

# Guidelines for School Equipment Purchases

**PRIMARY** Tim Mearig, Architect

AUTHOR Alaska Department of Education & Early Development

Juneau, Alaska

**CONTRIBUTORS** Facilities Staff

Alaska Department of Education & Early Development

Juneau, Alaska

#### **ACKNOWLEDGEMENTS**

Thanks to the Bond Reimbursement and Grant Review Committee members who reviewed the publication in its draft form and to those in the Department of Education & Early Development who were responsible for the predecessors to this document.

This publication may not be reproduced for sale by individuals or entities other than the:

State of Alaska Department of Education & Early Development Juneau, Alaska

Originally published in 1988 by the State of Alaska, Department of Education as *Guidelines for School Equipment Purchases* and updated in 1997 and 2005 under the same name.

# **Table of Contents**

SECTION		Page
Introducti	on	2
	ew	
Authori	ty	2
Identifying	g Needed Equipment	4
	onal Specifications	
	logy Items	
	ing & Equipment Items	
	uishing Between Supply & Equipment Items	
School Ed	quipment Budgets	7
	ies	
	Budgets	
	ry	
Accountir	ng for Equipment Purchases	9
	d Equipment	
	Asset Inventory	
	ent Control	
Appendix	A - Definitions	10

# Introduction

## **Overview**

Regulations governing the use of state aid from debt reimbursement and grant funding provide for the use of capital project funds for the purpose of equipping new or rehabilitated school facilities. In addition, statutes prohibit the granting of capital project funds to districts unless districts account for all school equipment through an auditable fixed asset inventory system. The purpose of this Department of Education & Early Development guideline is to assist school districts and municipal entities in purchasing equipment in compliance with school construction statutes and the regulations which implement them. The guideline provides direction in three major areas: identifying the needed equipment, equipment budgets and accounting for the equipment.

### **Authority**

#### AS 14.17.190(b)

(b) Each district shall maintain complete financial records of receipt and disbursement of public school foundation money, money acquired from local effort, and other money received by the district. The records must be in the form required by the department and are subject to audit by the department at any time.

#### AS 14.11.011(b)

- (b) For a municipality that is a school district or a regional educational attendance area to be eligible for a grant under this chapter, the district shall submit
- (1) a six-year capital improvement plan that includes a description of the district's fixed asset inventory system and preventive maintenance program no later than September 1 of the fiscal year before the fiscal year for which the request is made; the six-year plan must contain for each proposed project a detailed scope of work, a project budget, and documentation of conditions justifying the project; . . . .

#### AS 14.11.017(a)(3)

- (a) The department shall require in the grant agreement that a municipality that is a school district or a regional educational attendance area . . .
- (3) agree to limit equipment purchases to that required for the approved project plan submitted under (5) of this subsection and account for all equipment purchased for the project under a fixed asset inventory system approved by the department, . . . .

#### AS 14.14.060(h)

(h) School boards within the borough may determine their own policy separate from the borough for the purchase of supplies and equipment.

#### AS 14.11.135(3)

(3) "costs of school construction" means the cost of acquiring, constructing, enlarging, repairing, remodeling, equipping, or furnishing of public elementary and

# **Introduction (cont.)**

secondary schools that are owned or operated by the state, a municipality, or a district and includes the sum total of all costs of financing and carrying out the project; these include the costs of all necessary studies, surveys, plans and specifications, architectural, engineering, or other special services, acquisition of real property, site preparation and development, purchase, construction, reconstruction, and improvement of real property and the acquisition of machinery and equipment that may be necessary in connection with the project. . . .

## 4 AAC 31.900 defines school equipment as follows:

(2) "capital equipment" means built-in and movable equipment used to furnish a newly constructed or rehabilitated space; it includes the first-time purchase of library books, reference material, and media to furnish a new or renovated library; it does not include supply items such as textbooks and expendable commodities; the term is further defined in the Department of Education & Early Development's *Guidelines for School Equipment Purchases*, 1997 edition; . . . .

