STATE AID FOR SCHOOL CONSTRUCTION IN VERMONT

Analysis of options for changing the current system

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ATTACHMENTS

Introduction

Much of Vermont's public school infrastructure is over 30 years old. Not only are these buildings in need of repair, but many of them need upgrading to enable schools to provide 21st century services such as computer labs, media centers, and technical training. These needs have put pressure on the state to allocate an increasingly large percentage of its capital funds to school construction. Over the past few years, the general assembly has spent approximately 20 percent of the total capital funds available (about $10 million per year) on school construction and has also, as available, appropriated one-time general fund revenues to help pay down state obligations.[1] In FY 2008, the total state obligation for school construction was over $33 million,[2] and at the start of FY 2009, the state obligation is estimated to be $54 million.

The total requests from all state agencies for capital funds are typically $100 million, while the available capital funds are approximately $50 million. Clearly, the general assembly cannot pay all school construction aid as well as fund other necessary capital projects.
Therefore, instead of paying the entire $33 million obligation in FY 2008, the general assembly opted to appropriate $10,640,765 in capital funds and $2 million in general funds for school construction and to suspend aid for any new projects in order to enable the state to begin to pay the 2008 and 2009 backlog from future appropriations. Even so, given current state obligations and assuming the continuation of the moratorium along with the accompanying probable future obligations of $5 million per year due to emergency and other projects, paying $10 million a year for school construction projects would mean that there would still be $17 million left to fund at the end of FY 2014.[3]

In order to help it consider options for revising the system for providing aid for school construction so that it does not find itself in the position of being unable to meet its obligations in the future, the general assembly directed the commissioner of education to prepare a report describing recommended funding mechanisms, and it directed its staff to analyze various scenarios.[4] Specifically, legislative staff is directed to analyze:

1. The effects of lowering the percentage amount of school construction projects to be paid from funds raised through state bonding. (See Section 1A and B)
2. State aid for school construction systems in other states. (See Section 5)
3. The effect of authorizing 30-year bonding. (See Section 2A)
4. The effect of paying for school construction aid over the life of the state bond instead of in two payments. (See Section 2B)
5. Whether operating costs and property taxes are lowered as a result of entering into a performance contract pursuant to 16 V.S.A. § 3448f. (See Section 3)
6. The effect of providing state aid for construction of technical centers at the same rate as and through the same process that is used by other school construction projects. (See Section 1D)

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[1] In recent years, the general fund appropriations for school construction have been: $4 million in FY06, $8 million in FY07, and $2 million in FY08.
[2] The total obligation in 2006 was actually $74 million, but due to various construction schedules, the legislature was only obligated to pay $33 million in FY 2006. The remaining $41 million will be paid in future years.
[3] See Attachment 1 for Department of Education spreadsheet 9/18/2007.
[4] See Act No. 52 of 2007, §§ 37 and 38.

7. The pros and cons of using the education fund to pay for the state share of school construction. (See Section 1A and B)

8. The pros and cons of paying for emergency projects, biomass projects, performance contracts, and technical center equipment using state-bonded funds versus considering these to be operating costs and paying for them from the education fund. (See Section 1C)

9. A fair percentage for the state to pay for biomass projects based on savings that are actually realized by the school district. (See Section 4)

In this report we address the five large questions implied in the above list:

1. Should a larger percentage of school construction projects be paid from the education fund instead of from capital funds? (Questions 1, 6, 7, and 8)
2. Should the state consider revising bonding practices to pay for school construction projects? (Questions 3 and 4)
3. Are energy and operating costs reduced as a result of entering into an energy performance contract? (Question 5)
4. What is a fair percentage for the state to pay for biomass projects? (Question 9)
5. Can we learn something from how other states pay for school construction? (Question 2)

1. Should a larger percentage of school construction projects be paid from the education fund instead of from capital funds?

A. There are pros and cons to shifting (directly or indirectly) the burden of paying for school construction to the education fund.

Schools receive a portion of funding from the capital bill and pay for the rest, usually through a local bond that is carried in the school budget. Typically, the capital bill pays for 30 percent of a project, and the remaining 70 percent becomes a part of the school budget and therefore is an expense in the education fund.[5] Reducing the state's capital bill share on construction projects can be accomplished in different ways. The percent of funding could be reduced so that the same number of projects receive a smaller portion of state aid, or the legislature could choose to narrow the type of projects that are funded so that fewer projects are funded with a higher level of state aid. Assuming all projects move forward regardless of state aid, either method of reducing state obligations will increase the portion carried in the school budget, thereby increasing the demand on the education fund. Because the education fund is funded with a combination of property taxes and other education fund revenues, these revenues will have to replace the lost state bonded funds.

Arguments in favor of paying more of school construction costs from the education fund

[5] The majority of projects is funded 30%–70%. There are projects that receive more than 30% capital bill funding (e.g., tech centers receive 50%, biomass projects receive 75%).

- Using the education fund to pay for the state share of school construction will release state bond money for other capital projects. Given the great demand on the capital bill, this would be a positive move for these other capital projects.
- Typically, an entity bonds for large capital projects and not for ongoing operating expenses. Since the state share of all school construction projects tends to be approximately the same amount every year and is therefore more like an operating cost, the state should be paying for these items out of cash flow and not incurring debt in order to pay for them.
- All other education expenditures, both state and local, are paid from the education fund. Therefore, it makes sense to keep them together for ease of tracking.
- While it might make sense to pay for school construction projects from a different fund such as the general fund, at the moment, the education fund is experiencing the least pressure.
- Some capital projects are undertaken to reduce operating expenses and therefore should be funded with more "operating" type revenues and not bonded funds (see later discussion about performance contracts and biomass).

Arguments in favor of paying some of school construction costs from state capital funds

- Capital expenditures should be paid for from bonded funds.
- There are no education fund, general fund, or other revenues available to cover the traditional capital bill funding of $10 million per year.
- Any increase in education fund spending beyond the growth rate of the general fund transfer is paid for with increases in property taxes. Therefore, property taxes will rise to pay for these costs. Property taxes would increase approximately $0.01+ for every $10 million cost increase in the education fund.
- As the cost in the school budget increases, some districts may choose not to move ahead with their project or may choose to do a smaller project. There is no way to quantify the size of this effect, but this would reduce the demand on both the capital bill and the education fund. However, the impact would probably be fairly small as most projects are driven by real needs.
- As the cost in the school budget increases, some districts may defer projects which could result in increased maintenance costs.
- Along with reducing the state share might come less state control over the quality of school construction. With little state aid, there may be little incentive for schools to comply with standards, and they may choose to build without state capital funds and state input.

B. How the education fund pays for school construction will directly affect the homestead property tax rate and possibly the statewide rate.

If the legislature determines that all school construction costs should be paid out of the education fund, it will have to decide if the entire amount will be added to the local school budget, or if a portion (e.g. 30 percent) should be shared across the education fund and disbursed as categorical aid. Those costs added to the local budget would directly impact the homestead tax rate in the school district. Those costs paid by the education fund as direct

categorical aid would be borne by all property taxpayers in the state. Shifting the full cost of a project to the local budget may make it more difficult to receive voter approval.

C. There are pros and cons to shifting expenses for emergency projects, biomass projects, performance contracts, and technical center equipment, which are now partially paid for with capital funds, to the education fund.

In addition to the pros and cons discussed above, there are arguments specific to these projects.

