

Appendix A

DEVELOPING A FACILITIES ANALYSIS

The Department of Education recommends that the following procedures be followed when developing the facilities analysis:

1. Collect and evaluate data on deficiencies in the existing building(s), including the program and service areas, heating and ventilation systems, health and safety conditions, technology capacity, etc.
2. Identify deficiencies in specific areas using the space/needs survey.
3. Incorporate inspection reports from Labor and Industry or other professionals.
4. If deficiencies are due to changes in curriculum, develop and analyze a room utilization schedule.
5. If deficiencies are partially or totally due to student growth, include enrollment projections.
 - In elementary schools, determine the student capacity of the existing building by using the combined square footage of all instructional areas and dividing by 30.
 - For middle or junior high schools, determine the capacity of instructional space as outlined above and then divide by 80 percent.
 - For high schools, determine the capacity of instructional space as outlined above and then divide by 70 percent.
 - Information about the capacity of the building as originally designed, or approved by the Department of Education at the time of the original construction, should be included if available.
6. Incorporate a maintenance history on the building.
7. Discuss the findings at a school board meeting.
8. Submit the accepted report to the Department of Education with the preliminary application.

**SYSTEM FOR
RATING
PROPOSED SCHOOL CONSTRUCTION PROJECTS**

Adopted By:
The State Board of
Education on
September 20, 2005

The System For Rating Proposed School Construction Projects

is used to establish funding priority for major projects such as new schools and addition/renovation projects.

Department of Education staff will visit and score existing facilities following the submission of a completed preliminary application form, including enrollment projections, existing floor plans, and a facility analysis prepared by a qualified professional. Needs and deficiencies of existing facilities are the bases for scoring .

The maximum available score is 140. A high score means a higher placement on the State Board’s prioritized list for school construction aid. Using the facility analysis, points will be assigned to rated criteria as follows:

Point System for Rating

The following points will be applied to components based on a current facility analysis and a site inspection.

- 0- Excellent: Conditions ideal or comparable to new. A zero score may also indicate no information was provided on which to score.
- 1- Good: Adequate for programs, services, enrollment. Condition suggests reasonable useful life remaining.
- 2- Fair: Demonstrating signs of need. Shows wear. Component may be nearing the end of its useful life.
- 3- Poor: Demonstrating problems. Needs repair. Has exceeded its expected useful life. Non-compliant with current life safety codes.
- 4- Unsatisfactory: Inadequate for programs, services, enrollment. Code violation. Lack of action poses a threat to the health and safety of students.

The following points will be applied for overcrowded conditions based upon enrollment projections, current enrollment, and building capacity.

- 0- Enrollment is not projected to reach or exceed building capacity or available space.
- 5- Enrollment is projected to reach or exceed capacity within ten years.
- 10 to 20- Enrollment is at or above student capacity for facility and is not projected to decline significantly.

DEFINITIONS OF CRITERIA

Health and Safety:

The purpose of this section is to assess the degree to which students and staff are exposed to hazards and potential threats to physical well-being.

Structure / Infrastructure:

The overall condition of the physical plant will be rated according to the needs and deficiencies of building systems.

Adequacy of Facilities:

The existence and condition of specific facilities and their ability to provide an appropriate learning environment will be rated according to the impact of deficiencies on the educational program.

Individual Program Areas:

The evaluation under this component is based upon the availability of educational space to meet the needs of the curriculum and of required programs and services. Core facilities include library, cafeteria, gymnasium, storage areas, health services, art and music rooms, science labs, and administration areas.

Enrollment Versus Capacity:

Points in this component are based upon evidence that current space available for general classroom use is insufficient to accommodate enrollments. The department will compare current enrollment, projected enrollment, and the capacity of the existing building.

If the student capacity of a building has been determined by the department within the previous eight years, and no major construction has taken place in the interim, the capacity on record will stand unless otherwise determined by the commissioner.

For purposes of determining the capacity of an existing building, the department will divide total classroom space square footage by 30 square feet. Classrooms available for use by pre-K through grade 6 will be taken at no more than thirty students per undivided room. Allowances may be made for spaces not provided, such as library or arts, as determined by the commissioner.

ADDITIONAL INFORMATION:

Voter-approved school construction for school districts which do not currently operate a school but who propose to build or purchase a building for the purposes of housing a public school will be ranked by the State Board of Education based upon a determination of the immediacy of the district's need. Consideration will be given to such factors as the economic and geographic ramifications of tuition options and the district's long term plan for educating its students.