# **Identifying Needed Equipment**

## **Educational Specifications**

The general scope of necessary equipment purchases, as defined in 4 AAC 31.900(2) and this guide, should be a part of the educational specification developed for the project. Paragraph (7) of 4 AAC 31.010 Educational Specifications, indicates that the educational specifications should include, "the educational spaces needed, their approximate sizes in square feet, their recommended equipment requirements, and their space relationships to other facility elements." Educational specifications for projects incorporating state funding are reviewed and approved by the Department of Education & Early Development prior to contract award. Good educational specifications include, in tabular form, a listing of necessary equipment for the project. The listing should be based on the Activity Setting Descriptions identified in the department's guide "A Handbook to Writing Educational Specifications", current edition. If the project architect's professional services include responsibilities for preparing furnishing, fixtures, and equipment (often referred to as FF&E) documents, these listings become an invaluable tool in communicating district needs to ensure their inclusion in the project. The project's design documents should identify types and quantities of equipment which conform to the district's established standards. The actual selection and purchase of this equipment is normally the responsibility of the school district in which the school facility is located unless otherwise agreed when a municipality is the project manager.

## **Technology Items**

A key component of any equipment budget is the provision of technology items such as computers, computer peripherals and software, audio-visual and vocational-technical equipment. Technology incorporates a wide spectrum of equipment items and has become an integral part of education. Technology can both be taught as a subject area and used as a delivery system in the teaching/learning process across all subject areas. In other words, most schools include both technology education and educational technology. They do this to differing degrees depending on the objectives and culture of the school district or individual school. The definitions included in Appendix A indicate that technology is best thought of in the broad sense of those equipment items used to process or create electronic data which are integrated into a system. Under this definition, typical technology equipment at the publication of this guide would be, computers, printers (2D/3D), monitors, video projectors, interactive whiteboards, scanners (2D/3D), video cameras, digital cameras, large format displays, video recorders/players, image processors, robotics, calculators, electronic test equipment, voice over IP, digital telephone, etc. Most of these items are dependent on both the software and wiring/cabling connections to make them functional for specific purposes. An initial copy of software can be purchased as technology equipment. Typically, the wiring and cabling will be included as part of the construction budget.

#### **Furnishing & Equipment Items**

The remaining components of an equipment budget include furnishings and the equipment necessary to provide for the administration, operations and instructional programs of the school.

# **Identifying Needed Equipment (cont.)**

The identification of furnishings for administrative and instructional use is a relatively straightforward process. The items are typically large and are used daily. This serves to keep them in the forefront of people's minds when being asked to develop school equipment lists. The identification of instructional equipment presents additional challenges and requires intentional planning and even research on the part of the school district's project design team. Probably the most overlooked items are those that pertain to the maintenance and operation of the new or renovated school. Items in this category include custodial care equipment, personnel lifts, mowers, snow blowers, and similar items that are appropriately sized and are dedicated to the use and operation of that specific facility. Maintenance items such as testing equipment, any type of construction equipment, or vehicle that can be used at multiple school locations are not appropriate purchases under the capital equipment associated with the school facility being constructed or rehabilitated.

#### **Distinguishing Between Supply & Equipment Items**

An item can be classified as **supply** if it meets one or more of the following criteria:

- 1. It is consumed, worn out, or deteriorated as it is used, to the point of being not useful or not available for its principal purpose, and under normal conditions of use, it reaches this state of being not useful or not available for its principal purpose typically within one (1) but nor more than two (2) years.
- 2. Its original shape, appearance, and/or character changes with use.
- 3. It loses its identity through fabrication or incorporation into a different or more complex unit or substance.
- 4. It is expendable, that is, if the item is damaged or some of its parts are lost or worn out, it is usually more feasible to replace the item with an entirely new unit rather than repair it. Examples are paper, pencils, cleaning supplies, etc.