Emergency Projects in excess of $100,000

- Pro re paying the expense from capital funds: Since these are unexpected, a school district does not have time for fiscal planning, yet they are one-time expenses and should be provided the same aid as any other large capital expense.
- Con re paying the expense from capital funds: A school district may choose to defer replacing large equipment or an item such as a roof until it becomes an emergency project. If the policy is to pay for these items from bonded funds, the legislature may be encouraging districts not to incur the appropriate operating expenses.

Biomass Projects

- Pro re paying the expense from capital funds: (1) A biomass project tends to cost over one million dollars. It is a large capital expense that should be paid for from bonded funds. (2) These projects benefit the state as a whole, and it is in the state interest to encourage them.
- Con re paying the expense from capital funds: (1) It takes 20 to 30 years to realize savings from a biomass system. The state should not pay for an investment with such long life-cycle costs. A school district that wants to do this should pay for it from its local budget; the state should not pay for it from increasingly scarce capital funds. (2) The main incentive for these projects is to reduce operating expenses and therefore these should not be funded by capital funds. [6]

Performance Contracts

- Pro re paying the expense from capital funds: (1) If the state pays for a share of the contract, the district is able to invest in deeper energy savings. (2) These projects benefit the state as a whole, and it is in the state interest to encourage them.
- Con re paying the expense from capital funds: (1) These projects pay for themselves in approximately 10 years, so the district should be funding them with its own money. (2) The goal for these projects is to reduce operating expenses, and therefore these should not be funded by capital funds. [7]

[6] For a more thorough discussion of this, see Section 3B in this report.
[7] For a more thorough discussion of this, see Section 3A in this report.

Technical Center Equipment

- Pro re paying the expense from capital funds: These are large pieces of equipment. If the state did not help to pay for them, technical centers would be unlikely to purchase them, and technical students would not be trained appropriately.
- Con re paying the expense from capital funds: Compared to the entire school district budget, these are relatively small costs and can be planned for.

D. The state could pay for technical center construction at the same rate it pays for other school construction. This would reduce pressure on the capital fund, but the legislature might want to revise technical center governance to ensure that the voters have appropriate input into such a large budgetary decision.

State aid for technical center construction is 50 percent of the project, while general school construction aid is 30 percent. Assuming no change in the number of projects, reducing tech center aid to 30 percent will result in savings to the state bonded money and will increase the cost at the local school level. This increased cost will show up in the education fund.

Currently, there are approximately eight regional technical center buildings which were built in 1971 and which since have not been renovated. Of the boards that govern these centers, at least two, the Burlington Technical Center and the Barre Technical Center, are discussing renovations and have approached the Department of Education. However, without more information about specific projects, it is difficult to estimate the future fiscal impact of reducing state aid. The table below shows two projects that were built with 50 percent aid and the impact if state aid had been 30 percent instead of 50 percent.

	Total state approved cost	50% state aid	hypothetical 30% state aid	Difference in state aid 30%-50%
Green Mountain Technology and Career Center	12,416,206	6,208,103	3,724,862	(2,483,241)
The Center for Technology in Essex	6,121,050	3,060,525	1,836,315	(1,224,210)

In 2001, the legislature authorized the school district members of a regional technical center to form a regional technical center school district, and three regional technical centers have done this. In this case, the regional technical center is governed by a district school board. Budgetary decisions, including whether to incur debt, are voted on by the electorate of the entire district, and the amount is collected from property taxpayers in each town.

All other regional technical centers are governed by the school board of the school district in which the technical center is located, often referred to as the "host district." The board of the host district establishes a budget which is voted on by the electorate of the host district. The board then sends an assessment in the form of tuition charges to each school district which sends students to it. This amount becomes an obligation of the sending school district. A decision to bond for the technical center is therefore made by the electorate of the host district and is an obligation of the host district. Each sending district pays its share as part of its annual tuition assessment.

Therefore, in the case of regional technical centers governed by a host district, a reduction in state aid for construction would mean that a small number of the taxpayers would be voting to incur a large debt on behalf of a large number of taxpayers. If the legislature decides to reduce the amount of state aid for these projects, it might want to consider whether state policy should be:

- To continue the current practice of allowing the host district to make all the decisions regarding capital costs and pass these to member districts through an assessment or tuition charge.
- To allow the host district to continue to make decisions regarding the operating budget and day-to-day management of the technical center but allow the electorate of each member district to be involved in planning and voting on capital spending. In this case, policymakers would need to develop a system for ensuring that each member district is appropriately involved and to answer questions such as the composition of the planning committee; whether votes would be weighted, for example, based on the size of the member district or on historic per-pupil use of the center; and how the costs will be allocated among the member school districts.
- To provide incentives to encourage all regional technical center areas to form a regional technical center school district so that all those whose taxes will be affected will be able to vote on capital construction and other budgetary decisions.

2. Should the state consider revising bonding practices to pay for school construction projects?

A. One option is to authorize school districts to enter into 30-year bonding.

Currently, both the state and school districts are limited by law to 20-year bonding.[8] Increasing this limit to 30 years will reduce the annual cost but increase the total cost paid over the life of the bond because of interest expense. Since it will increase the amount of debt and the length of repayment, moving to 30-year bonding could negatively affect bond ratings.

For example, for a $1 million project using current bond rates, the 30-year bond will cost an additional $224,674. However, taking into account the time value of money (a dollar today is worth more than a dollar tomorrow), the 30-year bond would cost only $17,345 more than a 20-year bond. (See Attachment 2 for more details.)

[8] State: 32V.S.A. § 952, Municipal: 24 V.S.A. § 4755.

Currently, the state's debt position is such that 79.4% of our debt will be repaid in 10 years.[9] Moving to 30-year bonding would reduce the percentage that will be repaid in 10 years. Since bond rating agencies use this percentage as one factor in determining a state's credit rating, although it is not clear at what point the bond rating agencies would care about this difference, the Treasurer's office is concerned about any action that would reduce Vermont's rating.

Statute also limits local municipalities to 20-year bonds (except for the two interstate school districts which may issue 30-year bonds). The legislature could authorize all municipalities to issue 30-year bonds even if it continued to limit state bonding to 20 years. Lower annual payments could make it easier for voters to support projects. Furthermore, for some projects, a 30-year bond will spread the cost more appropriately across the life of the project. Moving to 30-year bonding could affect the rating of the Vermont Municipal Bond Bank as described above for the state. However, the Vermont Municipal Bond Bank indicated less concern about this concept during initial discussions with us, and we believe that this particular idea bears more consideration.

In addition, the legislature could consider allowing 30-year bonding only for those portions of a project that will last for 30 years or longer.

B. Another option is to pay school construction aid over the life of the state bond instead of in two payments.

If the state is obliged to pay for 30 percent of a project, regardless of how the costs are spread, the state will at some point have to pay for the full 30 percent. (This assumes the state does not take on the obligation to pay interest costs with this change in payments.)

In the short term, paying the aid in installments over time does reduce the demand on the capital bill since the state's obligation is now spread over 20 years as opposed to two payments. However, the payment over 20 years will start to lock in more and more of the capital bill payments as obligations already made and as more projects are added each year. The policy choice is to pay off a few schools with big checks or more schools with small checks.

