

## **APPENDIX D**

### **ADDITIONAL RESOURCES**

#### **American School and University Annual Maintenance and Operations Cost Study**

<http://images.asumag.com/files/134/mo%20school.pdf>

An annual survey that reports median national statistics for various maintenance and operations costs, including salary/payroll, gas, electricity, utilities, maintenance and grounds equipment and supplies, outside contract labor, and other costs.

#### **APPA Custodial Operation Self-Analysis Program**

<http://www.appa.org/pdffiles/AllCustodialAnalysis.pdf>

A survey and self-analysis tool designed to identify many of the variables that influence institutional custodial operations. It also establishes standardized benchmarks for the industry. APPA (1998) The Association of Higher Education Facilities Officers, Alexandria, VA, 15pp.

#### **Asbestos**

<http://www.edfacilities.org/rl/asbestos.cfm>

A list of links, books, and journal articles about how asbestos abatement and management is conducted in school buildings, and how schools should comply with federal regulations. National Clearinghouse for Educational Facilities, Washington, DC.

#### **Beyond Pesticides**

<http://www.beyondpesticides.org>

A nonprofit membership organization formed to serve as a national network committed to pesticide safety and the adoption of alternative pest management strategies.

#### **Budgeting for Facilities Maintenance and Repair Activities**

<http://www.nap.edu/books/NI000085/html/index.html>

An online publication that focuses on how to estimate future facility maintenance and repair needs. Federal Facilities Council, Standing Committee on Operations and Maintenance, National Research Council (1996) National Academy Press, Washington, DC.

#### **Building Commissioning**

<http://www.edfacilities.org/rl/commissioning.cfm>

A list of links, books, and journal articles about building commissioning. National Clearinghouse for Educational Facilities, Washington, DC.

#### **Building Commissioning Association**

<http://www.bcxa.org>

A professional association dedicated to the promotion of high standards for building commissioning practices.

#### **Building Evaluation Techniques**

Step-by-step techniques for conducting an effective building assessment, including the evaluation of overall structural performance, spatial comfort, noise control, air quality, and energy consumption. Includes sample forms and checklists tailored to specific building types. George Baird, et al. (1995) McGraw Hill, 207pp.

### California Collaborative for High Performance Schools (ChiPS)

<http://www.chps.net/>

A group that aims to increase the energy efficiency of public schools in California by marketing information, service, and incentive programs directly to school districts and designers. The goal is to facilitate the design of high-performance schools-environments that are not only energy efficient, but also healthy, comfortable, well lit, and contain the amenities needed for a quality education.

### Carpet and Rug Institute (CRI)

<http://www.carpet-rug.com/>

The web site of the national trade association representing the carpet and rug industry. It is a source of extensive information about carpets for consumers, writers, interior designers, facility managers, architects, builders, and building owners and managers, installation contractors, and retailers. CRI also publishes the web site "Carpet in Schools" (<http://www.carpet-schools.com/>) to address topics such as indoor air quality, allergies, and carpet selection, installation, and care.

### Cleaning & Maintenance Management Online

<http://www.cmmonline.com/Home.asp>

The online home of Cleaning & Maintenance Management magazine, which features articles, buyers guides, key topics, and a calendar.

### Cleaning and Maintenance Practices

<http://www.edfacilities.org/rl/cleaning.cfm>

A list of links, books, and journal articles about custodial standards and procedures, equipment, safety, and product directories for the cleaning and maintenance of schools and colleges.

### Community Participation in Planning

[http://www.edfacilities.org/rl/community\\_participation.cfm](http://www.edfacilities.org/rl/community_participation.cfm)

A list of links, books, and journal articles about how community members can become involved in the planning and design of school buildings and grounds. National Clearinghouse for Educational Facilities, Washington, DC.

### Creating a Vision

<http://www.nsba.org/sbot/toolkit/cav.html>

An online toolkit from the National School Boards Association for creating a vision in school organizations.

### Creating Safe Learning Zones: The ABC's of Healthy Schools

<http://www.childproofing.org/ABC.pdf>

A primer prepared by the Healthy Buildings Committee of the Child Proofing Our Communities campaign to offer guidance about constructing, maintaining, and renovating healthy schools.

