School systems have been forced to postpone purchases of new equipment and to defer repair and renovation projects. At present, 39 states provide support for local school district capital expenditures through five primary mechanisms: full state assumption, state/local sharing, state flat grant, state equalizing grant, and state loans. In response to high and volatile interest rates, increased competition within the municipal bond market, and reduced investor demand for tax-exempt securities, state policymakers might consider new ways of structuring tax-exempt bond issues that have the advantages of lower interest costs to issuers and of a broader potential market. However, state policymakers should be aware of the pros and cons of various creative financing techniques before modifying existing legislation to permit their use. (MLF)
43. School Facilities and Deferred Maintenance
43. School Facilities and Deferred Maintenance

The Issue

There is growing evidence that suggests the nation's education infrastructure is in disrepair. Today it is not uncommon to hear about classroom disruptions due to such things as poor ventilation or leaking roofs. The problem has been linked to three main factors: rapidly increasing operating costs, declining fiscal resources and high interest rates. Together, these factors have forced school systems to postpone purchases of new equipment and to defer repair and renovation projects. The problem of deferred maintenance and capital renewal affects the quality of education and thus is an important issue for our nation's elementary and secondary schools.

This Issuegram discusses the magnitude of the deferred maintenance problem, describes some of the obstacles to its resolution and identifies the various state policy options for addressing the issue.

Magnitude of the Problem

According to a recent survey jointly conducted by the American Association of School Administrators (AASA), the National School Boards Association (NSBA) and the Council of Great City Schools (CGCS), school facilities are
Unfortunately, nationwide, comprehensive data about the deferred maintenance problem is not available. At the elementary-secondary level, the only attempt at describing the problem is the survey report mentioned above. The survey, which sampled 100 school systems across the country, found that deferred maintenance is not unique to particular types of school districts but that urban, suburban, and rural school districts all have significant problems:

The greatest need for repair and replacement involves roofing. Over 70% of the districts surveyed indicated roof upgrading and replacement as the highest priority for maintenance expenditures.

Heating, ventilation, and air conditioning repair and replacement were the second most mentioned problems faced by school districts.

Interior modernization, window replacement, electrical systems, boiler repair and replacement, painting, paving, handicapped access, and asbestos removal were all reported as tasks that have been delayed due to lack of funds.

While it is difficult to conclude from a sample of less than 1% of the nation's school systems, a trend is discernible. Table 1 illustrates expenditures over the last 50 years in plant maintenance and capital renewal.

Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital Outlay</th>
<th>Maintenance</th>
</tr>
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<tbody>
<tr>
<td>1930</td>
<td>16.0%</td>
<td>3.4%</td>
</tr>
<tr>
<td>1940</td>
<td>11.0%</td>
<td>3.1%</td>
</tr>
<tr>
<td>1950</td>
<td>17.4%</td>
<td>3.7%</td>
</tr>
<tr>
<td>1960</td>
<td>17.0%</td>
<td>2.7%</td>
</tr>
<tr>
<td>1970</td>
<td>11.5%</td>
<td>2.4%</td>
</tr>
<tr>
<td>1980</td>
<td>6.8%</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

*Estimate

Expenditures for renewal of plant and equipment as a percentage of total expenditures have declined since 1960. While this can be attributed in part to declining enrollments in recent years, the fact remains that our education infrastructure is getting older. Expenditures for maintenance have remained relatively stable over time, suggesting that although the stock of physical plant and equipment has aged, expenditures for maintenance have not increased proportionately.

Obstacles to Funding: Renovation and Repair

Most often, short- and long-term borrowing finance district repair and renovation. For a variety of reasons, it is more difficult than in times past for school districts to tap into the bond market to acquire funds for renovation and repair. A major reason: voters are reluctant to approve bond referenda (see Table 2).

Table 2
RESULTS OF PUBLIC SCHOOL BOND ELECTIONS (1962-80)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Approved</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961-62</td>
<td>1,432</td>
<td>1,034</td>
<td>72.2</td>
</tr>
<tr>
<td>1965-66</td>
<td>1,745</td>
<td>1,265</td>
<td>72.5</td>
</tr>
<tr>
<td>1970-71</td>
<td>1,086</td>
<td>507</td>
<td>46.7</td>
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<tr>
<td>1975-76</td>
<td>770</td>
<td>391</td>
<td>50.3</td>
</tr>
<tr>
<td>1981-82*</td>
<td>332</td>
<td>204</td>
<td>38.6</td>
</tr>
</tbody>
</table>

*Daily Bond Buyer, New York.