	Year 1	Year 2	Year 3	Year 4	…	Year 20	TOTAL
Current law – two payments	$ 150,000	$ 150,000	$ -	$ -	…	$ -	$ 300,000
Proposal - payments over 20-yr life	$ 15,000	$ 15,000	$15,000	$ 15,000	…	$15,000	$ 300,000
Difference	$(135,000)	$ (135,000)	$15,000	$ 15,000	….	$15,000	$ -

[9] State of VT Bond Prospectus, March 7, 2007, p. 55.

Local perspective:
School districts currently take out short-term loans to cover the state portion of projects in the anticipation they will get money soon. If the state were to pay aid over the life of the bond, a school district might bond for the full amount and then use state aid to pay each year's costs. This would result in municipalities tying up more of their bonding capacity as well as possibly paying higher financing costs for borrowing more money.

3. Are energy and operating costs reduced as a result of entering into an energy performance contract?

An energy performance contract should reduce energy and operating costs; however, time to realize the savings depends on how the contract is structured and how much energy costs increase in the future. Investing in energy efficiency and atmospheric carbon reduction is probably in the state's interest but the current system of paying state aid on performance contracts may not be the best way to ensure maximum cost-effective reduction in energy use.

In 2003, the legislature authorized school districts to enter into a performance contract under which a district may hire an energy service company (ESCO) to analyze the potential for energy savings and do the work necessary to implement some or all of the savings. The school district pays the upfront costs, and the ESCO guarantees that the savings in energy and operating costs will be greater than the investment over a specified period of time. The law also authorizes school boards to enter into these contracts without a vote of the electorate if the contract permits the district to make payments to the contractor over a period of 10 years or less. The state reimburses the school district for 20 percent of the total cost of the project, and the district may pay its share through installment payments or lease-purchase agreements. A district may finance the project through the contractor or from another source.

Four school districts have taken advantage of this law and entered into 10-year contracts with an ESCO. Three contracted with Honeywell Building Solutions for work as follows: Montpelier school district for work in all its schools, Milton school district for work in its high school, and Brattleboro Town school district for work in its elementary schools. Brandon school district contracted with Johnson Controls for work in the Neshobe elementary school.

We do not yet have enough information to analyze how well the contracts are working. Montpelier entered into its contract in the summer of 2006 and has only one year's experience. Milton has only a few months' experience, and the other two districts have not yet begun their projects. Therefore, we can only report on the savings that are projected by the ESCO or the school district using the numbers that they report.

In the chart below, we show the payments and guaranteed energy savings agreed to in each of the three Honeywell 10-year energy performance contracts. The Johnson contract is structured differently and we describe the differences in the footnotes. The first number is the amount the ESCO charges to perform the work and which is eligible for state aid. In addition, three of the school districts contracted with the ESCO for maintenance and operation work (O & M) over the 10-year period. Each ESCO projected a total guaranteed savings over a

10-year period as well as how much of the savings were attributable to savings in electricity and fuel costs and how much were attributable to operational costs which Honeywell defines as follows:

> Operational costs commonly referred to as O and M costs, shall include the cost of operating and maintaining facilities, such as but not limited to, the cost of inside and outside labor to repair and maintain affected systems and equipment, the cost of custodial supplies, the cost of replacement parts, the cost of deferred maintenance, the cost of lamp and ballast disposal, and the cost of new capital equipment.

Johnson guaranteed savings over a 10-year period, but only described how much will be attributable to operational and energy costs for the first year. Johnson is very specific in its contract about where the operational costs savings will come in the first year as follows:

- $5,000 reduction in lamp and ballast stocks due to a longer life.
- $1,000 avoidance of repair of drywall and ceiling tiles, and less mold due to replacement and insulation of the roof.
- $3,291 avoidance of overhaul of existing boiler, no maintenance of steam trap, and avoidance of repairing underfloor steam lines due to conversion from steam heat to hot water heat.

School Energy Performance Contracts				
School District	**Montpelier**	**Milton**	**Brattleboro**	**Brandon**
Year entered into contract	2006	2006	2007	2007
ESCO	Honeywell	Honeywell	Honeywell	Johnson
Total work cost	$1,210,006	$ 523,367	$ 759,051	$ 458,720
Service cost (O&M)	$ 754,109[10]	$ 379,757	$ 220,221	N/A [11]
State aid (20% of work cost)	$ 242,000	$ 104,673	$ 151,810	$ 91,744
Other aid (e.g. Efficiency VT)	$ 25,000			
Amount financed	$ 943,006	$ 415,194	$ 602,241	$ 462,220[12]
Finance cost	$ 203,671	$ 108,235	$ 156,358	$ 105,964 [13]
Total cost to district = (work cost –aid + O&M + finance cost)	$1,900,786	$ 906,686	$ 983,820	$ 672,400
Total cost = (cost to district + state aid)	$2,167,786	$1,011,359	$1,135,630	$ 764,144
Total guaranteed savings over 10-year period	$1,801,835	$ 980,847	$1,055,175	$ 469,107
Energy savings	$1,210,006	$ 384,877	$ 781,642	$ 360,791[14]
Operational savings	$ 287,422	$ 595,970	$ 273,557	$ 76,974[15]

Using these numbers, we can see that Montpelier will probably begin to realize savings in year 11, Milton and Brattleboro will begin to realize savings toward the end of the 10-year contract period, and Brandon may not realize savings for 13 or 14 years. With no state aid, the time to realize savings would be longer. Rising energy costs may decrease the time to realize savings. Further, if a district chooses to invest only in those items with a high rate of return, the savings will be realized more quickly. If the district chooses to invest in deeper energy efficiency, the time to realize savings will be longer.

[10] The contract states that Montpelier's O&M obligation will be $795,458 over 10 years. However, the Montpelier business manager reports that this was renegotiated after the contract was signed and is actually $754,109.

[11] Brandon did not enter into an O&M contract with Johnson.

[12] Brandon financed the entire project and added to it for two reasons. First they added funds to pay for some monitoring and evaluation of the project. In addition, they financed the entire project because they are not expecting to receive state aid before they will have to pay the ESCO, and they find it will be less costly to borrow the funds through the municipal lease contract rather than short-term borrowing. They expect to pay the entire 20 percent state aid portion to the municipal leasing corporation as soon as they receive it, which will reduce both the principal and the finance costs.

[13] We calculated this using a 4.25 percent annual interest rate and assuming monthly payments over a 10-year period. As stated in footnote 12, once the state pays its 20 percent, both the principal and finance costs will decline.

[14] The contract described energy and operational savings only for year one. The business manager reports that 10-year energy savings will be as reported in the chart.

[15] IBID.

It will be difficult to measure the actual savings. The ESCO projects savings based on, for example, the rating of the lightbulb and the time saved in servicing lighting fixtures. Both of these would require time and effort to monitor. When the school district receives its energy bill, energy for lights is not reported separately from other items, and if the school has recently added new energy-using equipment in its computer lab or technical center, for example, determining the energy savings due to the efficient lightbulbs would require installing monitors to measure use of individual items, and determining maintenance time savings would require both information about time required before the installation and careful recordkeeping after the installation.

It is important to realize that although the savings are reported in dollars, in fact, this is not always what the ESCO is guaranteeing. Because the ESCO cannot accurately project future costs of fuel, it actually guarantees savings in units of the fuel. For purposes of reporting the cost of savings, it then uses a conservative figure to project the cost of fuel savings but does not guarantee that cost, only the savings of fuel. Therefore, the actual savings will be higher if the cost of fuel increases faster than expected, and lower if the cost of fuel does not increase as quickly as expected.

