

The Planning Process

Preliminary Application

The Commissioner may approve the preliminary application if he/she finds that a need exists that cannot be reasonably met by another means and meets the criteria established by V.S.A., T.16, §3448:

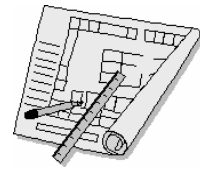
1. facilities that are inadequate to provide programs required by state or federal rule or regulation;
2. deterioration of existing buildings;
3. conditions that are unsafe or threaten the health of students or employees; or
4. excessive energy use resulting from the design characteristics of the building.

The preliminary application needs to include a facilities analysis of the existing school building(s) describing any deficiencies in the facilities of the school (See Application section, page 71). Once the preliminary application is approved, the Department will schedule a pre-construction evaluation to assess the needs of the existing facility in accordance with the criteria established in the State Board Rules.

All voter approved major renovation and new construction projects will be placed on a list of priority by the State Board of Education along with a cost estimate for each project. The Board will present these projects in order of priority to the legislature at the start of the session each year.

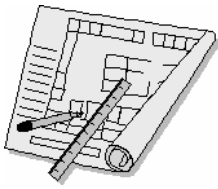
The legislature will use these figures to determine an appropriation for school construction in the next fiscal year.

Before the State Board can approve the final application for construction aid, except for certain types of emergency work, it must also find that the school district has available sufficient funding specifically authorized by the electorate for the estimated cost of the project. Funding may come from a bond issue, short term borrowing of no more than one year, federal grants in



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All schools with approved preliminary applications, ratings, and voter authorization will be sent to legislature at the beginning of each year.



Each district must submit an analysis of its present facilities. The analysis shall include:

- √ *an valuation of the infrastructure of the existing building(s)*
- √ *demographic data,*
- √ *enrollment projections*
- √ *room utilization schedule*

Educational specifications are a set of statements of performance requirements for a school construction or renovation project.

certain cases or other sources. School boards may sell bonds on the open market or through the Vermont Municipal Bond Bank.

School districts will not receive reimbursements on their annual principal and interest cost . The cost for borrowing money and the annual principal and interest payment are eligible education expenses that are to be reported each year on the annual budget submission to the Department of Education. For more information on how this may impact a district’s state aid, contact the Financial Management Team at the Department of Education at 828-3151.

Facility Analysis

As part of the preliminary application for new construction or additions to schools, the school district must submit an analysis of it present facilities. The analysis shall identify the areas of deficiency consistent with the criteria listed in V.S.A., T.16, §3448. The analysis entails an evaluation of the infrastructure of the existing building(s), including the health and safety conditions and a history of maintenance on the school (s). The analysis must include demographic data, enrollment projections, and a space utilization schedule. Schools identified as eligible for technical assistance under Act 60 should identify any links between the facility and student performance. The State Board rules on school construction also require that school districts review any alternative educational and physical solutions available to them as part of the facility analysis.

The results of the facility analysis are to be included in the educational specifications. (See Appendix A).

Educational Specifications

Educational specifications are a set of performance requirements for a school construction or renovation project. They describe in outline form the indoor and outdoor facilities the school needs for every area of its curriculum and services provided, as well as the anticipated community uses of its building and grounds. The specifications should incorporate an up-to-date enrollment projection by grade for the next five to ten years. The projections should be based on a ten-year history of enrollments by grade level and live births for districts sending students to the school. (See page 14).

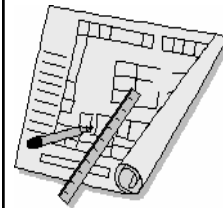
If the school needs new or renovated facilities to provide appropriate space for existing programs or to accommodate new instructional techniques, the educational specifications should articulate the physical space necessary for students to have the appropriate learning opportunities.

The architect will design the facility based on the approved educational specifications. The school board and the Department of Education will evaluate design proposals for the project based on these educational specifications.

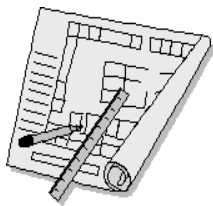
Preparing educational specifications should be a collaborative effort of the faculty, school housekeeping and support staff, administration and school board. Students, parents and other community members can and should be asked to help. The end product will be a document which talks about the school's future, and all elements of the community which have interests in the future of the school should be considered in its preparation.

