in cost per pupil during this period.

II. Procedure

The Covington, Ohio, Exempted Village School system, where the author has been a member of the teaching staff for several years, has been selected for the purpose of this report. Covington is located in Miami County, in the heart of the rich
agricultural and industrial region near Dayton, Ohio. It has a population of approximately 2,500. Its school population, taken from the village and surrounding Newberry Township, numbers approximately 700. It will be noted in Table I that the total enrollment is almost exactly the same for both years covered by this report, being 692 in 1941 and 693 in 1946.1

All data were taken from the financial records of the board of education and the attendance records from the offices of superintendent and principal.

Yearly totals of all items of income and expense were computed and comparisons made of each item for the two years (1941 and 1946). Increases or decreases and the percentage of each increase or decrease of each item of income and expense were then recorded. The proportion of each item to the total income and expenditure for each year was then figured, and tables were prepared showing these relationships. The income per pupil and the per-pupil cost were then computed on the basis of the average daily attendance, as this is the method used for distribution of funds to each school system under the state foundation program.

The following pages consist of tables showing the results of these computations and accompanying explanations.

---

1 The fiscal year, or the period covered by financial reports, in Ohio runs concurrently with the calendar year. Attendance reports, however, do not cover the same period, but are based on the period of time school is in session. Therefore, it has been necessary to select data for this report from those parts of the attendance records which are covered by the fiscal years, 1941 and 1946.
CHAPTER II

PRESENTATION OF DATA

Basically, all tables presented on the following pages show summaries of totals and balances for both years--1941 and 1946--with comparisons between the two years. An attempt is made herein to present the picture from different angles as the report progresses to its ultimate conclusion, showing the comparative income and cost on a per-pupil basis.

Table I, Page 5, is a composite of balance-sheet totals and it gives a "snapshot" picture of the financial condition for the two years. It will be noted that the increase in real estate values ($818,210, or 20.38 per cent) during the five-year period has added materially to the income from local taxation.

Beginning and ending balances have changed but little, indicating how closely the local board of education has kept within budget limitations.

Receipts have lagged behind expenditures, increasing $15,451.57, or 19.27 per cent, while expenditures have increased $23,586.92, or 29.59 per cent. In 1941, the year ended with a slightly higher income than had been expended ($435.19), but 1946 shows expenditures greatly in excess of income ($7,700.16), necessitating the use of reserves to make up the deficit. Obviously, this unfavorable trend indicates an immediate and imperative need for additional revenue to compete with the rapidly increasing cost of education.
### TABLE I

A COMPOSITE OF BALANCE SHEET TOTALS AND FINANCIAL CONDITION FOR YEARS 1941 AND 1946

<table>
<thead>
<tr>
<th>Item</th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax valuation</td>
<td>$4,015,070</td>
<td>$4,833,280</td>
</tr>
<tr>
<td>Tax levy (in mills)</td>
<td>9.56</td>
<td>9.36</td>
</tr>
<tr>
<td>Enrollment (total)</td>
<td>692</td>
<td>693</td>
</tr>
</tbody>
</table>

#### Balances as of January 1:

<table>
<thead>
<tr>
<th>Fund</th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>General fund</td>
<td>$11,102.26</td>
<td>$15,243.37</td>
</tr>
<tr>
<td>Bond retirement fund</td>
<td>$4,606.52</td>
<td>$6,680.16</td>
</tr>
<tr>
<td>Building fund</td>
<td>$7,200.17</td>
<td>$6,698.97</td>
</tr>
<tr>
<td>Cafeteria fund</td>
<td>$234.97</td>
<td>$979.04</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$23,143.92</td>
<td>$29,601.54</td>
</tr>
</tbody>
</table>

#### Balances as of December 31:

<table>
<thead>
<tr>
<th>Fund</th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>General fund</td>
<td>$10,882.13</td>
<td>$9,073.51</td>
</tr>
<tr>
<td>Bond retirement fund</td>
<td>$5,472.32</td>
<td>$5,944.59</td>
</tr>
<tr>
<td>Building fund</td>
<td>$7,200.17</td>
<td>$6,698.97</td>
</tr>
<tr>
<td>Cafeteria fund</td>
<td>$24.49</td>
<td>$164.31</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$23,579.11</td>
<td>$21,901.38</td>
</tr>
</tbody>
</table>

#### Receipts:

<table>
<thead>
<tr>
<th>Fund</th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>General fund</td>
<td>$65,377.28</td>
<td>$76,092.71</td>
</tr>
<tr>
<td>Bond retirement fund</td>
<td>$11,882.05</td>
<td>$8,705.68</td>
</tr>
<tr>
<td>Cafeteria fund</td>
<td>$2,874.05</td>
<td>$10,786.56</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$80,133.38</td>
<td>$95,584.95</td>
</tr>
</tbody>
</table>

#### Payments:

<table>
<thead>
<tr>
<th>Fund</th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>General fund</td>
<td>$65,597.41</td>
<td>$82,262.57</td>
</tr>
<tr>
<td>Bond retirement fund</td>
<td>$11,016.25</td>
<td>$9,441.25</td>
</tr>
<tr>
<td>Cafeteria fund</td>
<td>$3,084.53</td>
<td>$11,581.29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$89,705.19</td>
<td>$103,385.11</td>
</tr>
</tbody>
</table>

#### Assets:

<table>
<thead>
<tr>
<th>Category</th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$23,579.11</td>
<td>$21,901.38</td>
</tr>
<tr>
<td>Inventory--supplies and materials</td>
<td>$3,000.00</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>Lands</td>
<td>$3,800.00</td>
<td>$4,500.00</td>
</tr>
<tr>
<td>Buildings</td>
<td>$200,000.00</td>
<td>$200,000.00</td>
</tr>
<tr>
<td>Equipment</td>
<td>$11,450.00</td>
<td>$3,000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$241,829.11</td>
<td>$232,901.38</td>
</tr>
</tbody>
</table>

#### Liabilities:

<table>
<thead>
<tr>
<th>Category</th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonded debt</td>
<td>$84,000.00</td>
<td>$49,000.00</td>
</tr>
<tr>
<td>Notes outstanding</td>
<td>$9,122.90</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$89,912.90</td>
<td>$49,000.00</td>
</tr>
</tbody>
</table>

**Excess of Assets**

<table>
<thead>
<tr>
<th></th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>$151,916.21</td>
<td>$183,901.38</td>
</tr>
</tbody>
</table>
Table II, Page 7, gives an itemized listing of all sources of income for both years. By comparing these totals, item by item, a wide range in the amounts of increases and decreases among the various items is to be found.

Income from general property tax has increased $4,408.02. The foundation program has provided an additional $9,649.12, and an additional $7,314.58 has been received from miscellaneous revenue. Non-revenue income had been eliminated by 1946 because of the cancellation of notes sold in 1941.

The amount received for vocational education has decreased because the vocational agricultural instructor, while employed full time at Covington in 1941, divided his time between two schools in 1946, and the amounts received from the federal government under the vocational educational program were apportioned equally between these two systems.

Income from cafeteria increased by a greater per cent than any other item because of the rapid expansion of this service. Approximately 300 hot meals were served daily in 1946; whereas less than 100 were provided in 1941.