Most agree that it is in the state's interest to encourage school districts to engage in energy efficiency and thereby realize a reduction in the state's total energy use, energy costs, and overall carbon production. Proponents of the law argue that authorizing use of an ESCO, providing 20-percent aid, and allowing the project without a vote of the electorate is necessary because:

- From the school district's point of view, the reduction in the overall budget is not enough to consider managing the project with its own personnel, which would require hiring and managing an engineering firm to do the analysis, determining which of the potential cost-saving items it wishes to implement, and hiring and managing a contractor to carry out the project. This would involve considerable time and effort from school personnel for savings that would not be realized for approximately 10 years and which would be a very small portion of the school district's overall budget.
- From the school district's point of view, the reduction in the overall budget is not enough to invest the time and energy of school personnel in working with the electorate to approve the expenditure.
- Without the 20-percent subsidy, it would be difficult to realize a return on investment in less than 10 years except on a few of the items. With the subsidy, the district can also invest in those items that might take longer to realize a return and still have an attractive life-cycle cost benefit.

Others argue that while it may be in the state's interest to encourage schools to save energy, performance contracts may not be the best system for doing so because:

- Since the contractor will be assuming much of the risk, he or she will only offer to engage in those projects that realize a reasonably high rate of return. Therefore, he or she is likely to choose among the projects that the engineering analysis shows to be most profitable and not tell the school district about other items that could realize energy savings but are a more risky investment. Once the most profitable projects are

done, it will rarely be in the interest of the district to go back and do the less profitable projects. It might be in the state's interest to insist instead that all or most potential cost-effective energy savings be mined at the same time so the costs can be distributed among all projects.

- The contractors are likely to approach only the larger school districts in which the economies of scale allow them to realize a reasonably high rate of return. If so, the state may not want to subsidize projects in large school districts which may be able to realize a return in the 10-year time frame without it. The state may prefer to subsidize those who cannot realize a return in a reasonable amount of time without the subsidy.
- Current taxpayers can be obligated to pay for items which will realize savings for future taxpayers, in about 10 years, without consulting the current taxpayers.

Potential Alternate Aid System for Energy Savings

As indicated above, currently the state reimburses districts for 20 percent of performance projects. If a school district were to contract directly with an engineer, a project manager, and a contractor, it would not have to pay the ESCO fees, and it would receive a complete engineering analysis, not just a description of those retrofits which the ESCO decides to evaluate. It would then be able to negotiate with a contractor, which may be an ESCO, for all energy savings work. The state could encourage this by paying for a very high percentage of the engineering costs and a smaller portion of the contractor's costs. In addition to potentially realizing more energy savings, it could save funds.

Alternatively, the state could establish its own ESCO to conduct an engineering analysis for interested schools. In this way, the state could ensure that its ESCO describes all potential savings, not just those which realize a high rate of return. This would relieve the school district of the burden of managing the analysis.

An engineering analysis generally costs between $0.05 and $0.10 per square foot. A school generally has 173 square feet per student. Neshobe school, for example, has an enrollment of 308 students. It may be sized for more, so assuming 350 students at 173 square feet each and a cost of $0.10 per square foot, the engineering cost would be $6,055. For the entire state, assuming that schools are sized for 120,000 students and the cost is $0.10 per square foot, the cost of paying for all engineering analyses would be about $2 million.

Once a school district has a complete engineering analysis, the state could pay a small portion of the work costs in return for a guarantee that the district will do a very high percentage of the energy saving projects identified in the engineering analysis. The state could guarantee, for example, a 10-year pay-back period and subsidize the project to that extent.

4. What is a fair percentage for the state to pay for biomass projects?

If the legislature believes that the state should encourage school districts to build biomass heating projects and should therefore share the costs with the local school district, the state's recent aid share of 90 percent of the costs is probably more than necessary, and paying only 50 percent of the costs is probably not enough to encourage those still considering investing in biomass systems to do so.

Those who believe that it is in the interest of the state to pay a high percentage of the capital costs of a school biomass system argue:

- Use of a Vermont resource to produce heat is good for the economy because it employs local people at all stages of producing, harvesting, processing, and transporting the fuel and increases state tax revenues. This ripple effect on the economy is increasing as wood for fuel becomes a commodity. Currently, byproducts from sawmills and otherwise undesirable logs culled from wood harvesting jobs are used to produce heat, but as more systems are built, people are beginning to harvest wood just for this use.
- Use of a local resource is good for the environment because it reduces transportation costs.
- Use of sustainably harvested wood is good for the environment because it is renewable and is carbon neutral.
- As markets develop for use of lower grade wood for chips, forest owners will be less inclined to harvest only premium trees when logging and more inclined to engage in better forest management practices.
- Use of local wood is good for the schools because the price of fossil fuels is likely to increase dramatically in the future, and if we face an oil shortage, wood will still be available for heat.

Concerns about whether it is good public policy for the state to pay a high percentage of school biomass systems include:

- Particulate emissions from these systems may be detrimental to the health of our schoolchildren.[16,17,18]

[16] Studies show that exposure to a high level of fine particulates correlates to heart attacks and lung problems although to date, no studies have been done on the effects of school biomass systems on schoolchildren. The North East States for Coordinated Air Use Management of which the Vermont Agency of Natural Resources is a member, has recently applied for a grant to evaluate emissions from school wood heat systems. They hope to evaluate three Vermont schools and to have the information available by the summer of 2009.

[17] Vermont state law requires air quality permits only for biomass systems of greater than 90 HP. Thus, of the 31 systems in Vermont schools, only four have been evaluated by ANR and received permits.

[18] Concerns about particulate emissions at schools can be addressed by three methods. One is installation of emission control devices that are efficient at removal of large particulates but do little to remove fine particulates. A second technology has not been used in schools because it is prohibitively expensive. This involves fabric filters which are proven to reduce fine particulates in large facilities. However they require high maintenance, and the cost would greatly increase the life-cycle cost of the system. The third method is used in most, if not all schools. Tall stacks are sited and installed to disperse particulates in a way that can reduce ground-level ambient additions to near zero.

- A biomass system generally costs over $1 million while a fossil fuel system generally costs less. Investing in a biomass system is an excessive use of taxpayers' money.

When a school invests in a biomass system, many of the benefits accrue to the entire state. However, since the initial capital investment required to build a system is very high, usually in excess of $1 million, and savings are not realized for approximately 20 to 30 years,[19] from the point of view of the school district, it is not worth investing considerable time and effort to realize a small reduction in the budget 20 or more years in the future. Therefore, in 2001, the general assembly instituted a policy of providing aid to enable school districts to realize a return in a shorter time period.

Prior to 2001, the state paid 30 percent aid on all heating systems including biomass systems. In 2001, the general assembly directed the commissioner of education to pay for 50 percent of the costs of a school heating or cooling system that uses renewable energy which are in excess of costs for a fossil fuel system. In 2004, it increased the state share to 90 percent and in 2006, decreased the state share to 75 percent.