The school board is responsible for notifying the evaluator of any changes in local conditions not reflected in the facility analysis.

The following steps shall be used by the department to break ties that occur during the ranking process for the purpose of placing the projects on the annual prioritized list.

- A. The project with more points in section 1, Health and Safety, shall be placed first.
- B. If a tie still exists, the project benefiting the larger number of students shall be placed first.

Appeal process:

If a school board wishes to appeal its rating score, a written request for administrative review shall be made to the commissioner within 30 days of receipt of the rating. Specific evidence must be included to justify the adjustment of a score for each component being appealed.

Performance contracting:

School construction projects being completed using an energy service company, known as a performance contract, will be rated on facility deficiencies using the same criteria for rating as other projects. In accordance with 16 VSA 3448f, such projects will be ranked in priority order on a separate list annually.

The prioritized list for aid for projects utilizing performance contracting shall be ranked below other school construction projects ranked in the same year. State aid for performance contracting projects for a given year will be funded after all other prioritized projects for that same given year are funded.

Funding delays / Insufficient Appropriation:

In the event annual appropriations are insufficient to pay all state aid for eligible prioritized projects in a given year, state aid obligations remaining for that year will be paid in full before funds are distributed to prioritized projects for a subsequent year.

Upon completion of construction and until state aid is paid, school districts, including technical education centers, are eligible to deduct the interest expense attributable to borrowing in anticipation of state aid from education spending for purposes of determining the homestead tax rate.

Technical Education Centers

Projects to improve facilities for technical education centers will be rated on facility deficiencies using the same criteria as other projects.

A separate prioritized list for technical education center projects will be established annually, incorporating all projects with unfunded state aid obligations.

Subject to funds availability, the State Board of Education urges the general assembly to direct, each year, a minimum of ten percent of the total technical education center state aid obligation, or \$5 million, whichever is greater, toward payment of the technical center construction obligation until it is fully paid.

**VERMONT DEPT OF EDUCATION
BUILDING EVALUATION FORM**

DATE OF EVALUATION: _____

SCHOOL: _____

Grades served: _____

Evaluator: _____

Scoring:

-0- *Excellent: Conditions ideal or comparable to new. A zero may also indicate no information was provided on which to score.*
 -1- *Good: Adequate for programs, services, enrollment. Condition suggests reasonable useful life remaining.*
 -2- *Fair: Demonstrating signs of need. Shows wear. Component may be nearing the end of its useful life.*
 -3- *Poor: Demonstrating problems. Needs repair. Has exceeded its expected useful life. Non-compliant with current life safety codes.*
 -4- *Unsatisfactory: Inadequate for programs, services, enrollment. Code violation. Lack of action poses a threat to the health and safety of students.*

	Excellent	Good	Fair	Poor	Unsatis- factory	TOTAL SCORE
Value:	0	1	2	3	4	

CRITERIA

1. HEALTH AND SAFETY

The degree to which students and staff are exposed to hazards and potential threats to physical well-being.

Site (max 12 pts)						-
Vehicular traffic and circulation						-
Water and Septic						-
Physical Education						-
Other:						-
Building (max 20 pts)						-
Handicapped Access						-
Security and Egress						-
Fire Protection / Life Safety codes						-
Air Quality						-
Asbestos / Lead / Hazardous substances						-
Other:						-

2. GENERAL BLDG. CONDITIONS

The overall condition of the physical plant; the needs and deficiencies of existing building systems.

Structure / Infrastructure (max 28 pts)						-
Ventilation						-
Heating						-
Electrical / Lighting						-
Flooring and Finishes						-
Roof						-
Thermal Envelope and Windows						-
Acoustics						-
Other:						-

5. Consolidation or District Formation	5.1 buildings & programs district formation & cost effective	A single school district that proposes a consolidation of one or more buildings, or like programs and services, and demonstrates cost effectiveness will receive 10 points.	
6. Community Use	6.1 educational program incorporates approved community plan and use of building(s).	Any approved educational specification that includes implementation of a community use program that supports the educational program will receive 2 points.	
7. Years in Process	7.1 pre-approved projects waiting in the priority system	For each year a pre-approved project with an established urgent need is unfunded, the Department of Education will add five additional points to its rating.	
8. Identified Schools	8.1 Identified by DOE for technical assistance	Schools qualifying for technical assistance and demonstrating a link between the facility and school performance will receive 10 points.	
TOTAL SCORE			