An item can be classified as **equipment** if it is an instrument, machine, apparatus, or set of articles which meets *all* of the following criteria:

- 1. It retains its original shape, appearance, and/or character with use.
- 2. It does not lose its identity through fabrication, or incorporation into a different or more complex unit or substance.
- 3. It is non-expendable; that is, if the item is damaged or some of its parts are lost or worn out, it is usually more feasible to repair the item rather than to replace it with an entirely new unit.
- 4. Under normal conditions of use, including reasonable care and maintenance, it can be expected to serve its principal purpose for more than one (1) year.

Equipment items are normally of significant value, usually over \$5000, or the value that the local school district has established in its capitalization policy. However, smaller value items, often

# **Identifying Needed Equipment (cont.)**

needed in quantity or available as sets, which meet the above conditions also qualify as equipment. Examples include, a) office equipment such as punches and staplers, classroom flags, and waste cans, b) maintenance and career technology equipment such as hand tools and diagnostic equipment, and c) food service equipment such as utensils, pot/pans, shelving, and portable work surfaces.

Items which are obviously "supply" in nature may be purchased only if they are an integral part of an equipment package purchase such as with a computer (operating system software) or teaching machine or other device meeting the criteria of an equipment item.

For supply/equipment decision flow chart, see the department's Uniform Chart of Accounts, current edition.

# **School Equipment Budgets**

## **Quantities**

Equipment items should be purchased only as needed to support the individual school project or program which is authorized. Numbers of desks, computers, calculators, video players, video display panels, etc., should be--when added to those already available to be moved from any older facility which formerly housed the program--a total of no more than those appropriate to adequately provide for the educational program served by the school construction project named in the funding application or project agreement. The Department of Education & Early Development will approve the general types and quantities of equipment purchases as it approves the educational specifications submitted by the school district. It is the responsibility of the school district to actually purchase the equipment and to make specific cost-benefit value decisions and product selections.

#### **Overall Budgets**

The portion of each school construction or major maintenance project budget used for the purchase of school equipment should respond to the district's instructional program, the type of equipment needed to deliver the program, the grade levels being served, the availability of satisfactory existing equipment and the cost and quantities of new equipment. Traditionally, school equipment budgets have been thought of as a percentage of the facility construction cost. Current experience is showing percentages ranging as high as eight percent. This figure is for new construction; a lesser amount often is sufficient in renovations due to the availability of existing equipment items. For projects funded by appropriations made to the Department of Education & Early Development, total equipment budgets (i.e. conventional equipment plus technology items) have been limited to 7% unless a detailed justification is provided which shows the correlation between a school board-approved instructional program and the need for additional equipment.

While budgeting for equipment as a percentage of construction cost has some merit, state-wide equity is difficult to achieve due to the widely varying cost per square foot of Alaska schools. Whereas the cost of acquiring a constructed facility involves labor costs, material costs, and substantial premiums to access and serve remote sites, the cost of acquiring school equipment is more likely to be similar among districts regardless of location. Some small increases can be expected for shipping, lack of quantity discounts, as well as the services required to install more elaborate systems.

The department has established two parameters with which to evaluate school equipment budgets. The first will be the percentage-of-construction method with the standard limitation remaining at 7%. The second budget parameter is established on a per-student basis as shown in the tables on the following page:

Elementary Students Served	Technology Equipment	All Other Equipment
10 - 100 students	\$1,400	\$1,700
101 - 250 students	\$1,300	\$1,700
251 - 500 students	\$1,000	\$1,500
over 500 students	\$900	\$1,400

Secondary Students Served	Technology Equipment	All Other Equipment
10 - 100 students	\$1,700	\$2,100
101 - 250 students	\$1,500	\$2,000
251 - 500 students	\$1,300	\$1,900
over 500 students	\$1,200	\$1,700

Note: for schools with a mix of elementary (K-6) and secondary students (7-12), the aggregate number of students will determine which per-student allotment is used. Example: A K-12 school with 86 students in grades K-6 and 59 students in grades 7-12 would use figures from the 101-250 category (\$1,300 and \$1,700 for elementary and \$1,500 and \$2,000 for secondary). These would be applied to the specific numbers of students in each grade grouping.