It appears that state aid in the 50–75 percent range will motivate many schools to build these systems. When the state offered no aid or aid at 30 percent, 17 schools built systems[20] using some federal funds, which are no longer available, and, in some cases, volunteer resources in the form of local residents who could provide technical engineering or building expertise. During the three years when the state offered 50 percent aid, only seven schools built systems. At 90 percent aid, the state generated considerable interest as 22 schools applied for aid in two years, and another three have voter approval and may move forward with their projects. Therefore, it appears that it is not necessary for the state to offer aid as high as 90 percent in order to encourage schools to consider building biomass heat systems, but it is necessary to offer more than 50 percent aid. Experts that we talked to seemed to feel that 75 percent is the right amount of state aid.

As the general assembly considers this question, it will be important to consider whether those schools that could realize a return on investment in a biomass system have already applied for aid. For smaller schools, the investment is not worthwhile using current wood chip technology because the capital investment is very large and a wood chip system requires more maintenance than a fossil fuel system. However, recent development of wood pellet technology may make it feasible for smaller schools to invest in a biomass heating system. Wood pellets have lower moisture content and therefore require less storage space and may require less frequent delivery. Since the pellets are of uniform size and shape, they move through the system more easily, requiring less maintenance. As the infrastructure develops to produce this type of fuel, it will likely make biomass heating systems a viable alternative for smaller schools.

Norm Etkind, Director of the Vermont Superintendents Association School Energy Management Program, estimates that currently about 21 schools in Vermont are of a size to be able to realize a reasonable return on investment in a wood chip heating system. He

[19] See Attachment 3 for a life-cycle cost analysis of a hypothetical school biomass heating system.
[20] Source for the numbers of schools building biomass systems: Cathy Hilgendorf, Department of Education.

provided the following information about Vermont school sizes and whether they are likely to be interested in a biomass project:

- Large schools (over 500 students)
  - 10 have received a preliminary review and are good candidates for wood chip systems but have not yet applied for construction aid
  - 11 do not have wood chip systems but may be candidates for them
- Medium schools (between 300 and 500 students)
  - 49 do not have biomass systems and are probably not good candidates for the full-scale wood chip systems but may be able to use other less expensive types of biomass systems (such as wood pellets)
- Small schools (less than 300 students)
  - not good candidates for wood systems but may be able to utilize pellet systems in the future as the price of wood chips or pellets becomes less expensive in relation to the cost of oil or natural gas

If the time to realize savings is shortened, a district will be more likely to invest in a biomass project. Currently, oil prices are increasing faster than expected, thereby reducing the payoff time for projects, and if this trend continues, the legislature may be able to encourage projects by providing aid in an amount closer to 50% of the project than 75% of the project.

5. State aid for school construction systems in other states.

The most recent compilation of public school finance systems is eight years old and therefore may not reflect the actual system in each state today. The National Center for Education Statistics gathered this information by asking an expert in each state to describe its system. At that time:

- 10 states provided no state aid for school construction.
- 10 states earmarked specific taxes or other revenue sources for school construction aid.
- 5 states maintained funds for payment or reimbursement of specific expenses such as new schools, deficiencies correction, urgent needs, etc.
- 2 states paid for 100 percent of school construction costs.
- 9 states provided an annual appropriation to each school district for capital construction, often as part of the general state aid to education formula. In some of these states, the legislature required that the funds be used only for capital construction. Others did not require this but provided no other funding specifically for this purpose.
- 6 states provided low-interest or no-interest loans.
- Most states reimbursed school districts for capital outlay based on fiscal capacity, although a few used a flat percentage reimbursement.

A brief summary of each state's system is attached to this report.

STATE OBLIGATIONS for SCHOOL CONSTRUCTION AID

FY2008 – FY2014

New projects under suspension per 2007 Capital Bill

Projection reflecting '08 appropriation and assuming $10M funding per year FY09 fwd.

estimates as of 12/18/2007

Project Category	Requested FY'08	Outstanding obligations FY09	Estimated Need FY'10	Estimated Need FY'11	Estimated Need FY'12	Estimated Need FY'13	Estimated Need FY'14
Unfunded need carried forward from previous year:			43,779,902	38,479,902	33,179,902	27,879,902	22,579,902
Major new construction and addition/renovations	16,419,687	**11,561,637**	0	0	0	0	0
Consolidation projects: new construction and add/renov. (assumes one new project to serve 500 students at $16M every other year)	0	**4,284,558**	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
Emergency projects	1,800,000	**0**	700,000	700,000	700,000	700,000	700,000
Biomass projects	7,145,044	**13,986,445**	0	0	0	0	0
Performance Contracts	346,000	**390,480**	0	0	0	0	0
Limited-scope projects to extend the life of existing buildings	2,800,000	**3,245,362**	0	0	0	0	0
For equipping as Emergency Shelters	20,000	**0**	0	0	0	0	0
Aid obligated for technical education centers already under construction: Brattleboro, Essex, Hyde Park, Newport	4,030,033	**20,311,420**	0	0	0	0	0
Technical Center Capital Equipment	772,500	**0**	0	0	0	0	0
Total School Construction Aid Needed:	**33,333,264**	**53,779,902**	**48,479,902**	**43,179,902**	**37,879,902**	**32,579,902**	**27,279,902**
LESS ANNUAL APPROPRIATION	(12,709,014)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)
BALANCE CARRIED FORWARD TO SUBSEQUENT YEAR	**20,624,250**	**43,779,902**	**38,479,902**	**33,179,902**	**27,879,902**	**22,579,902**	**17,279,902**

Present Value Analysis of Bond Financing for a hypothetical school district
Assumptions:
20-Year and 30-Year Terms, $1.0 Million, Bond Interest Rates = 12/7/07 MMD "AAA-Insured", PV/Reinvestment Rate = 4.5%

