Issue 14

Locally Funded Initiative Update 3 Nov. 29, 2011

Introduction

The Maintenance Business Plan required by the Ohio School Facilities Commission (OSFC) for all schools completed under the Cleveland Metropolitan School District's construction/renovation program provides an independent assessment of funding needs for optimum maintenance of schools.

The purpose of this report is to use data from this Plan to highlight the need for additional revenue to properly maintain all of the District's schools, new and old, and – in the long run – to save money for local taxpayers.

Pattern of deferred maintenance. The BAC reported in Issue 14 / *Locally Funded Initiative Update 2* (July 2011) that the District had long engaged in a pattern of deferred maintenance that led to the need for major repairs for which operating-budget (the same budget that pays for teachers and books) funding was not available. Twice since the late 1980s, the District therefore had to turn to voters for approval of long-term capital-improvements borrowing to make these repairs.

These loans typically carry interest – at taxpayer expense -- for as long as 20 to 25 years. The interest on $50 million in bonds could easily amount to $20 million by the time they are retired. So the taxpayers not only have to pay for the $50 million in repairs, many of which could be avoided or reduced by proper routine maintenance, but they also have to pay $20 million in interest costs long into the future.

The situation is akin to not changing the oil in your car because you can't spare the $30, then having the engine fail and being faced with taking out a long-term loan to buy a new engine or another car, which still will need oil changes. That's not good management of your personal finances, and it isn't a financially sound way to run a school district.

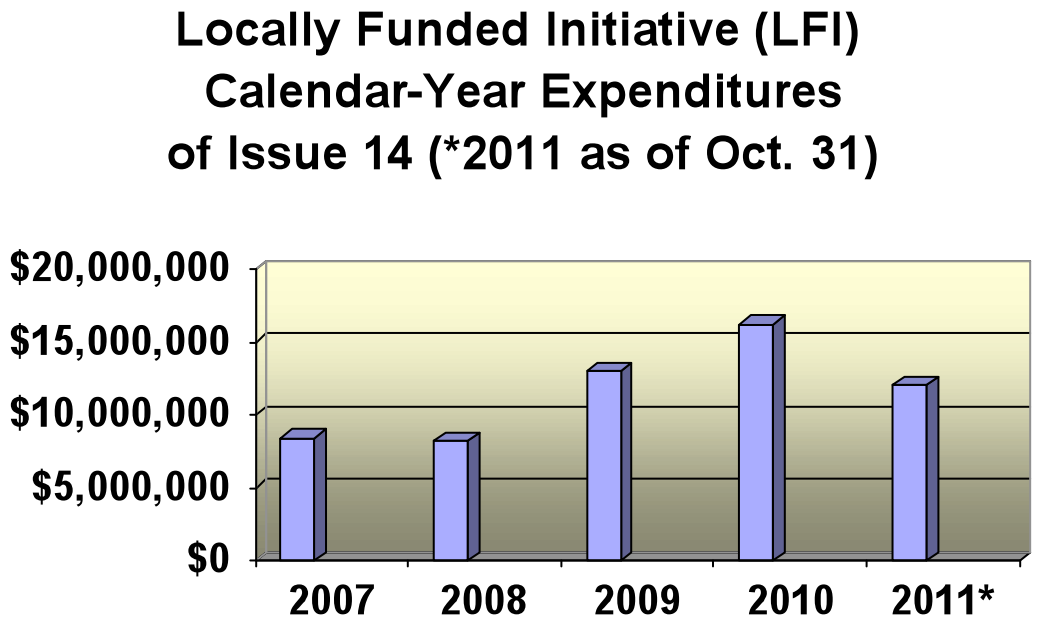
The District's construction and renovation program is funded by $335 million in bonds authorized by voter approval in May 2001 of ballot Issue 14. The OSFC pays for 68 percent of the basic costs of school replacement or renovation, and the District pays the remaining 32 percent.

Repairs financed by borrowed money. Previous Bond Accountability Commission reports have noted a rising trend of District spending of Issue 14 bond proceeds for repairs and improvements of schools that, due to enrollment declines, have been removed from the Master Plan for the co-funded construction/renovation program. The OSFC will co-fund only enough school space to accommodate the enrollment that its

forecasts predict the District will need in the program's final, or build-out, year, currently the 2017-18 academic year.