Other items shown here--interest, contributions, insurance adjustment, etc.--have, for the most part, increased, but they do not add materially to the total income received.
# TABLE II

## STATEMENT OF INCOME FOR YEARS 1941 AND 1946

<table>
<thead>
<tr>
<th>Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1941</td>
<td></td>
</tr>
<tr>
<td>1946</td>
<td></td>
</tr>
</tbody>
</table>

### Revenue

<table>
<thead>
<tr>
<th>Description</th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>General property tax--local levy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonds, interest, and sinking fund</td>
<td>$11,882.05</td>
<td>$8,705.68</td>
</tr>
<tr>
<td>All other purposes</td>
<td>27,934.26</td>
<td>35,518.65</td>
</tr>
<tr>
<td><strong>Total property tax</strong></td>
<td><strong>$39,816.31</strong></td>
<td><strong>$44,224.33</strong></td>
</tr>
<tr>
<td>Foundation program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash received</td>
<td>$28,423.84</td>
<td>$34,766.80</td>
</tr>
<tr>
<td>Deductions for teachers' retirement</td>
<td>---</td>
<td>2,546.68</td>
</tr>
<tr>
<td>Deductions for employees' retirement</td>
<td>---</td>
<td>748.68</td>
</tr>
<tr>
<td>Deductions for tuition paid from other districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total foundation program</strong></td>
<td><strong>$28,461.58</strong></td>
<td><strong>$38,110.70</strong></td>
</tr>
<tr>
<td>Miscellaneous revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest from state on irreducible debt</td>
<td>$140.19</td>
<td>$126.84</td>
</tr>
<tr>
<td>Depository interest</td>
<td>1,827.25</td>
<td>1,629.19</td>
</tr>
<tr>
<td>Vocational education</td>
<td>19,827.25</td>
<td>1,684.39</td>
</tr>
<tr>
<td>Contributions</td>
<td>100.00</td>
<td>170.12</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>2,874.05</td>
<td>10,786.56</td>
</tr>
<tr>
<td>Insurance adjustment</td>
<td>---</td>
<td>31.50</td>
</tr>
<tr>
<td>Other</td>
<td>993.85</td>
<td>421.32</td>
</tr>
<tr>
<td><strong>Total miscellaneous</strong></td>
<td><strong>$5,935.34</strong></td>
<td><strong>$13,249.92</strong></td>
</tr>
</tbody>
</table>

**Total Revenue**

| 1941 | $74,213.23 |
| 1946 | $95,584.95 |

### Non-Revenue

<table>
<thead>
<tr>
<th>Description</th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale of notes</td>
<td>$5,912.90</td>
<td>---</td>
</tr>
<tr>
<td>Other</td>
<td>7.25</td>
<td>---</td>
</tr>
<tr>
<td><strong>Total Non-Revenue</strong></td>
<td><strong>$5,920.15</strong></td>
<td>---</td>
</tr>
</tbody>
</table>

**Total Receipts**

| 1941 | $80,133.38 |
| 1946 | $95,584.95 |
In Table III, Page 9, all totals from Table II have been converted into percentages. The first two columns represent the respective value of each item of income in relation to the total income for each year. The third column represents the amount of increase or decrease in the percentage value of each item over the five-year period from 1941 to 1946.

Although the amount of income received from general property tax has increased, its value in relation to the total income had decreased from 49.69 per cent in 1941 to 46.27 per cent in 1946—a decrease of 3.42 per cent.

Income from the foundation program has increased in value from 35.52 per cent in 1941 to 39.37 per cent in 1946—representing an increase in value of 4.35 per cent.

Miscellaneous revenue increased more in value than any other type of income, jumping from 7.4 per cent in 1941 to 13.86 per cent in 1946. This increase of 6.46 per cent has been brought about largely by the great amount of increase from cafeteria sources, which have climbed from 3.59 per cent in 1941 to 11.29 per cent in 1946 or an increase of 7.7 per cent.

Non-revenue income, which represented 7.39 per cent of the total in 1941, had dropped to 0.0 per cent in 1946.
### TABLE III

**RELATIVE VALUE OF EACH ITEM OF INCOME EXPRESSED IN PERCENTAGES OF THE TOTAL VALUE OF EACH YEAR**

<table>
<thead>
<tr>
<th>Item</th>
<th>1941</th>
<th>1946</th>
<th>Amt of Inc. or Dec.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General property tax--local levy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonds, interest, and sinking fund</td>
<td>14.83</td>
<td>9.11</td>
<td>-5.72</td>
</tr>
<tr>
<td>All other purposes</td>
<td>34.86</td>
<td>37.16</td>
<td>2.30</td>
</tr>
<tr>
<td><strong>Total general property tax</strong></td>
<td>49.69</td>
<td>46.27</td>
<td>-3.42</td>
</tr>
<tr>
<td>Foundation program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>35.47</td>
<td>36.37</td>
<td>0.90</td>
</tr>
<tr>
<td>Deduction for teachers' retirement</td>
<td>---</td>
<td>2.67</td>
<td>2.67</td>
</tr>
<tr>
<td>Deduction for employees' retirement</td>
<td>---</td>
<td>0.78</td>
<td>0.78</td>
</tr>
<tr>
<td>Deduction for tuition paid other districts</td>
<td>0.05</td>
<td>0.05</td>
<td>---</td>
</tr>
<tr>
<td><strong>Total foundation program</strong></td>
<td>35.52</td>
<td>39.87</td>
<td>4.35</td>
</tr>
<tr>
<td>Miscellaneous revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest from state on irreducible debt</td>
<td>0.17</td>
<td>0.13</td>
<td>-0.04</td>
</tr>
<tr>
<td>Depository interest</td>
<td>---</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>Vocational education</td>
<td>2.28</td>
<td>1.76</td>
<td>-0.52</td>
</tr>
<tr>
<td>Contributions</td>
<td>0.12</td>
<td>0.18</td>
<td>0.06</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>3.59</td>
<td>11.29</td>
<td>7.70</td>
</tr>
<tr>
<td>Insurance adjustment</td>
<td>---</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>Other</td>
<td>1.24</td>
<td>0.44</td>
<td>-0.80</td>
</tr>
<tr>
<td><strong>Total miscellaneous</strong></td>
<td>7.40</td>
<td>15.66</td>
<td>6.46</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>92.61</td>
<td>100.00</td>
<td>7.39</td>
</tr>
<tr>
<td><strong>Non-Revenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale of notes</td>
<td>7.38</td>
<td>---</td>
<td>-7.38</td>
</tr>
<tr>
<td>Other</td>
<td>0.01</td>
<td>---</td>
<td>-0.01</td>
</tr>
<tr>
<td><strong>Total Non-Revenue</strong></td>
<td>7.39</td>
<td>---</td>
<td>-7.39</td>
</tr>
<tr>
<td><strong>Total Receipts</strong></td>
<td>100.00</td>
<td>100.00</td>
<td>---</td>
</tr>
</tbody>
</table>
The two preceding tables have dealt with an analysis of the sources of income. The following four tables present a complete summary and analysis of all the items contributing to the cost of education in the Covington schools for 1941 and 1946.