GENERAL COMMENTS:

Appendix D

DEVELOPING EDUCATIONAL SPECIFICATIONS

In developing the educational specifications, the Department of Education recommends that the following procedures be followed:

1. The facility committee develops the first draft of the specifications using the outline enclosed.
2. The draft should be presented to the following for review, critique and change:
 - A. Board of School Directors
 - B. Staff of School District
 - C. Community
3. The draft of the specifications reworked based on input from the meetings.
4. The revised specifications presented to the Board for further review.
5. The revised draft copy of specifications submitted to Vermont Department of Education for approval.

SUGGESTED OUTLINE FOR EDUCATIONAL SPECIFICATIONS

1. Introduction – (general overview of project/purpose)
 - A. The educational program to be housed
 - B. School philosophy/mission
 - C. Goals for the educational programs to be housed
 - D. Areas to be considered for new construction, addition or renovation
2. The community to be served – (background of the characteristics of the community)
3. The pupils to be served – (enrollment/classroom information)
4. Timetable for project – (outline of project with completion dates)
5. Instructional areas
 - A. General Classrooms
 - B. Art Room
 - C. Music Room
 - D. Laboratories
 - A. Computer Room
 - F. Library/Media Rooms
 - G. Multi-purpose Room/Gymnasium
 - H. Project Rooms
 - I. Other
6. Student Support Services
 - A. Guidance
 - B. Special Education
 - C. Compensatory Education
 - D. Health

7. Cafeteria/Food Preparation
8. Administrative Area
 - A. Principal Office
 - B. Secretary Office
 - C. Conference Room
 - D. Work Room
 - E. General Storage
9. Environmental considerations for the facility:
 - A. Lighting
 - B. Heating
 - C. Acoustics
 - D. Aesthetics
10. Site considerations for the facility:
 - A. Size
 - B. Parking
 - C. Bus loading
 - D. Water and sewer
11. Community programs to be housed, or accommodated by the facility
12. Maintenance
 - A. Custodial Room
 - B. Custodial Storage
13. Parking Area
14. Playground Area

Appendix E

PRELIMINARY PLANS REVIEW

If you are involved in planning a school building aid project, you need to note the following:

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 before application for school building aid is submitted. Preliminary reviews may also be needed for other kinds of projects.

At a preliminary review meeting the state agencies will advise school officials of any problems they see with the plans with respect to building codes and school quality standards. At this meeting, the Department of Education will usually be able to advise school officials of the level of state aid their project may receive based on the capital outlay funding rules of the State Board of Education. The maximum project cost for state participation is calculated from the approved educational specifications and the preliminary architectural plans.

Preliminary plans consist of the following:

1. floor plans of the existing building where an addition and alterations are proposed;
2. floor plans and elevations for proposed construction – 1/8 inch scale unreduced preferred;
3. floor plans for proposed alterations and/or new construction;
4. a plan of the **school site** and **location map**; and
5. proposed locations for on-site sewage disposal and water supply and any wetlands, streams or other significant natural features on the property.

All plans must include for each room:

1. the intended use of room (classroom, library, guidance office, etc.)
2. net usable square foot area and maximum anticipated occupancy for each classroom

Four steps are needed prior to a preliminary plans review:

1. The preliminary application has been submitted and approved.
2. A need has been demonstrated through a pre-construction evaluation, and a rating of the need has been completed.
3. The educational specifications for the project have been submitted to the Commissioner and approved.
4. The architect develops preliminary design and cost estimates for the project based on the approved educational specifications and needs identified at the pre-construction evaluation.

Preliminary reviews should be completed before projects are warned for voter approval.