Year	20-Year Term				30-Year Term				Variance	
	Principal	Interest	Total	PV	Principal	Interest	Total	PV	Actual	PV
	$0	$35,284	$35,284	$35,284	$0	$36,994	$36,994	$36,994	$1,710	$1,710
1	$50,000	$39,395	$89,395	$85,545	$35,000	$41,584	$76,584	$73,286	-$12,811	-$12,259
2	$50,000	$37,769	$87,769	$80,373	$35,000	$40,446	$75,446	$69,088	-$12,323	-$11,285
3	$50,000	$36,102	$86,102	$75,451	$35,000	$39,279	$74,279	$65,090	-$11,823	-$10,360
4	$50,000	$34,394	$84,394	$70,770	$35,000	$38,083	$73,083	$61,285	-$11,311	-$9,485
5	$50,000	$32,645	$82,645	$66,319	$35,000	$36,859	$71,859	$57,663	-$10,786	-$8,655
6	$50,000	$30,851	$80,851	$62,085	$35,000	$35,603	$70,603	$54,216	-$10,248	-$7,869
7	$50,000	$29,008	$79,008	$58,057	$35,000	$34,312	$69,312	$50,932	-$9,696	-$7,125
8	$50,000	$27,115	$77,115	$54,226	$35,000	$32,987	$67,987	$47,807	-$9,128	-$6,419
9	$50,000	$25,173	$75,173	$50,584	$35,000	$31,628	$66,628	$44,834	-$8,545	-$5,750
10	$50,000	$23,183	$73,183	$47,125	$35,000	$30,235	$65,235	$42,007	-$7,948	-$5,118
11	$50,000	$21,147	$71,147	$43,841	$35,000	$28,810	$63,810	$39,320	-$7,337	-$4,521
12	$50,000	$19,069	$69,069	$40,727	$35,000	$27,355	$62,355	$36,768	-$6,714	-$3,959
13	$50,000	$16,949	$66,949	$37,777	$35,000	$25,871	$60,871	$34,348	-$6,078	-$3,430
14	$50,000	$14,787	$64,787	$34,983	$35,000	$24,358	$59,358	$32,052	-$5,429	-$2,932
15	$50,000	$12,583	$62,583	$32,338	$35,000	$22,815	$57,815	$29,874	-$4,768	-$2,464
16	$50,000	$10,346	$60,346	$29,839	$35,000	$21,249	$56,249	$27,813	-$4,097	-$2,026
17	$50,000	$8,087	$58,087	$27,485	$35,000	$19,667	$54,667	$25,867	-$3,420	-$1,618
18	$50,000	$5,805	$55,805	$25,269	$35,000	$18,069	$53,069	$24,030	-$2,736	-$1,239
19	$50,000	$3,499	$53,499	$23,181	$35,000	$16,456	$51,456	$22,296	-$2,043	-$885
20	$50,000	$1,170	$51,170	$21,217	$35,000	$14,879	$49,879	$20,682	-$1,291	-$535
21			$0	$0	$30,000	$13,443	$43,443	$17,238	$43,443	$17,238
22			$0	$0	$30,000	$12,094	$42,094	$15,983	$42,094	$15,983
23			$0	$0	$30,000	$10,722	$40,722	$14,796	$40,722	$14,796
24			$0	$0	$30,000	$9,326	$39,326	$13,674	$39,326	$13,674
25			$0	$0	$30,000	$7,907	$37,907	$12,613	$37,907	$12,613
26			$0	$0	$30,000	$6,475	$36,475	$11,614	$36,475	$11,614
27			$0	$0	$30,000	$5,040	$35,040	$10,676	$35,040	$10,676
28			$0	$0	$30,000	$3,603	$33,603	$9,798	$33,603	$9,798
29			$0	$0	$30,000	$2,164	$32,164	$8,974	$32,164	$8,974
30			$0	$0	$30,000	$722	$30,722	$8,203	$30,722	$8,203
Total	$1,000,000	$464,361	$1,464,361	$1,002,477	$1,000,000	$689,035	$1,689,035	$1,019,822	$224,674	$17,345

School Energy Management Program - Vermont Superintendents Association

Norm Etkind, Director, School Energy Management Program, 2 Prospect Street, Montpelier, Vermont 05602, Phone 802-229-1017, Email: SEMP@VTVSA.org

Analysis Based on a Consensus Approach by the Partners in the Vermont Fuels For Schools Program

Specific information provided by project design team and used for this analysis is: Fuel usage, project cost

Project Name: Generic

Preliminary Life Cycle Cost Estimate, total project costs of renewable energy heating system.

Life Cycle Cost Savings-Net Present Value	**$160,621**		**Bond Rate:**	4.43%					
Project Cost:	**$1,200,000.00**	**Note: Analysis period begins one year from today, so year one numbers have inflation applied**						Last Update	Sept. 19, 2007
Discount Rate:	**4.500%**								
Fuel Oil:	**35,000**	annual Gallons.					110,560	net BTU/gallon	
Fuel Oil Price:	**$1.980**	/ Gal. Yr. 1	**Current Price**						
Wood Chips:	551	annual tons.				63.50	Gal. / ton.		
Wood Chip Price:	**$50.00**	/ ton Year 1.							
Propane:						89.20	Gal./Ton		
Propane Price:									
BTU ratio (net basis)	**85%**	wood	469	tons.	15%	Fuel Oil	5,250	Gallons	
General Inflation:	**3.25%**	annually.							
Fuel Oil inflation:	**5.25%**	annually.	Consensus "best guess."						
Wood Chip Inflation:	**3.25%**	annually.							
O. & M.:	**$6,148.00**	in Year 1 $.	Estimate of additional electricity for feed system motors and additional maintenance staff time,etc.						
Major Repair Reserve/yr	**$1,000.00**	in Year 1 $.							

Yr.	Fuel Oil Cost	Total	Acquisition/ Salvage	Wood Chip Cost	Fuel Oil Cost	O&M	Repairs Contingency	Total	Annual Cashflow	Cumulative Cashflow
1	$72,938	$72,938	($1,200,000)	($24,187)	($10,941)	($6,348)	($1,033)	($1,242,508)	($1,169,569)	($1,169,569)
2	$76,768	$76,768		($24,973)	($11,515)	($6,554)	($1,066)	($44,108)	$32,660	($1,136,910)
3	$80,798	$80,798		($25,784)	($12,120)	($6,767)	($1,101)	($45,772)	$35,026	($1,101,884)
4	$85,040	$85,040		($26,622)	($12,756)	($6,987)	($1,136)	($47,502)	$37,538	($1,064,346)
5	$89,504	$89,504		($27,487)	($13,426)	($7,214)	($1,173)	($49,301)	$40,204	($1,024,142)
6	$94,203	$94,203		($28,381)	($14,130)	($7,449)	($1,212)	($51,171)	$43,032	($981,110)
7	$99,149	$99,149		($29,303)	($14,872)	($7,691)	($1,251)	($53,117)	$46,032	($935,078)
8	$104,354	$104,354		($30,255)	($15,653)	($7,941)	($1,292)	($55,141)	$49,213	($885,865)
9	$109,833	$109,833		($31,239)	($16,475)	($8,199)	($1,334)	($57,246)	$52,587	($833,278)
10	$115,599	$115,599		($32,254)	($17,340)	($8,465)	($1,377)	($59,436)	$56,163	($777,115)
11	$121,668	$121,668		($33,302)	($18,250)	($8,740)	($1,422)	($61,714)	$59,954	($717,161)
12	$128,056	$128,056		($34,385)	($19,208)	($9,024)	($1,468)	($64,085)	$63,970	($653,191)
13	$134,778	$134,778		($35,502)	($20,217)	($9,318)	($1,516)	($66,552)	$68,226	($584,964)
14	$141,854	$141,854		($36,656)	($21,278)	($9,620)	($1,565)	($69,119)	$72,735	($512,229)
15	$149,302	$149,302		($37,847)	($22,395)	($9,933)	($1,616)	($71,791)	$77,510	($434,719)
16	$157,140	$157,140		($39,077)	($23,571)	($10,256)	($1,668)	($74,572)	$82,568	($352,151)
17	$165,390	$165,390		($40,347)	($24,808)	($10,589)	($1,722)	($77,467)	$87,923	($264,228)
18	$174,073	$174,073		($41,659)	($26,111)	($10,933)	($1,778)	($80,481)	$93,592	($170,637)
19	$183,212	$183,212		($43,012)	($27,482)	($11,289)	($1,836)	($83,619)	$99,593	($71,044)
20	$192,830	$192,830		($44,410)	($28,925)	($11,656)	($1,896)	($86,886)	$105,944	$34,900
21	$202,954	$202,954		($45,854)	($30,443)	($12,034)	($1,957)	($90,289)	$112,665	$147,565
22	$213,609	$213,609		($47,344)	($32,041)	($12,426)	($2,021)	($93,832)	$119,777	$267,342
23	$224,823	$224,823		($48,883)	($33,724)	($12,829)	($2,087)	($97,522)	$127,301	$394,643
24	$236,627	$236,627		($50,471)	($35,494)	($13,246)	($2,155)	($101,366)	$135,260	$529,904
25	$249,050	$249,050		($52,112)	($37,357)	($13,677)	($2,225)	($105,371)	$143,679	$673,583
26	$262,125	$262,125		($53,805)	($39,319)	($14,121)	($2,297)	($109,542)	$152,583	$826,165
27	$275,886	$275,886		($55,554)	($41,383)	($14,580)	($2,372)	($113,889)	$161,998	$988,163
28	$290,370	$290,370		($57,359)	($43,556)	($15,054)	($2,449)	($118,418)	$171,953	$1,160,115
29	$305,615	$305,615		($59,224)	($45,842)	($15,543)	($2,528)	($123,137)	$182,477	$1,342,593
30	$321,659	$321,659	$360,000	($61,148)	($48,249)	($16,049)	($2,610)	$231,944	$553,603	$1,896,196
Totals	$5,059,207	$5,059,207	($840,000)	($1,198,437)	($758,881)	($314,533)	($51,160)	($3,163,011)	$1,896,196	
	30 Yr. NPV at	4.500%	Discount Rate							
	$2,327,160.15	$2,327,160.15	($1,052,205.35)	($586,342.26)	($349,074.02)	($153,886.95)	($25,030.41)	($2,166,539)	$160,621.15	