Such spending for non-Master Plan schools is known as Locally Funded Initiative (LFI) spending. Compared with the co-funded Master Plan program, LFI repairs are much more expensive for local taxpayers: One local tax dollar spent on the construction program yields $3 worth of work. One local tax dollar (not counting the interest cost) spent on LFI projects yields $1 worth of work. Therefore LFI spending quickly erodes the pot of money available for the co-funded construction/renovation program.

The chart below illustrates the trend:



The Finance Department has reported that Issue 14 LFI spending as of Oct. 31, 2011, totaled $12.07 million, with an additional $5.5 million in pending encumbrances.

Insufficient funding. The District's annual operating budget for maintenance, currently $5.2 million, has clearly been inadequate to meet the needs of what was once in excess of 100 schools, many of them quite old. In recent years, as more and more schools have been eliminated from the Master Plan due to declining enrollment, the District has been faced with the choice of closing them or keeping them in working order – by replacing a leaking roof and fixing the water damage below, for example. A number of schools have indeed been closed, and an increasing number of the rest have been targeted for LFI repairs funded by Issue 14 securities, on which taxpayers pay interest from one to 23 years.

Maintenance Business Plan

On June 29, 2011, the OSFC approved the Maintenance Business Plan (MBP) for schools in Segments 1-3 of the construction program.

The District contracted with Resource International, Inc., a firm pre-approved by the OSFC, to be its Maintenance Plan Advisor.

According to Resource International, the Plan "addresses the anticipated level of fiscal and human resources associated with the proper maintenance of the new and renovated school buildings. This document provides suggestions and strategies to help the district bridge the gap between the most desirable parameters for the ideal maintenance of the facilities and the current resources available to the District."

Issue 14 half-mill levy. Execution of the Maintenance Business Plan is funded by a half-mill continuing levy that also was part of Issue 14, as well as by a state "equalization" subsidy for economically distressed districts and whatever operational maintenance funds the District can muster. The required District contribution from the half-mill levy (regardless of how much the levy actually yields) is $2.47 million a year. The annual state subsidy is $1.93 million. These two revenue streams can only be spent on maintaining the new or renovated schools.

The District may also spend money from its operating budget on maintenance.

Cost of neglect. As this report will show, the pro-rated share of the District's maintenance operating budget, money produced by the half-mill levy, and the state subsidy fall far short of what is needed for optimum maintenance of the District's new schools, not to mention its old ones. Resource International has this to say about the risks presented by such a situation:

> "The negative repercussions of under-funding maintenance are significant. The equipment's performance and efficiencies will be undermined and lack of preventive maintenance will shorten the life expectancy of the equipment while increasing its operational cost.
>
> "Lack of preventive maintenance also increases the likelihood of major breakdowns that could disrupt the scheduled operations of the school facilities jeopardizing their intended function.
>
> "Furthermore, inadequate or improper maintenance could invalidate the manufacturer's warranty, which could result in a major financial drain to the district if a major piece of equipment is not covered by the warranty and needs to be repaired or replaced in an emergency situation.
>
> "Finally, the lack of proper maintenance of life/safety systems has major moral and financial implications to the district if such equipment/systems were to fail in an emergency situation and someone were to get hurt."

Zero-Based Budget

Resource International quantified the financial resources needed for optimum maintenance by establishing what it calls a Zero-Based Budget based on an inventory of each school's systems and assets. Each item in the inventory was assigned a cost based on well-known industry standards and manufacturers' suggested maintenance guidelines, Resource International said.

Costs were estimated for four areas: preventive maintenance, unplanned repairs, planned repairs, and capital renewal. This is how Resource International defines them:

Preventive Maintenance

A planned program of periodic inspection, adjustment, lubrication, and replacement of components, as well as performance testing and analysis. Also, repeatable maintenance activities that maximize the reliability, performance, and lifecycle of building systems. This maintenance occurs on no longer than an annual cycle and is typically done weekly, monthly, semi-annually, or annually.