Table IV, Pages 11 and 12, gives a complete summary of all items of expenditure, with totals of each classification of expenditures, and the total expenditure for each year. Examination of the statement of expenditures brings to light all the changes in expenditures over the five-year period. It is easy to determine which items have contributed most to the cost of operation of the school system, the amount of increase or decrease of each item, and the extent of these increases or decreases.

The administrative costs have decreased materially (from $4,381.48 in 1941 to $2,357.17 in 1946) chiefly as a result of transferring the salary of the superintendent to personal service under instruction.

Personal service of all types has increased greatly to meet the demand for higher salaries since 1941. (Teachers' salaries, for example, have risen from $36,085.20 in 1941 to $52,064.96 in 1946). Instruction and cafeteria expenditures have increased more than any other items. Operational costs have increased, largely because of the higher prices paid for supplies of all types.

Repair, replacement, and maintenance show a decrease, brought about by a postponement of these needed expenses until the total income once again equals or exceeds total expenditures and the increasing deficit can be erased.
| TABLE IV |
| STATEMENT OF EXPENDITURES FOR 1941 AND 1946 |

<table>
<thead>
<tr>
<th></th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administrative</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and wages</td>
<td>$4,205.65</td>
<td>$2,079.90</td>
</tr>
<tr>
<td>Office supplies</td>
<td>175.83</td>
<td>200.69</td>
</tr>
<tr>
<td>Travel expense</td>
<td>---</td>
<td>76.58</td>
</tr>
<tr>
<td><strong>Total Administrative</strong></td>
<td>$4,381.48</td>
<td>$2,357.17</td>
</tr>
<tr>
<td><strong>Instruction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal service</td>
<td>$36,085.20</td>
<td>$52,064.96</td>
</tr>
<tr>
<td>Textbooks</td>
<td>1,146.35</td>
<td>1,507.05</td>
</tr>
<tr>
<td>Other educational supplies</td>
<td>418.79</td>
<td>520.72</td>
</tr>
<tr>
<td>Repairs, educational equipment</td>
<td>200.02</td>
<td>75.57</td>
</tr>
<tr>
<td>Replacement, educational equipment</td>
<td>28.32</td>
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</tr>
<tr>
<td>Coordinate activities</td>
<td>40.40</td>
<td>47.99</td>
</tr>
<tr>
<td>Library books (school)</td>
<td>197.26</td>
<td>115.13</td>
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<tr>
<td><strong>Total Instruction</strong></td>
<td>$38,118.34</td>
<td>$54,331.42</td>
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<tr>
<td>Personal service</td>
<td>$3,560.00</td>
<td>$4,782.00</td>
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<tr>
<td>Maintenance, motor vehicles</td>
<td>1,442.34</td>
<td>672.31</td>
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<tr>
<td>Motor vehicle supplies</td>
<td>49.70</td>
<td>1,206.11</td>
</tr>
<tr>
<td>Repairs, motor vehicles</td>
<td>197.14</td>
<td>1,167.25</td>
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<tr>
<td><strong>Total Transportation</strong></td>
<td>$5,249.15</td>
<td>$7,829.67</td>
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<tr>
<td><strong>Cafeteria</strong></td>
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<td></td>
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<tr>
<td>Personal service</td>
<td>$877.77</td>
<td>$2,714.28</td>
</tr>
<tr>
<td>Supplies</td>
<td>2,206.76</td>
<td>8,867.01</td>
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<tr>
<td><strong>Total Cafeteria</strong></td>
<td>$3,084.53</td>
<td>$11,581.29</td>
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<tr>
<td><strong>Other Auxiliary Services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecturer</td>
<td>$25.00</td>
<td>$50.00</td>
</tr>
<tr>
<td>Playground supervision</td>
<td>150.00</td>
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</tr>
<tr>
<td>Tuition paid other districts</td>
<td>---</td>
<td>50.54</td>
</tr>
<tr>
<td>Teachers' retirement contracts</td>
<td>---</td>
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<tr>
<td>Employees' retirement contracts</td>
<td>---</td>
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<tr>
<td><strong>Total Other Auxiliary Agencies</strong></td>
<td>$175.00</td>
<td>$3,393.90</td>
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### TABLE IV (Continued)

**STATEMENT OF EXPENDITURES FOR 1941 AND 1946**

<table>
<thead>
<tr>
<th></th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation of School Plant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal service</td>
<td>$2,770.00</td>
<td>$4,030.27</td>
</tr>
<tr>
<td>Gas</td>
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<td>304.90</td>
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<tr>
<td>Fuel</td>
<td>1,674.31</td>
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<td>Janitor's supplies</td>
<td>254.95</td>
<td>345.06</td>
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<tr>
<td>Other operational supplies</td>
<td>1,466.01</td>
<td>1,590.39</td>
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<tr>
<td>Water</td>
<td>106.20</td>
<td>427.03</td>
</tr>
<tr>
<td>Electricity</td>
<td>644.51</td>
<td>757.83</td>
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<tr>
<td>Telephone</td>
<td>61.50</td>
<td>81.20</td>
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<tr>
<td>Advertising</td>
<td>28.51</td>
<td>1.78</td>
</tr>
<tr>
<td>Insurance</td>
<td>526.34</td>
<td>185.35</td>
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<td>Other contract and open order service</td>
<td>469.65</td>
<td>713.20</td>
</tr>
<tr>
<td><strong>Total Operation</strong></td>
<td>$8,174.88</td>
<td>$11,236.37</td>
</tr>
<tr>
<td><strong>Maintenance of School Plant and Grounds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials for maintenance of buildings and grounds</td>
<td>$692.40</td>
<td>$943.43</td>
</tr>
<tr>
<td>Materials for maintenance of equipment and furniture</td>
<td>46.28</td>
<td>164.29</td>
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<tr>
<td>Replacement of other equipment</td>
<td>378.34</td>
<td>104.75</td>
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<tr>
<td>Repairs to building</td>
<td>986.10</td>
<td>181.25</td>
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<tr>
<td>Repairs to other equipment</td>
<td>294.60</td>
<td>306.67</td>
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<tr>
<td><strong>Total Maintenance</strong></td>
<td>$2,397.72</td>
<td>$1,700.99</td>
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<tr>
<td><strong>Debt Service</strong></td>
<td></td>
<td></td>
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<tr>
<td>Bonds maturing</td>
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<td>$7,000.00</td>
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<tr>
<td>Interest on bonds</td>
<td>4,016.25</td>
<td>2,441.25</td>
</tr>
<tr>
<td><strong>Total Debt Service</strong></td>
<td>$11,016.25</td>
<td>$9,441.25</td>
</tr>
<tr>
<td><strong>Capital Outlay</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment for old building</td>
<td>$1,187.91</td>
<td>$1,413.45</td>
</tr>
<tr>
<td>Certificate of irreducible debt</td>
<td>5,912.90</td>
<td>---</td>
</tr>
<tr>
<td><strong>Total Capital Outlay</strong></td>
<td>$7,100.81</td>
<td>$1,413.45</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td>$79,698.19</td>
<td>$103,285.11</td>
</tr>
</tbody>
</table>
By taking all the items listed in Table IV and converting the amount of each item into a percentage of the yearly total, a more comprehensive picture is given of the changes in the cost of education from 1941 to 1946. The results of this conversion are given in Table V, Pages 14 and 15.