To request a preliminary review for a project, submit to the school construction office the following information on the proposed construction project along with **seven copies of the preliminary drawings** which clearly indicate the areas of renovation and new construction and **two extra copies of reduced site plan and location map**:

1. name, address and telephone number of school and superintendent
 2. name, address and telephone number of project architect
 3. construction type(s)
 4. square footage for impacted site (excluding building footprint)
 5. square footage for each existing story and basement
 6. square footage for each story and basement, to be added
 7. total square footage of area to be renovated
 8. existing building footprint
 9. extent of fire alarm system
 10. extent of sprinkler protection
 11. extent of handicapped accessibility
 12. known use of asbestos containing building materials
 13. fire rated walls
 14. basic door schedule
 15. heating system type and fuel(s) for both the space and domestic hot water
 16. date(s) of existing construction
 17. site size in acres
 18. maximum planned occupant load
 19. water supply and sewage disposal systems
- **Approval by Agency of Natural Resources for on-site sewage disposal and/ or water supply**
20. ventilation provisions, supply and exhaust, for all occupied rooms
 21. estimated cost of project
 22. starting and completion dates
 23. date of bond vote
 24. identify features with possible historic significance to the best of your knowledge.

The superintendent, architect and school board chair should attend the preliminary review meeting. It is desirable to have the school principal and other school board members also.

Allow a minimum of three weeks after submissions for the scheduling of preliminary plan review.

For further information call the School Construction Program .

Appendix F

ENROLLMENT PROJECTIONS

Ten-year projections are prepared as follows:

1. List live births by year for the past fifteen years.
2. List enrollments by grade levels for the past ten years.
3. Compare kindergarten enrollments for the past five years to the live births for five previous years. For each year divide the kindergarten enrollment by the live births five years earlier. Find the average of the results. This will be your survival ratio for kindergarten enrollments.
4. Develop grade to grade survival ratios for each year. Divide grades one enrollment for each year by the kindergarten enrollment for the previous year. The average of the results will be your grade one survival ratio.
5. Repeat step four for each succeeding grade. (dividing grade two enrollments by grade one enrollments for the previous year, etc.)
6. Find the average number of live births for the past ten years. Calculate the anticipated enrollment for each grade for each year ahead. Multiply the number of live births for each of the past five years by the kindergarten survival ratio to get anticipated kindergarten enrollments for the next five years. Multiply the average number of births by the kindergarten survival ratio to get anticipated kindergarten enrollments for years six to ten ahead. Multiply the kindergarten enrollment by the grade one survival ratio to get the anticipated first grade enrollment for next year. Multiply the anticipated kindergarten enrollment for next year by the grade one survival ratio to get the anticipated grade one enrollment for the following year and so forth through ten years ahead. Repeat the process for succeeding grades.

This method is familiar to most school administrators and has proved as reliable as any for predicting school space needs if it can be reasonably assumed that 1) student in-migration and out-migration will continue as in the past; 2) school board policies on promotion and retention will remain unchanged; 3) the percentage of school dropouts will remain constant; 4) and the number of pupils entering your schools from non public schools and/or leaving your school for non-public schools will remain constant.

Appendix G

SITE INSPECTION – CHECK LIST

- A. Size
- B. Expendability
- C. Site relative to surrounding terrain (flooding)?
- D. Soil composition: loam____;sand____;shale____;gravel____;clay____;rock____
- E. Clearance required (brush/trees)
- F. Erosion____ Swamp____ Prime Agriculture_____
- G. General shape:_____
- H. Development needed:_____
- I. Distance to school population center:_____
- J. Walking distance to ___% of pupils to be served.
- K. Miles to most distant pupils:_____
- L. Access from improved highway:_____
- M. Safe ingress/egress:_____
- N. Distance from: railroad_____; airport_____; heavy traffic_____;
Hazardous chemical plant_____; unsafe structures_____; other_____
- O. Distance from objectionable: noises_____; odors_____; nuisances_____
- P. Access to: electricity_____; fire protection_____; water_____; telephone_____;
sewage system_____
- Q. General Observations:

Appendix H

CLERK OF THE WORKS

DUTIES, RESPONSIBILITIES AND LIMITATIONS OF AUTHORITY OF CLERK OF THE WORKS FOR SCHOOL CONSTRUCTION AID PROJECT

1. **EXPLAIN CONTRACT DOCUMENTS**

Assist the Contractor's superintendent in understanding the intent of the Contract Documents.

2. **OBSERVATIONS**

Conduct on-site observations and spot checks of the work in progress as a basis for determining conformance of work, materials and equipment with the contract documents, report and defective work to the board.

3. **ADDITIONAL INFORMATION**

Obtain from the board additional details or information if, and when, required at the site for proper execution of the work. Become acquainted with standard or reference specifications referred to in the specifications.