Unplanned Maintenance

This includes any of four categories of maintenance, defined as follows:

a. *Reactive* -- unplanned maintenance of a nuisance nature requiring low levels of skill for correction. These problems are usually identified and reported by facilities users.

b. *Emergency* -- unscheduled work that requires immediate action to restore services, to remove problems that could interrupt activities, or to protect life and property.

c. *Corrective* -- unplanned maintenance of a non-emergency nature involving a moderate to major repair or correction requiring skilled labor.

d. *Support* -- the "service" that all departments must deliver. It includes supporting discussions and light customer service activities that every school building demands. While not applicable to maintenance, it must be accounted for because it will always be a drain on maintenance staff resources. If it is not included in a staffing model, it will still occur, and it will drain other estimated or budgeting staff resources and leave a department short for true maintenance activities.

Planned Maintenance & Repairs

Maintenance characterized by replacement of nominal components of a system—for example, the compressor of an air conditioning unit or the motor of a feedwater pump. This activity is capital by definition but managed out of the operating budget in most cases. It involves major system-component replacement—for example, the HVAC major subcomponent renewal factor accounts for the major motors and compressors that are replaced in a cycle shorter than the life of the HVAC system.

Capital Renewal

This is the periodic replacement of major components or infrastructure systems at or near the end of their useful life. Repair work that ensures that facilities will function at levels commensurate with the academic priorities and missions of an institution, such as tuck-pointing brickwork.

Included is replacement of components that are typically financed using a "Facilities Improvement Fund" as well as large and costly infrastructure components that are typically financed through capital improvement bonds.

Resource International asserts that the four maintenance areas are interdependent: "There is no way one of them can be ignored without affecting another, so the total outcome of the plan is dependent on properly acknowledging this inter-connectedness."

Proper, fully funded maintenance can save operating money for the District, for example through less overtime for emergency repairs, and hence the taxpayers who support it. The opposite is also true.

It should be noted here that although the Plan's authors describe some capital renewal costs as typically being financed through capital improvement bonds, they annualize these replacement costs in determining the Zero-Based Budget for each school. Therefore, if fully funded the Plan would theoretically eliminate the need for issuance of capital improvement bonds and save taxpayers the substantial expense of borrowing at interest.

The Bottom Line

Costs. Resource International calculated the Zero-Based Budget for all the Segment 1-3 schools except Willson, which was not included in Plan documents supplied to the BAC by the District, at $3.46 million for maintenance and $3.55 million for capital replacement, a grand total of $7.01 million a year for 20 schools, including two high schools.

Available funds. The District's continuing annual resources for maintenance are $2.47 million from the half-mill levy, $1.93 million in state "equalization" payments, and $5.2 million allocated to its operating maintenance fund, a grand total of $9.6 million a year for 94 schools, including at least 17 high schools. This a gross availability of funds, ignoring the fact that the required half-mill levy contribution and state subsidy cannot be spent on non-Master Plan schools.

The magnitude of this budgetary shortfall may be difficult to grasp. Broadly speaking, the District's combined recurring resources for maintenance are sufficient to meet the complete needs of perhaps only a third of its schools.

It is no wonder that the District for many years has found itself in a pattern of deferred maintenance that inevitably results in shabby schools and the need either to abandon those that are no longer fit for education or to tap proceeds of expensive capital improvement bonds to fix them.

$4.5 million annual deficit for just 20 schools. (The Maintenance Business Plan does not address the cost of maintaining all of the District's schools, but it recognizes that all of the District's maintenance/replacement resources cannot be spent on just the 20 schools covered by the Plan, so it pro-rates the available funds to calculate the annual shortfall for the 20. It puts the annual gap between available funds for the 20 schools and optimum funding at $4.52 million.

(For just these schools, the Plan identifies a shortfall of 2.59 in-house maintenance workers and a shortfall of more than $846,000 a year for contracted outside services.

("Consequently, it can be surmised that the total FTE [full-time equivalent] of in-house personnel plus service contracts is insufficient to properly address the maintenance needs of the schools in this plan. Efforts to train in-house personnel to increase efficiency [are] imperative to minimize the negative impact of this deficiency until other sources of funding can be identified and used to address the FTE deficit.")