The first two columns represent the relative value of each item of expenditure and the value of each major class of expenditure in comparison with the total cost for each year. The third column indicates the increase or decrease in these relative values. An analysis of this table reveals that administrative costs have decreased from 51.5 per cent to 2.27 per cent—a decrease of 3.23 per cent of the total cost.

Maintenance, debt service, and capital outlay also show decreases in relative value for this period. Maintenance items have decreased from 3 per cent to 1.65 per cent, a decrease of 1.35 per cent. Debt service decreased from 13.82 per cent to 9.14 per cent, and capital outlay dropped from 8.91 per cent to 1.37 per cent of the total cost.

Cost of instruction increased from 47.83 per cent of the total to 52.6 per cent. Transportation items increased but little—from 6.59 per cent to 7.58 per cent. Cafeteria expenses increased 7.36 per cent, operation of school plant .61 per cent, and other auxiliary agencies 3.07 per cent.

The two individual items that have increased the most in relative value have been personal service under instructional costs (5.13 per cent) and cafeteria supplies (5.83 per cent).
<table>
<thead>
<tr>
<th>Item</th>
<th>1941</th>
<th>1946</th>
<th>Inc. or Dec.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administrative</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and wages</td>
<td>5.28</td>
<td>2.01</td>
<td>-3.27</td>
</tr>
<tr>
<td>Office supplies</td>
<td>0.22</td>
<td>0.19</td>
<td>-0.03</td>
</tr>
<tr>
<td>Travel expense</td>
<td>---</td>
<td>0.07</td>
<td>-0.07</td>
</tr>
<tr>
<td>Total Administrative</td>
<td>5.50</td>
<td>2.27</td>
<td>-3.23</td>
</tr>
<tr>
<td><strong>Instruction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal service</td>
<td>45.28</td>
<td>50.41</td>
<td>5.13</td>
</tr>
<tr>
<td>Textbooks</td>
<td>1.43</td>
<td>1.46</td>
<td>0.03</td>
</tr>
<tr>
<td>Other educational supplies</td>
<td>0.53</td>
<td>0.50</td>
<td>-0.03</td>
</tr>
<tr>
<td>Repairs, educational equipment</td>
<td>0.25</td>
<td>0.07</td>
<td>-0.18</td>
</tr>
<tr>
<td>Replacement, educational equipment</td>
<td>0.04</td>
<td>---</td>
<td>-0.04</td>
</tr>
<tr>
<td>Coordinate activities</td>
<td>0.05</td>
<td>0.05</td>
<td>---</td>
</tr>
<tr>
<td>Library books (school)</td>
<td>0.25</td>
<td>0.11</td>
<td>-0.14</td>
</tr>
<tr>
<td>Total Instruction</td>
<td>47.83</td>
<td>52.60</td>
<td>4.77</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal service</td>
<td>4.47</td>
<td>4.63</td>
<td>0.16</td>
</tr>
<tr>
<td>Maintenance, motor vehicles</td>
<td>1.81</td>
<td>0.65</td>
<td>-1.16</td>
</tr>
<tr>
<td>Motor vehicle supplies</td>
<td>0.06</td>
<td>1.17</td>
<td>1.11</td>
</tr>
<tr>
<td>Repairs, motor vehicles</td>
<td>0.25</td>
<td>1.13</td>
<td>0.88</td>
</tr>
<tr>
<td>Total Transportation</td>
<td>6.39</td>
<td>7.58</td>
<td>0.99</td>
</tr>
<tr>
<td><strong>Cafeteria</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal service</td>
<td>1.10</td>
<td>2.63</td>
<td>1.53</td>
</tr>
<tr>
<td>Supplies</td>
<td>2.77</td>
<td>8.60</td>
<td>5.83</td>
</tr>
<tr>
<td>Total Cafeteria</td>
<td>3.87</td>
<td>11.23</td>
<td>7.36</td>
</tr>
<tr>
<td><strong>Other Auxiliary Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecturer</td>
<td>0.03</td>
<td>0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>Playground supervision</td>
<td>0.19</td>
<td>---</td>
<td>-0.19</td>
</tr>
<tr>
<td>Tuition paid other districts</td>
<td>---</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>Deduction, teachers' retirement contracts</td>
<td>---</td>
<td>2.47</td>
<td>2.47</td>
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<tr>
<td>Deduction, employees' retirement contracts</td>
<td>---</td>
<td>0.72</td>
<td>0.72</td>
</tr>
<tr>
<td>Total Auxiliary Services</td>
<td>0.22</td>
<td>3.29</td>
<td>3.07</td>
</tr>
</tbody>
</table>
### TABLE V (Continued)

**RELATIVE VALUE OF EACH ITEM OF EXPENDITURE IN PROPORTION TO THE TOTAL COST OF EDUCATION FOR 1941 AND 1946**

<table>
<thead>
<tr>
<th>Item</th>
<th>Year</th>
<th>Amt of Inc. or Dec.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation of School Plant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal service</td>
<td>3.48</td>
<td>3.90</td>
</tr>
<tr>
<td>Gas</td>
<td>0.22</td>
<td>0.30</td>
</tr>
<tr>
<td>Fuel</td>
<td>2.10</td>
<td>2.71</td>
</tr>
<tr>
<td>Janitor's supplies</td>
<td>0.32</td>
<td>0.33</td>
</tr>
<tr>
<td>Other operational supplies</td>
<td>1.84</td>
<td>1.54</td>
</tr>
<tr>
<td>Water</td>
<td>0.13</td>
<td>0.41</td>
</tr>
<tr>
<td>Electricity</td>
<td>0.81</td>
<td>0.73</td>
</tr>
<tr>
<td>Telephone</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>Advertising</td>
<td>0.03</td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td>0.66</td>
<td>0.18</td>
</tr>
<tr>
<td>Other contract and open order service</td>
<td>0.59</td>
<td>0.69</td>
</tr>
<tr>
<td><strong>Total Operation</strong></td>
<td><strong>10.26</strong></td>
<td><strong>10.87</strong></td>
</tr>
</tbody>
</table>

| **Maintenance of School Plant and Grounds** |            |                     |
| Materials for maintenance of buildings and grounds | 0.87 | 0.91 | 0.04 |
| Materials for maintenance of equipment and furniture | 0.06 | 0.16 | 0.10 |
| Replacement of other equipment            | 0.47       | 0.10                |
| Repairs to buildings                      | 1.23       | 0.18                |
| Repairs to other equipment                | 0.37       | 0.30                |
| **Total Maintenance**                     | **3.00**   | **1.65**            |

| **Debt Service**                          |            |                     |
| Bonds maturing                            | 8.78       | 6.78                |
| Interest on bonds                          | 5.04       | 2.36                |
| **Total Debt Service**                    | **13.82**  | **9.14**            |

| **Capital Outlay**                        |            |                     |
| Equipment for old building                | 1.49       | 1.37                |
| Certificate of irreducible debt           | 7.42       |                     |
| **Total Capital Outlay**                  | **8.91**   | **1.37**            |

| **Total Expenditures**                    | 100.00     | 100.00              |
By grouping all similar items listed under different headings in Table IV, Pages 11 and 12, and listing them under proper group headings, a complete picture of the contribution of all major items to the total cost of education is obtained. Tables VI and VII show the results of this grouping.