4. **CONTRACTOR'S SUGGESTIONS**

Consider and evaluate suggestions or recommendations which may be submitted by the contractor to the architect and report them with recommendations to the board for final decision.

5. **CONSTRUCTION SCHEDULE**

Be alert to the construction schedule and to conditions, which may cause delay in completion, and report it to board.

6. **LIAISON**

Maintain liaison with the Contractor and all subcontractors on the project only through the contractor's superintendent.

7. **CONFERENCES**

Attend and report to the board on conferences held at the project site as directed by the board.

8. **TESTS**

Advise the board in advance of the schedules of tests and observe that tests at the project site which are required by the contract documents are actually conducted;

9. INSPECTIONS BY OTHERS

If inspectors, representing local, state or federal agencies having jurisdiction over the project visit the site, accompany such inspectors during their trips through the project, record and report to the board the results of these inspections.

10. RECORDS

10.1 Maintain orderly files at the site for (1) correspondence, (2) reports of site conferences, (3) shop drawings and (4) reproductions of original contract documents including all addenda, change orders supplementary drawings issued subsequent to the award of the contract.

10.2 Keep a daily diary or log book, recording hours on the site, weather conditions, list of visiting officials and jurisdiction, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures.

10.3 Record names, addresses and telephone numbers for all contractors and subcontractors.

11. SHOP DRAWINGS

The contractor is not authorized to install any materials and equipment for which shop drawing are required, unless such drawings have been approved in accordance with the General Conditions by the Contractor and the Architect.

12. SAMPLES

Receive samples which are required to be furnished at the site; record date received and from whom, and notify the board of their readiness for examination; record approval or rejection; and maintain custody of approved samples.

13. CONTRACTOR'S APPLICATIONS FOR PAYMENT

Review the applications for payment submitted by the contractor and forward them with recommendations to the board for disposition.

14. LIST OF ITEMS FOR CORRECTION

After substantial completion check each item as it is corrected.

15. OWNER'S OCCUPANCY OF THE PROJECT

If the board occupies the project for any portion thereof prior to final completion of the work by the contractor, be especially alert to possibilities of claims for damage to work completed prior to occupancy.

16. OWNER'S EXISTING OPERATION

In the case of additions to or renovations of an existing facility, which must be maintained in operation during construction is alert to conditions, which could have an effect on the existing operating of the board.

17.. REJECTION OF WORK

If a situation arises during construction, which in your view requires that work be rejected, report such situation immediately to the board.

18. LIMITATIONS OF AUTHORITY

Unless specific exceptions are established by written instructions issued by the board:

- 18.1 Do not authorize deviations from the contract documents.
- 18.2 Do not personally conduct any tests.
- 18.3 Do not enter into the area of responsibility of the contractor's superintendent.
- 18.4 Do not expedite the work for the contractor.
- 18.5 Do not advise on, or issue directions relative to, any aspect of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work.
- 18.6 Do not authorize or suggest that the board occupy the project, in whole or in part, prior to substantial completion.
- 18.7 Do not issue a certificate for payment.

Appendix I

AUDIT INFORMATION

Financial Documentation for Construction Aid Payment

It is a requirement to establish a separate checking account and cost accounting system for all school construction projects. When a district is engaged in a small construction project it may seek approval from the Department of Education to use existing checking account systems, but must maintain a separate accounting system.

PLEASE DISCUSS YOUR SYSTEM FOR ACCOUNTING WITH THE DEPARTMENT OF EDUCATION AT THE BEGINNING OF THE CONSTRUCTION PROJECT.

At the completion of the construction project and the final inspection and approval by all state agencies and local authorities, the Department of Education will conduct an audit. For the final audit of accounts the Department expects the following information for each payment to be documented in a summary report.

- Name of vendor
- Brief description of work performed
- Amount of payment
- Check number

All transactions must be listed on the summary report and available for review. If you are mailing in copies of the audit materials please include

- Copies of all invoices
- Proof of payment—either copies of cancelled checks or bank statements

Please include all checks and invoices in the same order as the summary report.

EXAMPLE OF SUMMARY REPORT

VENDOR	DESCRIPTION OF	CHECK	AMOUNT OF	NOTES
Toyland	Playground Equipment	00111	2,000.00	
Public Safety	Building Permits	00112	4,500.00	
Smith & Smith	Legal Fees for Bonding	00113	400.00	
DE Printing	Printing of Ballots	00114	25.00	