Capital Construction Aid in the United States in 1998-99

Summaries of descriptions of capital outlay and debt service systems in *Public School Finance Programs of the United States and Canada: 1998-1999*, Compiled by National Center for Education Statistics, American Education Finance Association, National Education Association
Summaries by Legislative Council

Alabama
State provides capital funds through an earmarked state fund and state bonds
Sales and use taxes pledged to retire state bonds for education
Local allocation matched on a wealth-adjusted basis using a guaranteed yield system

Alaska
State provides capital appropriations as grants to districts
State reimburses a portion of debt service at 70 percent using general funds and cigarette tax

Arizona
State funds 100 percent needed to meet state standards through several funds:
- Deficiencies Correction Fund
- Building Renewal Fund
- New Schools Facilities Fund

Local district may raise funds for building in excess of state standards through cash reserves for capital outlay, sale of property, gifts, special levy, or bonding. Also, foundation program includes funding for capital outlay.

Arkansas
Four state programs for capital outlay and debt service:
Three are part of state aid formula:
- Growth facilities funding
- General facilities funding
- Debt service funding supplement

Revolving loan fund allows districts to borrow money at seven percent for up to eight years for remodeling, small additions, and buses
Remainder is raised by local districts.

California
- State School Building Lease-Purchase Fund: General obligation bonds pay for school construction, and facility is then leased to local school districts for $1 per year for 40 years. Then facility becomes property of the district.
- School district may levy developer fee, capped at state rate, for capital projects.
- If a district uses the State School Building Lease-Purchase Fund, it must contribute the amount it could receive through developer fees as its share of construction costs whether or not it levies the fees. Therefore, many districts opt to construct schools solely with local resources.

- A school district may establish a community facility district within which bonded indebtedness for capital outlay may be incurred and a property tax levied. Requires 2/3 vote for passage.
- Other state assistance: Emergency Temporary Classroom Program allocated funds for portable classrooms. Deferred Maintenance Program provides matching assistance. Year-Round School Incentives include implementation and annual operating grants.

Colorado
District must budget between $223 and $800 per pupil from equalized funding formula for capital outlay. Remainder of capital need met through local bonding.

Connecticut
State pays 20–80 percent of town's eligible school construction costs on an equalized basis. Interdistrict magnet schools, regional vocational agriculture schools, regional special education facilities, and regional technical school receive 100 percent funding.

Delaware
State pays 60–80 percent of capital costs based on ability index. Local district bonds for remaining costs. Technical schools receive 100 percent funding.

District of Columbia
Capital outlay funded through general obligation bonds issued by District government and sales of old school facilities.

Florida
State revenues for capital outlay from taxes on utilities, automobile license tags, and lottery and disbursed through several funds:

Public Education Capital Outlay and Debt Service Trust Fund: allocated annually to each district based on a formula which accounts for building value and age for remodeling, renovation, maintenance, repair, and site improvements. At least 1/10 of annual allocation must be spent to correct unsafe, unhealthy, or unsanitary conditions.

Special Facility Construction Account: construction funds for districts with urgent need and insufficient resources. A district may receive funding for one complete education plant. No district may receive funding for more than one approved project in a three-year period.

Specified revenues from above sources earmarked for specific uses such as capital outlay funding and debt service.

Local districts may levy taxes, issue bonds.

Georgia
State pays 75–90 percent of eligible construction costs using general obligation bonds and lottery funds. Percentage is based on need. District may allow funds to accumulate or use them in conjunction with locally raised funds for capital outlay and debt service. Local district may issue bonds or levy a special purpose local option sales tax to pay for capital outlay.

Hawaii
Hawaii has only one school district. All capital improvement projects are approved by the legislature and become a part of the Capital Improvement Appropriation Bill funded by current tax revenues and general obligation bonds.

Idaho
No state aid. Local districts may use general fund monies or issue a bond if authorized by a two-thirds majority vote.

Illinois
The state awards construction grants based on need and project type within the categories of damage from human or natural disasters, population growth, aging buildings, inter-district reorganization, accessibility issues, health and safety issues, and other unique issues. The state also awards debt service based on district wealth.

Indiana
The state provides a flat grant of $40 per pupil per year to each public school corporation for use as debt service. If grant is greater than the debt service obligation, the excess may be used for other purposes. A school corporation is authorized to levy a bond which may be no more than two percent of its assessed valuation.

Iowa
No state aid for capital outlay or debt service. A district may use a combination of property taxes, income surtaxes, and local option sales tax to fund a project and may issue a bond if authorized by 60 percent of the electorate.

Kansas
For new facilities, aid for capital outlay is awarded through a weighting in the general state aid formula. A district may levy a bond and the state provides aid to help pay for debt service based on district property wealth. A district may establish a capital outlay fund and transfer some of its general state aid to the fund.

Kentucky
The state awards $100 per student for construction needs. This may be used as a cash outlay or to back local revenue bonds.
If a district levies at least $0.05 cents per $100 for debt service, the state provides equalized funding based on property wealth.
The state provides additional debt service aid based on unmet need.

Louisiana
No state aid for capital outlay or debt service. A district may levy a bond and pay for it through property taxes or a local option sales tax or both.

Maine
Aid for debt service is provided based on debt service payments due in a given year, cost of state approved leases by the school unit, the costs of tuition payments to private schools, and district wealth. In addition, a state revolving renovation fund provides interest free loans for building upgrade and repairs. A portion of the loan may be forgiven based on the level of the school district's state debt service aid and on project priority.

Maryland
A state interagency committee approves school construction projects, and the state pays a share of all but site acquisition, architectural and engineering fees, utility connections, regional or central administrative offices, and permits. The state share for each county is based on wealth but no county receives less than 50 percent share from the state for school construction. Some of the state funds come from a transfer of funds from the Maryland Stadium Authority.

Massachusetts
School districts are reimbursed for capital costs based on individual wealth indices fixed in statute in the 1980s. Reimbursement rates range from 50 to 90 percent. Statute requires that to be eligible for assistance, a district must have spent at least 50 percent of its foundation budget target for maintenance and extraordinary maintenance in the prior year.