Table VI, Page 17, presents in the first two columns, the cost of each item, the total for each group, and the total expenditure for each year. Column 3 shows the amount of increase or decrease for each item, and Column 4 indicates the per cent of increase or decrease for each item and for the total cost of education from 1941 to 1946.

The four major types of expenditure and the percentage of increase or decrease are: personal service, 37.8 per cent; supplies, 90.9 per cent; repairs and replacements, 11.9 per cent (decrease); and debt service, 14.3 per cent (decrease). All other items of expenditure are listed under miscellaneous and show, collectively, a decrease of 28.7 per cent.

Table VII, Page 18, shows the same grouping as Table VI, but adds further to the picture by giving the relative value of each type of expenditure to the cost of education and the increase or decrease in these proportionate values.

Personal service increased in value from 59.83 per cent to 63.63 per cent. Supplies increased from 11.61 per cent to 19.12 per cent. Repairs and replacements decreased from 4.42 per cent to 2.43 per cent, debt service from 13.82 per cent to 9.14 per cent, and miscellaneous items from 10.32 per cent to 5.68 per cent.
<table>
<thead>
<tr>
<th>Item</th>
<th>Total Cost 1941</th>
<th>Total Cost 1946</th>
<th>Amount of Inc. or Dec.</th>
<th>Percent of Inc. or Dec.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>$4,205.65</td>
<td>$2,079.90</td>
<td>-$2,125.75</td>
<td>-50.5</td>
</tr>
<tr>
<td>Instruction</td>
<td>$36,085.20</td>
<td>$52,064.96</td>
<td>$15,979.76</td>
<td>44.3</td>
</tr>
<tr>
<td>Transportation</td>
<td>$3,560.00</td>
<td>$4,782.00</td>
<td>$1,222.00</td>
<td>34.3</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>$877.77</td>
<td>$2,714.28</td>
<td>$1,836.51</td>
<td>209.2</td>
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<tr>
<td>Lecturer</td>
<td>$25.00</td>
<td>$50.00</td>
<td>$25.00</td>
<td>100.0</td>
</tr>
<tr>
<td>Playground supervision</td>
<td>$150.00</td>
<td>---</td>
<td>-$150.00</td>
<td>-100.0</td>
</tr>
<tr>
<td>Operation</td>
<td>$2,770.00</td>
<td>$4,030.27</td>
<td>$1,260.27</td>
<td>45.5</td>
</tr>
<tr>
<td>Total</td>
<td>$47,673.62</td>
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<td>$18,047.79</td>
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</tr>
<tr>
<td>Supplies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>$175.83</td>
<td>$200.69</td>
<td>$24.86</td>
<td>12.4</td>
</tr>
<tr>
<td>Instruction</td>
<td>$418.79</td>
<td>$520.72</td>
<td>$101.93</td>
<td>24.3</td>
</tr>
<tr>
<td>Textbooks</td>
<td>$1,148.33</td>
<td>$1,507.04</td>
<td>$358.70</td>
<td>31.2</td>
</tr>
<tr>
<td>Library books (school)</td>
<td>$197.26</td>
<td>$115.13</td>
<td>-$82.13</td>
<td>-41.6</td>
</tr>
<tr>
<td>Transportation</td>
<td>$1,492.04</td>
<td>$1,880.42</td>
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<tr>
<td>Cafeteria</td>
<td>$2,206.76</td>
<td>$8,867.01</td>
<td>$6,660.25</td>
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<tr>
<td>Operation</td>
<td>$4,318.88</td>
<td>$6,224.57</td>
<td>$1,905.69</td>
<td>44.1</td>
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<tr>
<td>Maintenance</td>
<td>$738.68</td>
<td>$1,107.72</td>
<td>$369.04</td>
<td>49.8</td>
</tr>
<tr>
<td>Total</td>
<td>$10,696.59</td>
<td>$20,423.31</td>
<td>$9,726.72</td>
<td>90.9</td>
</tr>
<tr>
<td>Repairs and Replacements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational equipment</td>
<td>$228.34</td>
<td>$75.57</td>
<td>-$152.77</td>
<td>-33.6</td>
</tr>
<tr>
<td>Transportation</td>
<td>$197.14</td>
<td>$1,167.25</td>
<td>$970.11</td>
<td>492.1</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$1,669.04</td>
<td>$592.87</td>
<td>-$1,066.17</td>
<td>-64.3</td>
</tr>
<tr>
<td>Total</td>
<td>$2,084.52</td>
<td>$1,835.69</td>
<td>-$248.83</td>
<td>-11.9</td>
</tr>
<tr>
<td>Debt Service</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonds maturing</td>
<td>$7,000.00</td>
<td>$7,000.00</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Interest on bonds</td>
<td>$4,016.25</td>
<td>$2,441.25</td>
<td>-$1,575.00</td>
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<tr>
<td>Total</td>
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<td>$9,441.25</td>
<td>-$1,575.00</td>
<td>-14.3</td>
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<tr>
<td>Miscellaneous</td>
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<tr>
<td>All other expenses</td>
<td>$8,227.21</td>
<td>$5,863.45</td>
<td>-$2,363.76</td>
<td>-28.7</td>
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<td>Total Expenditures</td>
<td>$79,698.19</td>
<td>$103,285.11</td>
<td>$23,586.92</td>
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<tr>
<td>Item</td>
<td>Percent of Total Cost 1941</td>
<td>Percent of Total Cost 1946</td>
<td>Percent of Increase or Decrease</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------</td>
<td>-----------------------------</td>
<td>--------------------------------</td>
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</tr>
<tr>
<td><strong>Personal service</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Administration</td>
<td>5.28</td>
<td>2.01</td>
<td>-3.27</td>
<td></td>
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<td>Instruction</td>
<td>45.28</td>
<td>50.41</td>
<td>5.13</td>
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<tr>
<td>Transportation</td>
<td>4.47</td>
<td>4.63</td>
<td>0.16</td>
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<td>1.10</td>
<td>2.63</td>
<td>1.53</td>
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</tr>
<tr>
<td>Lecturer</td>
<td>0.03</td>
<td>0.05</td>
<td>0.02</td>
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<tr>
<td>Playground supervision</td>
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<td>-0.19</td>
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</tr>
<tr>
<td>Operation</td>
<td>3.48</td>
<td>3.90</td>
<td>0.42</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>59.83</td>
<td>63.63</td>
<td>3.80</td>
<td></td>
</tr>
<tr>
<td><strong>Supplies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>0.22</td>
<td>0.19</td>
<td>-0.03</td>
<td></td>
</tr>
<tr>
<td>Instruction</td>
<td>0.53</td>
<td>0.50</td>
<td>-0.03</td>
<td></td>
</tr>
<tr>
<td>Textbooks</td>
<td>1.43</td>
<td>1.46</td>
<td>0.03</td>
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</tr>
<tr>
<td>Library books (school)</td>
<td>0.25</td>
<td>0.11</td>
<td>-0.14</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>0.06</td>
<td>1.17</td>
<td>1.11</td>
<td></td>
</tr>
<tr>
<td>Cafeteria</td>
<td>2.77</td>
<td>8.60</td>
<td>5.83</td>
<td></td>
</tr>
<tr>
<td>Operation</td>
<td>5.42</td>
<td>6.02</td>
<td>0.60</td>
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<td>Maintenance</td>
<td>0.93</td>
<td>1.07</td>
<td>0.14</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11.61</td>
<td>19.12</td>
<td>7.51</td>
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</tr>
<tr>
<td><strong>Repairs and Replacements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational equipment</td>
<td>0.29</td>
<td>0.07</td>
<td>-0.22</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>2.06</td>
<td>1.78</td>
<td>-0.28</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>2.07</td>
<td>0.58</td>
<td>-1.49</td>
<td></td>
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<tr>
<td><strong>Total</strong></td>
<td>4.42</td>
<td>2.43</td>
<td>-1.99</td>
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<tr>
<td><strong>Debt Service</strong></td>
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<tr>
<td>Bonds maturing</td>
<td>8.78</td>
<td>6.78</td>
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</tr>
<tr>
<td>Interest on bonds</td>
<td>5.04</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>13.82</td>
<td>9.14</td>
<td>-4.68</td>
<td></td>
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<tr>
<td><strong>Miscellaneous</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other expenses</td>
<td>10.32</td>
<td>5.68</td>
<td>-4.64</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.00</td>
<td>100.00</td>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>
The preceding seven tables and the accompanying explanatory statements have been concerned only with computations of income and cost on a per-item basis. The following three tables have been prepared to show the income and cost of education on a per-pupil basis. Information for preparation of these tables has been taken from the preceding tables and from attendance records.