No rainy-day money. With the possible exception of proceeds from the sale of some properties, the District is socking away nothing for eventual capital replacement costs. Resource International recommends otherwise (emphasis added):

"It is very crucial for the success of any maintenance plan that funds are set aside for major systems and equipment replacements, even when some of these components have life spans exceeding 10 years. The District has not set aside funds in the past to finance these capital renewals, but major capital expenditures have a significant financial impact on the district's budget and it is best to be proactive. As an example, the complete replacement of a roof system in 20 to 25 years for a facility of the size of the Memorial Elementary School building will be around $350,000."

Total cost of ownership. To quantify the long-term impact of the District's present course, Resource International used OSFC data on costs associated with lack of maintenance -- for example, higher utility bills, more overtime for emergency repairs, higher costs for asset replacement – to calculate what it calls total cost of ownership over 25 years under four scenarios, ranging from full implementation of the Zero-Based Budget (Scenario 1), including setting aside money for planned repairs and a fund for long-term replacement of major components, to one in which preventive maintenance other than that required by government regulations is generally ignored and repairs are only performed after assets or equipment fails (Scenario 4). Resource International used a 3% inflation rate compounded annually to estimate expenditures.

Resource International said the scenario most closely resembling the District's current practice is the third scenario: Government-required maintenance is performed on such items as fire/safety equipment, boilers and elevators, but maintenance of the rest of the building assets and equipment is minimal and in most cases ignored until an emergency repair arises "However, the district goes beyond the minimal preventive maintenance described in this scenario by using the Building Trades Division team of licensed and skilled workers, as well as outside contractors."

Excluding the cost of retiring the original construction bonds, which is the same under each scenario, the Plan advisor calculated the total 25-year cost of ownership, including utility costs, for the 20 schools as follows:

Scenario 1 -- $583.0 million
Scenario 2 -- $797.8 million
Scenario 3 -- $838.6 million
Scenario 4 -- $2.02 *billion*

If Resource International's calculations are accurate, the School District could save between $215 million and $256 million over 25 years by fully funding execution of the Maintenance Business Plan for just 20 schools.

The predicted savings from implementing a Zero-Based Budge compared with the District's current practice are significant - an average total of $9 million to $10 million a year for 20 schools – but actually understate the potential impact on taxpayers. That is because the predicted savings do not include avoidance of the considerable interest cost that would be incurred if the markedly higher asset and equipment replacement costs foreseen under Scenarios 2 and 3 are financed with tax-exempt municipal securities, as is currently the case with repairs being done with Issue 14 LFI money.

Breaking the cycle

The conclusion is inescapable: The perceived savings from scrimping on maintenance every year really are not savings at all; in fact, the practice amounts to

pushing onto a future generation the costs – and then some -- that the current generation chooses not to pay.

After years of neglected maintenance, taxpayers typically have been asked to foot the bill for borrowing to repair the wreckage. The collapse of the East High School gymnasium roof in 2000, often regarded as the catalyst for the current Issue 14-financed program of school repairs, renovations and replacements, was a symptom of the underlying problem of inattention to maintenance.

Full implementation of a preventive maintenance plan is really about breaking this cycle by taking responsibility now so that the students of the future do not have to attend shoddy and even unsafe schools – and so that taxpayers in the future do not face catastrophic repair or replacement bills.

The Cleveland District is planning draconian cuts to balance the current school year's operating budget, and the future is even bleaker. Without additional revenue, the District will have to deal next school year with an operating budget deficit predicted at more than $60 million, meaning that there will be even greater incentive to defer maintenance.

Issue 14 bond proceeds also are dwindling. When that money is gone, the construction and renovation program will stop, unfinished, and the District will no longer have that pool of money to tap the next time one of its schools springs a leak.

The District probably will ask voters soon to approve a levy to fund school operations, and if it wishes to complete the construction and renovation program, the District will have to ask voters to approve more bond issuance. In either case, the Maintenance Business Plan prepared by Resource International clearly supports the idea that it would be much less expensive for taxpayers in the long run if the District also requested and received approval of a companion continuing levy that is reserved only for system-wide building maintenance and that is set at a rate sufficient to pay for the routine work that will reduce the likelihood of catastrophic repair bills later.