Schools in regions with a geographic area cost factor greater then 110.00, as established in the department's current Program Demand Cost Model for Alaskan Schools, will be allowed an additional amount to account for estimated shipping and installation costs. For these schools, equipment budgets calculated using the per-student table may be increased an amount equal to one-fifth of their geographic area cost factor. Example: A school with a geographic factor is 140.91, may increase their per-student-based equipment budget by 8.18 percent. (40.91 / 5 = 8.18)

#### **Summary**

For projects funded under AS 14.11, total school equipment budgets will be limited to the lesser of the amounts generated by the percentage of construction cost formula at 7%, and the perstudent formula shown above. The opportunity to provide detailed justification which shows the need for additional funding of equipment remains in effect.

For projects providing new facilities or projects constructing space for new media programs which do not replace another facility, the initial purchase of library media is appropriate for inclusion in the equipment budget.

# **Accounting for Equipment Purchases**

## **Installed Equipment**

Built-in equipment or furnishings or those pieces of equipment which are an integral part of a building system are normally included in the construction documents and are not considered capital equipment for the purposes of a fixed asset inventory. Installed equipment is instead accounted for as part of the building cost.

## **Fixed Asset Inventory**

Procedures and requirements for establishing and maintaining a property accounting system can be found in various industry, state, and federal publications. Equipment purchased as part of a school construction project will be recorded in a district's approved fixed asset inventory system, as required. It is impractical for every individual item purchased as school equipment to be recorded. Therefore, a minimum cost should be established above which an asset will be entered into the fixed asset records. The Alaska Department of Education & Early Development Uniform Chart of Accounts, current edition, establishes that minimum at \$5000 or the school district's/municipality's capitalization threshold for equipment, whichever is lower. The cost established as the threshold should be stated in the fixed asset portion of the annual audit submitted for department review under 4 AAC 09.130. In establishing the appropriate management of school equipment within a fixed asset system, cost thresholds and financial accounting are one consideration. Another consideration of similar importance is level of control or physical control. Often, these two considerations—fiscal control and physical control—work in conjunction within a fixed asset inventory.

## **Equipment Control**

The tracking and control of physical resources by school districts is a matter of responsible stewardship. In devising methods for carrying out this responsibility, selecting an appropriate level of control is important. Three broad categories of control have been suggested as applicable to school equipment purchases: little or no control, group control, and individual control. Two of these, group control and individual control intersect with the district's fixed asset system. The individual control category, in which discrete equipment items are tracked based on their relatively high value, has been adequately covered in the preceding paragraph. Group control, as a category, offers a mechanism for school districts to include equipment items with lower individual dollar values in their fixed asset inventory. Items in this category, when taken as a group, are valuable enough to justify the cost of providing some type of control over their safety, use, location, and condition. Examples of such items include classroom equipment group, or administration equipment group. These groups would consist of furnishings, computers/peripherals and appliances assigned to a room, suite, or wing of the school facility. Best practices for school equipment accounting would include such groups as fixed assets.

# **Appendix A - Definitions**

**Construction Equipment:** Any type of bulldozer, front end loader, fork lift, or other type of equipment that is typically used in construction activities that may or may not be legal for use on a public way, that can move under its own power, and is controlled by an operator that is located on or in the equipment.

**Installed Equipment:** Built-in equipment or furnishings or those pieces of equipment which are an integral part of a building system.

**Fixed Assets:** An account grouping used to track the balance of expenditures and revenues associated with owned property.

**Property:** Physical assets including land, buildings, and equipment.

**Supplies:** Items which are consumed during normal use or are more feasible to replace with an entirely new unit rather than repair it. Supplies are not part of the fixed asset account group.

**Technology:** An integrated system of electronic and mechanical equipment, associated software and peripherals which creates and/or process information to support a school's educational program.

**Vehicle:** Any tracked, two, or four wheeled motorized means of conveyance that carries an operator, that may or may not carry a passenger, and that may or may not be legal for use on a public way.