A study of the attendance records for 1941 and 1946 reveals that the average daily attendance for 1941 was 658 or 95.09 per cent of the total enrollment, while the average daily attendance for 1946 was 637, or 91.92 per cent of the total enrollment--a decline of 3.17 per cent in attendance.

Tables VIIIA and VIIIB, Pages 20, 21 and 22, have been prepared to show the per-pupil income and the per-pupil cost, respectively, for 1941 and 1946, based on the attendance figures shown above.

Table VIIIA, Page 20, has each item of income ranked in order of its contribution to each dollar of income and to the amount of income per pupil. The totals shown in this table reveal that the total income per pupil increased from $121.78 in 1941 to $150.05 in 1946--an increase of $28.27, or 23.21 per cent.

Table VIIIB, Pages 21 and 22, has each item of expense ranked in similar order. These totals indicate that the cost per pupil has increased from $121.12 in 1941 to $162.14 in 1946--an increase of $41.02, or 33.87 per cent.
<table>
<thead>
<tr>
<th>Item</th>
<th>Percent of Each Dollar Income</th>
<th>Dollars Income Per Pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td>1941</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foundation program--cash</td>
<td>35.47</td>
<td>$ 43.19</td>
</tr>
<tr>
<td>General property tax--all other purposes</td>
<td>34.86</td>
<td>42.45</td>
</tr>
<tr>
<td>General property tax--bonds, interest, and sinking fund</td>
<td>14.83</td>
<td>18.06</td>
</tr>
<tr>
<td>Sale of notes</td>
<td>7.38</td>
<td>8.99</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>3.59</td>
<td>4.37</td>
</tr>
<tr>
<td>Vocational education</td>
<td>2.28</td>
<td>2.78</td>
</tr>
<tr>
<td>Other revenue</td>
<td>1.24</td>
<td>1.51</td>
</tr>
<tr>
<td>Interest from State on irreducible debt</td>
<td>0.17</td>
<td>0.21</td>
</tr>
<tr>
<td>Contributions</td>
<td>0.12</td>
<td>0.15</td>
</tr>
<tr>
<td>Deduction for tuition from other districts</td>
<td>0.05</td>
<td>0.06</td>
</tr>
<tr>
<td>Other non-revenue</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>100.00</strong></td>
<td><strong>$121.78</strong></td>
</tr>
<tr>
<td>1946</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General property tax--all other purposes</td>
<td>37.16</td>
<td>$ 55.76</td>
</tr>
<tr>
<td>Foundation program--cash</td>
<td>36.37</td>
<td>54.57</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>11.29</td>
<td>16.94</td>
</tr>
<tr>
<td>General property tax--bonds, interest, and sinking fund</td>
<td>9.11</td>
<td>13.67</td>
</tr>
<tr>
<td>Deduction for teachers' retirement</td>
<td>2.67</td>
<td>4.01</td>
</tr>
<tr>
<td>Vocational education</td>
<td>1.76</td>
<td>2.64</td>
</tr>
<tr>
<td>Deduction for employees' retirement</td>
<td>0.78</td>
<td>1.17</td>
</tr>
<tr>
<td>Other revenue</td>
<td>0.44</td>
<td>0.66</td>
</tr>
<tr>
<td>Contributions</td>
<td>0.18</td>
<td>0.27</td>
</tr>
<tr>
<td>Interest from state on irreducible debt</td>
<td>0.13</td>
<td>0.20</td>
</tr>
<tr>
<td>Deduction for tuition from other districts</td>
<td>0.05</td>
<td>0.08</td>
</tr>
<tr>
<td>Depository interest</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>Insurance adjustment</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>100.00</strong></td>
<td><strong>$150.05</strong></td>
</tr>
<tr>
<td>Item (1941)</td>
<td>Percent of Each Dollar Expenditure</td>
<td>Dollars Per Pupil</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>-----------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Personal service--instruction</td>
<td>45.28</td>
<td>$ 54.84</td>
</tr>
<tr>
<td>Bonds maturing</td>
<td>8.78</td>
<td>10.63</td>
</tr>
<tr>
<td>Certificate of irreducible debt</td>
<td>7.42</td>
<td>8.99</td>
</tr>
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<td>Personal service--administration</td>
<td>5.28</td>
<td>6.40</td>
</tr>
<tr>
<td>Interest on bonds</td>
<td>5.04</td>
<td>6.10</td>
</tr>
<tr>
<td>Personal service--transportation</td>
<td>4.47</td>
<td>5.41</td>
</tr>
<tr>
<td>Personal service--operation</td>
<td>3.48</td>
<td>4.22</td>
</tr>
<tr>
<td>Supplies--cafeteria</td>
<td>2.77</td>
<td>3.36</td>
</tr>
<tr>
<td>Fuel</td>
<td>2.10</td>
<td>2.54</td>
</tr>
<tr>
<td>Supplies--operation</td>
<td>1.84</td>
<td>2.23</td>
</tr>
<tr>
<td>Maintenance--motor vehicles</td>
<td>1.81</td>
<td>2.19</td>
</tr>
<tr>
<td>Equipment--old building</td>
<td>1.49</td>
<td>1.81</td>
</tr>
<tr>
<td>Textbooks</td>
<td>1.43</td>
<td>1.73</td>
</tr>
<tr>
<td>Repairs--building</td>
<td>1.23</td>
<td>1.49</td>
</tr>
<tr>
<td>Personal service--cafeteria</td>
<td>1.10</td>
<td>1.33</td>
</tr>
<tr>
<td>Materials for maintenance buildings and grounds</td>
<td>0.87</td>
<td>1.05</td>
</tr>
<tr>
<td>Electricity</td>
<td>0.81</td>
<td>0.98</td>
</tr>
<tr>
<td>Insurance</td>
<td>0.66</td>
<td>0.80</td>
</tr>
<tr>
<td>Other contract and open order service</td>
<td>0.59</td>
<td>0.72</td>
</tr>
<tr>
<td>Educational equipment</td>
<td>0.53</td>
<td>0.64</td>
</tr>
<tr>
<td>Replacement--other equipment</td>
<td>0.47</td>
<td>0.57</td>
</tr>
<tr>
<td>Repairs--other equipment</td>
<td>0.37</td>
<td>0.45</td>
</tr>
<tr>
<td>Supplies--janitor</td>
<td>0.32</td>
<td>0.39</td>
</tr>
<tr>
<td>Repairs--educational equipment</td>
<td>0.25</td>
<td>0.30</td>
</tr>
<tr>
<td>Library books--(school)</td>
<td>0.25</td>
<td>0.30</td>
</tr>
<tr>
<td>Repairs--motor vehicles</td>
<td>0.25</td>
<td>0.30</td>
</tr>
<tr>
<td>Supplies--office</td>
<td>0.22</td>
<td>0.27</td>
</tr>
<tr>
<td>Gas</td>
<td>0.22</td>
<td>0.27</td>
</tr>
<tr>
<td>Playground supervision</td>
<td>0.19</td>
<td>0.23</td>
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<tr>
<td>Water</td>
<td>0.13</td>
<td>0.16</td>
</tr>
<tr>
<td>Telephone</td>
<td>0.08</td>
<td>0.10</td>
</tr>
<tr>
<td>Materials for maintenance equipment and furniture</td>
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<td>0.07</td>
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<tr>
<td>Supplies--motor vehicles</td>
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<td>0.07</td>
</tr>
<tr>
<td>Coordinate activities--instruction</td>
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<td>0.06</td>
</tr>
<tr>
<td>Replacement--educational equipment</td>
<td>0.04</td>
<td>0.05</td>
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<tr>
<td>Lecturer</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>Advertising</td>
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<td>0.04</td>
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<tr>
<td><strong>Totals</strong></td>
<td><strong>100.00</strong></td>
<td><strong>$121.12</strong></td>
</tr>
</tbody>
</table>
## TABLE VIIIIB (Continued)