Educational specifications should begin with an opening statement that clearly describes the vision the school board has for the school. In the years ahead, how will instruction be organized? How will students work with each other and their teachers? What new programs will be introduced? Then, based on the enrollment projections, each indoor and outdoor area needed should be described in non-architectural terms:

- Who will use it (age or grade level of students for instructional spaces) and what will they be doing there?
- What will be the maximum number of users at any one time?
- How much space will be needed for the teaching strategies employed?
- What furnishings and equipment are necessary?
- What is the frequency of the room's use during the school week?
- Who will be in charge?
- Are there special requirements as to...
 - a. heating, lighting, or ventilation?
 - b. acoustics?
 - c. relative location within the building or the site?
 - d. other environmental or aesthetics considerations?
- What storage provisions are necessary?
- How many such spaces or areas are needed for the current school population?



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Educational specifications should be able to demonstrate how the current configuration of classrooms and other instructional areas cannot support the curriculum changes the school is required to offer now and in the future.

Generally speaking, projections for enrollment for construction aid purposes must follow the so-called persistence of experience method.

- How many may be needed five to ten years from now?
- How many does the school have now and how well do these spaces work?
- What parts of the school are to be used by the community, and what are the desirable design provisions in anticipation of such use?

Space Utilization Schedule

The facility analysis and the educational specification should include a room utilization chart or schedule showing that the existing facilities are inadequate to provide quality programs and services required by state or federal rule. The educational specifications should be able to demonstrate how the current configuration of classrooms and other instructional areas cannot support the curriculum changes the school is required to offer now and in the future.

Enrollment Projections

When a construction aid project is primarily intended to accommodate enrollment growth, it must be shown that the existing facilities are overcrowded or are otherwise inadequate to support programs required by state or federal rules. It must also be shown that these conditions are not likely to be relieved by a decline in enrollment for the foreseeable future. The educational specifications must be based on reasonable projections of enrollments for the school over the next five to ten years so that the design of the facility can accommodate such projections.

Generally speaking, projections for enrollment for construction aid purposes must follow the so-called persistence of experience method. This means that you must use the enrollment history of the school together with the live birth history for the district or districts from which the school receives tuition pupils to predict the enrollments that will occur in the years to come. This approach must be used in any school system with yearly live births and grade-by-grade enrollments of twenty or more with a record of growth or stability in its enrollments. If you have a different situation, confer with the Department of Education to determine a more appropriate basis for predicting future enrollments. The persistence of experience enrollment projections should be based on a ten-year history and limited to ten years ahead. Directions for preparing projections are found in Appendix F.

Attempting to anticipate the number of classrooms a school will need beyond ten years from now becomes too speculative a base for a school construction aid project. If you plan your project for ten years growth and the school reaches capacity enrollment at the end of that time period you will have done your job very well. If you plan for ten years growth and reach capacity in five years you still will have done well. On the other hand, a project which cannot be expected to reach capacity enrollment for more than ten years must be considered to be over-built. Construction aid must be limited to projects that address only the foreseeable space needs of a district.

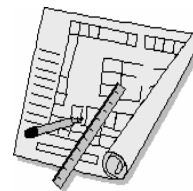
Site Considerations

What makes a good site for a school? There are many different issues to consider when identifying a site for a school, but one issue is clear: the location of a school facility affects many aspects of a community.

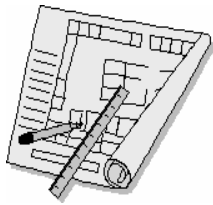
A school's location affects transportation needs within the community, as well as school transportation costs. Sites that are accessible to modes of transportation other than the automobile, that students can safely walk and ride their bicycles to and from and that are near municipal bus services may reduce transportation costs.

The location and design of schools and other public buildings often contribute to a community's identity. Throughout Vermont's history, these structures have been symbols of civic pride and important meeting places and cultural environments in the lives of community members. Many are located in the historical center of the community. Their presence defines the image of many Vermont cities, towns, and villages. The historic character of existing buildings should be respected in rehabilitation projects. Attention to the visual character of new construction will contribute greatly to the community's pride and sense of accomplishment with the final product.