Source: Digest of Education Statistics, 1979

The high cost of borrowing is another obstacle. It is unlikely that the cost of capital will return to the 5% to 7% range enjoyed during the mid-sixties and early seventies, so selling bonds will cost more in debt service and taxes.

Another factor is increased competition in the tax-exempt bond market. Today, tax-exempt municipal bonds are raising cash for hospitals, industrial renovation, utilities,
pollution control and housing. More and more bond issues have been offered by public corporations (such as housing authorities or water districts) that are generally exempt from traditional municipal borrowing restrictions. This increased supply of bonds has put upward pressure on interest rates for tax-exempt securities.

On the demand side, two groups of investors traditionally in the bond market -- banks and insurance companies -- have reduced their consumption of tax-exempt securities. Profit margins for these investors have declined under recent economic circumstances, lessening their demand for the tax shelters provided by public bonds.

Similarly, the 1981 Economic Recovery Tax Act (ERTA) and the Tax Equity and Fiscal Responsibility Act (TEFR) of 1982 have worked to reduce the attractiveness of tax-exempt bonds. The ERTA lowered the maximum individual income tax bracket from 70% to 50%, making tax-exempt interest payments less attractive to persons in higher income markets. These investors have been siphoned off by the relatively high yield and more liquid money market funds and other financial instruments. The TEFR, effective July 1, 1983, requires that all state and local government bonds be issued in registered form, thus raising the cost of administration. Moreover, the act requires a 15% reduction in the tax deduction that banks are currently allowed for the interest they pay on debt to purchase or carry tax-exempt bonds. Banks will be allowed to deduct 85% as opposed to the current 100%.

Can States Help?

At present, 39 states provide support for local school district capital expenditures through five primary mechanisms:

- Full state assumption (3)
- State/local sharing (8)
- State flat grant (10)
- State equalizing grant (10)
- State loans (8)

In some states, funds are available only for new construction, not renovation. Districts with renovation needs must pay the full cost of capital improvement projects. This makes repairs and renovation contingent upon local
Many states place limits on the amount of debt that may be incurred by school districts, either in terms of a tax rate or a restriction on indebtedness related to property wealth. While these restrictions are properly a means of fiscal control and accountability, they can create a situation in which poorer school districts cannot raise enough money for capital improvement needs. One-quarter of the states have no mechanism for supporting either capital improvement or new capital construction projects. For districts in these states, like those where only new construction is aided, the funds for renovation and repair are dependent upon local ability to pay.

State policy makers should consider:

- More flexible regulations and guidelines for the use of state aid for capital projects
- Aid structures for capital outlay that are more sensitive to district need and ability to pay

Creative Financing?

In response to high and volatile interest rates, increased competition within the municipal bond market and reduced investor demand for tax-exempt securities, state policy makers might consider new ways of structuring tax-exempt bond issues. These include:

- **Zero coupon bonds.** Bonds that pay no interest prior to maturity. Similar to U.S. government Series E savings bonds, they are sold at a considerable discount from their face value.

- **Compound interest bonds.** Similar to zero coupon bonds, they do not pay annual or semiannual interest. The bonds, however, sell at their face value. The return to the investor at maturity is the principal plus interest compounded at a specified rate.

- **Floating rate bonds.** The interest rate on this security is pegged to one or more market interest rates such as the average weekly rate of U.S. Treasuries. Thus, the yield changes over the life of the bond and the cost of borrowing is variable rather than fixed.

- **Tender Option ("PUT") bonds.** A long-term bond that may be redeemed well in advance of the stated maturity. Usually, tender option bonds are issued with a simultaneous call date on which the issuers can call in the bond and pay it
Thus, the issuers and the bond holder have equal rights to cash in when market conditions dictate.

The primary advantages of these new instruments are (1) lower interest costs to issuers and (2) an opportunity to sell bonds to a broader market. But there are disadvantages as well. Due to the discounting associated with zero coupon bonds, a much larger issue may be required to generate enough capital. With both zero coupon and compound interest bonds, the balloon payment at maturity requires careful planning. Issuers of floating rate bonds face considerable uncertainty in debt service planning. Issuers of tender option securities may require an expensive line of credit from a bank as a guarantee against a large number of investors exercising the tender option. While each type of bond represents a new way to provide capital for renovation (and new construction), state policy makers should be aware of the pros and cons of various creative financing techniques before modifying existing legislation to permit their use.

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