ITEMIZED LIST OF EXPENDITURES RANKED IN ORDER OF CONTRIBUTION TO EACH DOLLAR COST AND AMOUNT OF PER-PUPIL EXPENDITURES FOR 1941 AND 1946

<table>
<thead>
<tr>
<th>Item (1946)</th>
<th>Per cent of Each Dollar Expenditure</th>
<th>Dollars Expenditure Per Pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal service--instruction</td>
<td>50.41</td>
<td>$ 81.74</td>
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<tr>
<td>Supplies--cafeteria</td>
<td>8.60</td>
<td>13.94</td>
</tr>
<tr>
<td>Bonds maturing</td>
<td>6.78</td>
<td>10.99</td>
</tr>
<tr>
<td>Personal service--transportation</td>
<td>4.63</td>
<td>7.51</td>
</tr>
<tr>
<td>Personal service--operation</td>
<td>3.90</td>
<td>6.32</td>
</tr>
<tr>
<td>Fuel</td>
<td>2.71</td>
<td>4.39</td>
</tr>
<tr>
<td>Personal service--cafeteria</td>
<td>2.63</td>
<td>4.26</td>
</tr>
<tr>
<td>Teachers' retirement contracts</td>
<td>2.47</td>
<td>4.01</td>
</tr>
<tr>
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<td>2.56</td>
<td>3.83</td>
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<tr>
<td>Personal service--administration</td>
<td>2.01</td>
<td>3.26</td>
</tr>
<tr>
<td>Supplies--operation</td>
<td>1.54</td>
<td>2.50</td>
</tr>
<tr>
<td>Textbooks</td>
<td>1.46</td>
<td>2.37</td>
</tr>
<tr>
<td>Equipment--old building</td>
<td>1.37</td>
<td>2.22</td>
</tr>
<tr>
<td>Supplies--motor vehicles</td>
<td>1.17</td>
<td>1.90</td>
</tr>
<tr>
<td>Repairs--motor vehicles</td>
<td>1.13</td>
<td>1.83</td>
</tr>
<tr>
<td>Materials for maintenance buildings and grounds</td>
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<td>1.48</td>
</tr>
<tr>
<td>Electricity</td>
<td>0.73</td>
<td>1.18</td>
</tr>
<tr>
<td>Employees' retirement contracts</td>
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</tr>
<tr>
<td>Other contract and open order service</td>
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<td>1.12</td>
</tr>
<tr>
<td>Maintenance--motor vehicles</td>
<td>0.65</td>
<td>1.05</td>
</tr>
<tr>
<td>Other educational equipment</td>
<td>0.50</td>
<td>0.81</td>
</tr>
<tr>
<td>Water</td>
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<td>0.67</td>
</tr>
<tr>
<td>Supplies--janitor</td>
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<td>0.54</td>
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<tr>
<td>Repairs--other equipment</td>
<td>0.30</td>
<td>0.47</td>
</tr>
<tr>
<td>Gas</td>
<td>0.30</td>
<td>0.47</td>
</tr>
<tr>
<td>Supplies--office</td>
<td>0.19</td>
<td>0.31</td>
</tr>
<tr>
<td>Insurance</td>
<td>0.18</td>
<td>0.29</td>
</tr>
<tr>
<td>Repairs--building</td>
<td>0.18</td>
<td>0.29</td>
</tr>
<tr>
<td>Materials for maintenance furniture and equipment</td>
<td>0.16</td>
<td>0.26</td>
</tr>
<tr>
<td>Library books (school)</td>
<td>0.11</td>
<td>0.18</td>
</tr>
<tr>
<td>Replacement--other equipment</td>
<td>0.10</td>
<td>0.16</td>
</tr>
<tr>
<td>Telephone</td>
<td>0.08</td>
<td>0.13</td>
</tr>
<tr>
<td>Travel expense</td>
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<tr>
<td>Repairs--educational equipment</td>
<td>0.07</td>
<td>0.11</td>
</tr>
<tr>
<td>Coordinate activities--instruction</td>
<td>0.05</td>
<td>0.08</td>
</tr>
<tr>
<td>Lecturer</td>
<td>0.05</td>
<td>0.08</td>
</tr>
<tr>
<td>Tuition paid other districts</td>
<td>0.05</td>
<td>0.08</td>
</tr>
</tbody>
</table>

Totals 100.00 $162.14
Table IX, Page: 24, is a composite picture of the totals of each class of income and expenditure, the per cent of each class in proportion to the total income and total expenditure, and the relative contribution of each class to per-pupil income and per-pupil cost. This table is a summary of preceding information and includes only the major divisions or classes of income and expense for the two years.