Recreation and non-school activities occur during the evening and on the weekends. Sites should be conveniently located for these activities. Recreational facilities on school grounds should also be considered within the context of the town's existing recreational facilities. Coordination is needed so that facilities are not redundant and meet the future recreational needs of the community.



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Many local and regional planning commissions have computerized resource inventories or “constraints” to help in your site planning process.

Many towns in Vermont have town plans that identify important natural, cultural and other resources, and set out visions and goals for how a community would like to grow. The location of existing schools and proposed facilities should fit within that plan. In addition, many towns have identified places where they would like certain land uses to be focused, thus allowing other areas with important natural resource value to be left open. Schools should be located within these growth centers.

It is important to identify what natural and cultural resources may be located at the site of an existing school or at a proposed site. Identification of resources is the first step in planning a construction project that will be environmentally sound and protect or even enhance the surrounding natural environment. Identification of resources is also the first step in avoiding permitting problems related to those resources.

Many local and regional planning commissions have computerized resource inventories or “constraints” to help in your site planning process. Some of these resources include: wetlands; rivers, streams, lakes and ponds and the buffer areas surrounding them; ground water recharge and wellhead protection areas; critical wildlife habitats; rare and endangered species; prime agricultural soils; contaminated sites (from previous use) and archeological resources. The presence of these resources does not automatically preclude development of the site. Steps may be needed to avoid the resources or mitigate certain impacts.

If a choice has to be made between an existing school site and a new one, cost of land is an obvious factor, and must be weighed against the possible proceeds from the sale of the old site. In addition, the site “constraints” noted above will affect both the short-term uses of a site and its potential for expansion. These conditions, combined with the project design, determine whether or not environmental permits issued by the Agency of Natural Resources and Act 250 commissions, can be issued. When reviewing potential sites contact the Department of Environmental Conservation Permit Specialist in your area for guidance. In the end, it is the responsibility of the elected school board to sort out the issues concerning the site and provide the community with its best recommendations. In any case there are constant factors which should enter into the decision making on a school site in any district. These are outlined below.

Site considerations include:

- Convenient location for school activities and non school functions the school facility may serve;
- Safe highway access; and safe traffic pattern around the school;
- Aesthetic appeal;
- Access to municipal services for water supply and sewage disposal or suitable conditions for developing on-site services;
- Sufficient usable land for all the programs the school would provide;
- Conditions for economical construction and site development;
- Enough space for the necessary service delivery areas for the school;
- Noise levels in the surrounding areas; and
- Space to accommodate the growth potential of the district.

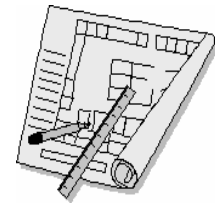
The site should also be safe from traffic, and well away from rivers and streams that might flood or threaten student safety, areas that are likely to contain archeological sites, and industrial or agricultural operations that might present environmental hazards.

Land owned by another legal entity may be counted if the school has permanent unrestricted use of it, a community recreation field adjacent to the school property for example. However, state school construction aid can only apply to construction or site development costs on land owned outright by the district or land for which the district has a clear title in fee simple or a permanent deeded easement or right-of-way.

Anticipating the Next School Development

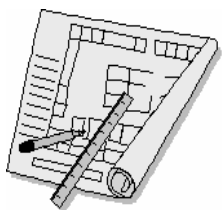
While no one can know the future, we can plan intelligently for the choices it might offer us. This is an obligation all elected school officials have to the communities they represent.

A major consideration in planning a school expansion project must be the options that will be available when the school district again needs more space. Several factors beyond the utility issues discussed elsewhere in this document will bear on the choice the district will then have. These include the size of the project site now, and the possibilities for adding more useable land to it at a later date. The



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Look for a layout that would allow for the easy addition of more classrooms and ready enlargement of core and support facilities.

Discuss with your architect how best to plan your project so that it will be adaptable to future uses of the building including possible non-educational uses.

desirability and practicality of constructing a future addition to the building, and the similar needs of other schools and districts in the region could eventually lead to joint school operations.