Michigan
No state aid. School districts can pay for capital outlay from cash reserves, sinking funds, sale of bonds. The state provides a Michigan School Bond Loan Program from which a district may borrow up to 90 percent of the funds needed to meet its annual bond payment.

Minnesota
State aid includes partial funding for certain health and safety expenditures; debt service aid based on wealth; debt service aid for districts with older buildings and a 10-year facilities plan for deferred maintenance and health and safety projects; capital and debt service loans for low wealth districts; and grants to groups of two or more districts to build a new secondary school facility. Prior to holding a bond vote, a district must submit its proposal to the state. If the state review is positive, the district vote passes if it wins by a simple majority; if negative, it requires a 60 percent majority vote to pass.

Mississippi
State aid is in the form of annual grants of $12 to $24 per student to be used to establish and maintain adequate facilities. Districts may borrow in anticipation of future grants. The state may loan up to 75 percent of estimated grants which will accrue to the district in the next 20 years at the rate of 2.5 percent interest. The state diverts a specified portion of its sales tax revenues per month to the loan fund. A district may bond or borrow funds for capital outlay.

Missouri
No state aid for capital outlay or debt service. Districts may levy a tax to establish a capital projects fund and may levy bonds if authorized by the electorate.

Montana
The state reimburses districts for a portion of debt service based on wealth. The districts may levy bonds and taxes to pay their share.

Nebraska
Very little state aid for capital outlay; a few programs provide funds for certain specific capital outlay.

Nevada
No state aid for capital outlay except in a few unique circumstances. Local districts may sell bonds, gradually build up a building and site fund, or levy a tax.

New Hampshire
The state gives school districts 30 percent of their annual principal payments plus 5 percent for consolidation. The state constructs regional technical centers; and pays 75 percent of construction costs for kindergarten facilities. Local districts levy bonds for their share of costs.

New Jersey
Districts receive debt service aid based on wealth.

New Mexico
Districts may levy a tax for up to four years to build up a capital improvement fund which is generally used for school maintenance. The state provides aid to participating districts through a guaranteed yield system in which the state guarantees that a district will receive a certain amount for a specific tax rate and the state will pay the difference between what the district actually raises for that tax rate and the guaranteed amount. The state also provides funding for critical capital outlay needs that cannot be met by local revenue sources. State funds for this come from the New Mexico Lottery and general fund appropriations.

Districts raise local funds for capital outlay from sale of bonds, direct levies, earnings from investments, rents, sales of property and equipment, and other miscellaneous sources.

New York
A district may receive state aid and sell bonds only for projects approved by the state. State aid is provided based on the value of the building adjusted for regional cost factors.

North Carolina
Capital outlay funds are the responsibility of local county commissioners. Most funds are raised through general obligation bonds although some districts may use a local option sales tax.

North Dakota
There is no state aid for capital outlay.

Ohio
State aid is distributed by the Ohio School Facilities Commission which gives priority to buildings in poor condition in low-wealth school districts.

Oklahoma
There is no state aid for capital outlay.

Oregon
There is no state aid for capital outlay.

Pennsylvania
State aid is based on approved expenditures and percent equalization which takes district wealth and pupil capacity of the building into account.

Rhode Island
A capital project supported by local bonds must go through a needs test at the state level to qualify for aid. If the project is qualified, the state reimburses the district for a portion of the cost of the project and capital debt service based on district wealth.

South Carolina
Every school district receives state school building aid based on its enrollment. The funds may be used for capital improvements and the retiring of debt. There are also some funds from a tax on a radioactive waste facility which are distributed based on tax effort and need. School districts may raise funds through bonding.

South Dakota
There is no state aid for capital outlay.

Tennessee
State aid is based on a square footage allowance, ADM, cost per square foot, 10 percent added for equipment, five percent added for an architect‘s fee, and debt service at the state bond rate.

Texas
State aid is allocated through a guaranteed yield program which helps pay for annual debt service based on district wealth.

Utah
State aid includes a capital outlay loan program and an emergency school building needs program. In order to qualify for full funding, the district must already be levying a minimum tax rate for capital outlay and debt service; those levying less due to certain circumstances receive a prorated amount. Until recently, 20 percent of the state appropriation was set aside for emergency needs and distributed based on school district need and tax effort. This component was recently integrated into the rest of the program. The remaining 80 percent was distributed on the basis of a minimum guarantee per student to be used for general purpose capital outlay funding.

In addition, the state maintains a school building revolving account loan fund. Moneys received by a district from the account may not exceed the district's bonding limit minus its outstanding bonds. In order to qualify for a loan, a district must levy a tax rate of at least a minimum amount for capital outlay and debt service and contract to repay the loan and interest within five years of receipt, using future state building appropriations and/or local revenues.

Virginia
Each school district receives $200,000 in state funding for school construction and debt service completed within the last 10 years. The balance of state appropriations for this purpose is distributed on the basis of a district's wealth and the average daily membership. In addition, the state maintains a Literary Fund which provides loans for school construction and charges interest at a rate based on district wealth.

Washington
State revenues for school construction come from a constitutionally dedicated source, revenues from the sale of renewable resources from state school lands, and from sale of general obligation bonds. These revenues are deposited into the Common School Construction Fund. When there are insufficient monies in the Fund, the state issues bonds which are not an obligation of the state, but payable from interest earned on the Permanent Common School Fund. Funds are distributed based on the wealth of the district and need for the facility. Remaining funds are raised by local bonding, other capital revenue sources, or both.

West Virginia
The State School Building Authority uses revenues from issuance of bonds, general fund appropriations, dedicated lottery profits, and dedicated state sales tax revenues for school construction/improvement programs to fund immediate and long-term school facility needs and to help districts pay for debt service.

Wisconsin
School districts receive aid for capital outlay and debt service costs through the basic support program. In addition, small low-interest loans are available through constitutionally established trust funds funded by sale of public lands. School districts may establish sinking funds into which a portion of tax levies may be deposited and may issue bonds.

Wyoming

The state provides state aid for capital outlay through a mill levy supplement based on need. In addition, for those districts in which need exceeds the ability to issue debt, the state provides capital construction assistance, emergency capital outlay assistance, and pledges specified permanent state funds as a guarantee for certain district bond issues for purposes of reducing the cost of bond issuance.

Summary of Capital Construction Aid in O States 1998-1999														
		Revenue Source				Disbursement System								
	No aid	State bonds	Sales tax	Ear-marked fund	Gen Fund	Categ oric funds	Need-base reimburse	Grants	% Reimburse	100% Funding	Annual Approp	Low interest loans	Impact fees	other
AL		x	x	x			x							
AK								x	x					
AZ						x				x	x			
AR											x	x		
CA													x	x
CO											x			
CT							x							
DE							x							
FL				x		x								
GA		x		x			x				x			
HI										x				
ID	x													
IL							x							
IN											x			
IA	x													
KS							x				x			
KY							x		x					
LA	x													
ME							x					x		
MD				x			x							
MA							x							
MI	x													
MN						x	x					x		
MS			x								x			
MO	x													
MT							x							
NE														
NV						x								
NH									x					
NJ							x							
NM				x	x		x							
NY							x							
NC	x													
ND	x													
OH														
OK	x													
OR	x													
PA							x							
RI							x							
SC				x			x				x			
SD	x													
TN									x					
TX							x							
UT						x						x		
VA							x					x		
WA		x		x			x							
WV		x	x	x										
WI				x							x	x		
WY							x							