The same information as shown in Table IX, pertaining to per-pupil income and expenditure, is shown in graphic form on Pages 25 and 26. These two charts provide a clearer picture of what has happened in school finance during the past five years and make for easier comparison of each item for 1941 and 1946.
### A COMPOSITE OF TOTALS OF EACH CLASS OF INCOME AND EXPENDITURE

#### (A) INCOME

<table>
<thead>
<tr>
<th>Class of Income</th>
<th>1941 Total Income</th>
<th>Per cent of Total</th>
<th>1946 Total Income</th>
<th>Per cent of Total</th>
<th>1941 Income per Pupil</th>
<th>1946 Income per Pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td>General property tax</td>
<td>$39,816.31</td>
<td>49.69</td>
<td>$44,224.33</td>
<td>46.27</td>
<td>$60.51</td>
<td>$69.43</td>
</tr>
<tr>
<td>Foundation program</td>
<td>28,461.58</td>
<td>35.52</td>
<td>38,110.70</td>
<td>39.87</td>
<td>43.26</td>
<td>59.82</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>2,874.05</td>
<td>3.59</td>
<td>10,786.56</td>
<td>11.29</td>
<td>4.37</td>
<td>16.95</td>
</tr>
<tr>
<td>Vocational education</td>
<td>1,827.25</td>
<td>2.28</td>
<td>1,684.39</td>
<td>1.76</td>
<td>2.78</td>
<td>2.64</td>
</tr>
<tr>
<td>Miscellaneous revenue</td>
<td>1,234.04</td>
<td>1.53</td>
<td>778.97</td>
<td>0.81</td>
<td>1.86</td>
<td>1.21</td>
</tr>
<tr>
<td>Non-revenue</td>
<td>5,920.15</td>
<td>7.39</td>
<td>---</td>
<td>---</td>
<td>9.00</td>
<td>---</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$80,133.38</strong></td>
<td><strong>100.00</strong></td>
<td><strong>$95,584.95</strong></td>
<td><strong>100.00</strong></td>
<td><strong>$121.78</strong></td>
<td><strong>$150.05</strong></td>
</tr>
</tbody>
</table>

#### (B) EXPENDITURES

<table>
<thead>
<tr>
<th>Class of Expenditure</th>
<th>1941 Total Cost</th>
<th>Per cent of Total</th>
<th>1946 Total Cost</th>
<th>Per cent of Total</th>
<th>1941 Cost per Pupil</th>
<th>1946 Cost per Pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>$4,381.48</td>
<td>5.50</td>
<td>$2,357.17</td>
<td>2.27</td>
<td>$6.66</td>
<td>$3.67</td>
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<tr>
<td>Instruction</td>
<td>38,118.34</td>
<td>47.83</td>
<td>54,331.42</td>
<td>52.60</td>
<td>57.93</td>
<td>55.29</td>
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<tr>
<td>Transportation</td>
<td>5,249.18</td>
<td>6.59</td>
<td>7,829.67</td>
<td>7.58</td>
<td>7.98</td>
<td>12.29</td>
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<tr>
<td>Cafeteria</td>
<td>3,084.53</td>
<td>3.87</td>
<td>11,581.29</td>
<td>11.23</td>
<td>4.69</td>
<td>18.21</td>
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<tr>
<td>Auxiliary agencies</td>
<td>175.00</td>
<td>0.22</td>
<td>3,393.90</td>
<td>3.29</td>
<td>0.27</td>
<td>5.33</td>
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<tr>
<td>Operation</td>
<td>8,174.88</td>
<td>10.26</td>
<td>1,827.25</td>
<td>1.76</td>
<td>12.43</td>
<td>17.63</td>
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<tr>
<td>Maintenance</td>
<td>2,397.72</td>
<td>3.00</td>
<td>1,700.59</td>
<td>1.65</td>
<td>3.63</td>
<td>2.68</td>
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<tr>
<td>Debt Service</td>
<td>11,016.25</td>
<td>13.82</td>
<td>9,441.25</td>
<td>9.14</td>
<td>16.74</td>
<td>14.82</td>
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<tr>
<td>Capital outlay</td>
<td>7,100.81</td>
<td>8.91</td>
<td>1,413.45</td>
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<td>10.79</td>
<td>2.22</td>
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<tr>
<td><strong>Totals</strong></td>
<td><strong>$79,698.19</strong></td>
<td><strong>100.00</strong></td>
<td><strong>$103,285.11</strong></td>
<td><strong>100.00</strong></td>
<td><strong>$121.12</strong></td>
<td><strong>$162.14</strong></td>
</tr>
</tbody>
</table>
CHART I

COMPARISON BETWEEN MAJOR ITEMS OF INCOME FOR 1941 AND 1946 ON A PER PUPIL BASIS

KEY:

1941

1946

GENERAL PROPERTY TAX
FOUNDATION PROGRAM
CAFETERIA
VOCATIONAL EDUCATION
MISCELLANEOUS REVENUE
NON-REVENUE
CHART II

COMPARISON BETWEEN MAJOR ITEMS OF EXPENDITURE FOR 1941 AND 1946 ON A PER PUPIL BASIS

Key:

1941

1946
CHAPTER III

SUMMARY

I. RESULTS

From the analysis of the cost of education and of the income of the Covington Exempted Village Schools for the years 1941 and 1946, the following facts have been determined:

1. The amount of income has increased 19.27 per cent while the cost of education has increased 29.59 per cent over the five-year period.

2. Per-pupil income has increased from $121.78 in 1941 to $150.05 in 1946—an increase of 23.32 per cent.

3. Per-pupil cost has increased from $121.12 in 1941 to $162.14 in 1946—an increase of 33.87 per cent.

4. The expenditures for personal service have increased 37.8 percent and for supplies of all types have increased 90.9 percent. These two items are representatives of the major types of expenditures and show a greater amount of increase than any other major type of expense.

Obviously, this excess of expenditures over the amount of income can lead only to a bad financial condition in a school system which has always been proud of its record of being able to operate within its income and build up reserves in addition, unless something is done in the immediate future to provide additional revenue.
II. RECOMMENDATIONS

It is the responsibility of both the state and the local community to provide sufficient funds for the efficient operation of public schools. Although local school officials have but little control over state financial policies, they can obtain better cooperation from local taxpayers by presenting to the public complete information on local school finances and thereby showing the necessity for increased revenue.

It is the author's contention that an analysis of the cost of education should be presented periodically to the public in a form that is readily understandable by the average layman.

The picture in the local district of Covington at the present time is a little brighter. In the fall of 1946, the local board of education petitioned for and succeeded in having passed an additional one-mill levy. The Ohio Legislature, after a long and bitter struggle, passed a modified bill for additional school aid which should have far-reaching effects on school finances throughout the state of Ohio. How much these two sources of new revenue will contribute to the amount necessary to meet the increased costs of education will be determined in the immediate future.