The desirability of a future addition will be an outgrowth of the size and design of the building when the current project is completed. It will also be related to the prospects for consolidation of this school with other schools of the district or of this district with another district in the years ahead. Community concerns about a school becoming too big can sometimes become a real issue in trying to win approval for funding an addition. On the other hand, site limitations may rule out a future addition. If neither of these circumstances exist or even if they might, you should be looking for a design for your project that will keep as many options as possible open to the district in the years to come.

Look for a layout that would allow for the easy addition of more classrooms and ready enlargement of core and support facilities. The design also should allow for low cost reallocation of space if the need arises. In other words, the shape of some rooms should permit them to be subdivided. Others should be easy to combine if larger spaces may someday be needed. This all calls for careful planning of mechanical systems so that adding or removing partitions can be done without major alterations to these systems. You should discuss with your architect how best to plan your project so that it will be adaptable to future uses of the building including possible non-educational uses.

Consolidation

School consolidation and school district consolidation may be part of the thinking going into school building plans. This is especially true where a school board is planning a project that will represent the maximum development appropriate for an existing school site. If this is your situation, look for your next school site now, or talk with other school boards about an eventual merger, or both.

Re-locatable Units

A re-locatable unit is a supplementary educational facility, generally manufactured or fabricated off-site, moved to and erected at the desired location. All prefabricated structures are subject to the same requirements of the Department of Labor and Industry and the Department of Education as are other construction projects.

Before purchasing a re-locatable unit, a school board must see that all state agency requirements are met. As with other construction projects, an inspection by the required state agencies will be arranged to ensure that all building codes are being met.

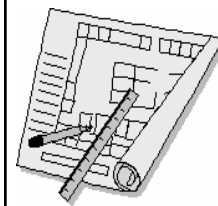
Committees

School boards often find it useful to ask community representatives to help examine school needs, evaluate various alternatives for meeting those needs, and assist with the planning and completion of a construction project. A building committee, for instance, can be a good sounding board to use in selecting an architect and choosing the final design for a project. Such committees may be comprised of people who have special expertise to offer and people who represent various interests within the community. The broader the participation in the development of a school construction proposal, the better will be the school board's presentation of the project to the voters for funding. The board, however, needs to be explicit in its charge to any such committee so that its tasks are clearly defined. The final decision-making responsibility rests with the school board as the elected representatives of the community.

Preliminary Plan Review

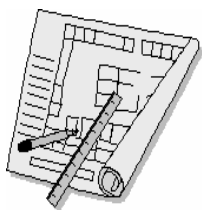
State Board of Education Rules require a meeting of school district and state agency representatives to review preliminary architectural plans for school additions, renovations and new buildings. This review should occur before the warning for a public vote on a project is published in order to inform the voters of how much of the project is eligible for construction aid and how much will be fully funded by the district. (See V.S.A., T. 24 , §1758(b)) Preliminary reviews may also be needed for other kinds of projects. Contact the Department of Education for a determination for other types of projects.

The purpose of the meeting is to expedite the final state review of the completed working drawings for the project. At a preliminary review meeting the state agencies will advise school officials of any problems they see with the plans with respect to their agency rules and regulations, and the approved educational specifications. Based on the Capital Outlay Financing Formula the Department of Education will usually be



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The Capital Outlay establishes the minimum and maximum square footage allowances for programs and services by grade range and class size. The Outlay formula includes a maximum gross square footage by grade range and school size beyond which the state cannot participate.

able to advise at this meeting the estimated level of state financial assistance the project may receive.

Preliminary plans submitted for review must contain the details listed in Appendix E.

Capital Outlay Formula

Construction aid for a new school or an addition to an existing school is subject to limits established by rule of the State Board of Education. This rule is known as the Capital Outlay Financing Formula. (Details of the formula are included in section starting on page 59). The Capital Outlay establishes the minimum and maximum square footage allowances for programs and services by grade range and class size and the maximum cost for the total construction beyond which the state cannot participate.

Although this step is a requirement of the school capital construction program, it does not limit what a district may choose to build. If a project exceeds the allowances established by the Capital Outlay, the local district must assume the additional costs.