### Custodial Staffing Guidelines for Educational Facilities

[http://www.appa.org/resources/publications/pubs.cfm?Category\\_ID=2](http://www.appa.org/resources/publications/pubs.cfm?Category_ID=2)

A guide about custodial staffing in educational facilities that addresses custodial evaluation, special considerations, staff development tools, and case studies. Appendices include information about custodial requirements, space classification, standard space category matrices,

standard activity lists, and audit forms. APPA (1998) The Association of Higher Education Facilities Officers, Alexandria, VA, 266pp.

### **Custodial Standards**

[http://ehs.brevard.k12.fl.us/PDF%20files/custodial\\_standards\\_03.pdf](http://ehs.brevard.k12.fl.us/PDF%20files/custodial_standards_03.pdf)

Guidelines that detail cleaning requirements for each area of a school, including classrooms, restrooms, cafeterias, gymnasiums, locker rooms, and corridors. Samples of assessment forms include emergency lighting, fire extinguisher inspection, air conditioner maintenance/service log sheets, and monthly custodial preventive maintenance forms. Office of Plant Operations and Maintenance (1998) Brevard Public Schools, Rockledge, FL, 44pp.

### **Deteriorating School Facilities and Student Learning**

[http://www.ed.gov/databases/ERIC\\_Digests/ed356564.html](http://www.ed.gov/databases/ERIC_Digests/ed356564.html)

A report documenting that many facilities in American public schools are in disrepaira situation with implications on the morale, health, and learning of students and teachers. Frazier, Linda M. (1993) ERIC Clearinghouse for Educational Management, Eugene, OR.

### **Disaster Planning and Response**

<http://www.edfacilities.org/rl/disaster.cfm>

A list of links, books, and journal articles about building or retrofitting schools to withstand natural disasters and terrorism, developing emergency preparedness plans, and using school buildings to shelter community members during emergencies. National Clearinghouse for Educational Facilities, Washington, DC.

### **Educational Performance, Environmental Management, and Cleaning Effectiveness in School Environments**

[http://www.carpet-rug.com/pdf\\_word\\_docs/0104\\_school\\_environments.pdf](http://www.carpet-rug.com/pdf_word_docs/0104_school_environments.pdf)

A report demonstrating how effective cleaning programs enhance school and student self-image, and may promote higher academic attendance and performance. Berry, Michael A. (2001) Carpet and Rug Institute, Dalton, GA.

### **Energy Design Guidelines for High Performance Schools**

<http://www.eren.doe.gov/energysmartschools/order.html>

A manual written by the U.S. Department of Energy to help architects and engineers design or retrofit schools in an environmentally friendly manner. U.S. Department of Energy, Washington, DC.

### **Energy Savings**

<http://www.edfacilities.org/rl/energy.cfm>

A list of links, books, and journal articles providing extensive resources on various methods of heating, cooling, and maintaining new and retrofitted K-12 school buildings and grounds. National Clearinghouse for Educational Facilities, Washington, DC.

### **Energy Smart Schools**

<http://www.eren.doe.gov/energysmartschools/>

An initiative by the U.S. Department of Energy to provide detailed information about how to increase school building energy efficiency and improve the learning environment. Includes a discussion of school facility commissioning.

### Facilities Audit: A Process for Improving Facilities Conditions

A handbook presenting a step-by-step approach to all phases of facility inspection. It is designed to help a facility manager assess the functional performance of school buildings and infrastructure and provides information about how to quantify maintenance deficiencies, summarize inspection results, and present audit findings for capital renewal funding. Kaiser, Harvey (1993) APPA, The Association of Higher Education Facilities Officers, Washington, DC, 102pp.

### Facilities Assessment

[http://www.edfacilities.org/rl/facility\\_assessment.cfm](http://www.edfacilities.org/rl/facility_assessment.cfm)

A list of links, books, and journal articles about methods for assessing school buildings and building elements for planning and management purposes. National Clearinghouse for Educational Facilities, Washington, DC.

### Facilities Evaluation Handbook: Safety, Fire Protection, and Environmental Compliance, 2nd Edition

A guide to help plant and facilities managers conduct inspections and evaluations of their facilities in order to identify and address problems in the areas of maintenance, safety, energy efficiency, and environmental compliance. Petrocelli, K. L. and Thumann, Albert (1999) Fairmont Press, Lilburn, GA, 200pp.

### Facilities Information Management: A Guide for State and Local School Districts

<http://nces.ed.gov/forum/publications.asp>

A publication that defines a set of data elements that are critical to answering basic policy questions related to elementary and secondary school facility management. Facilities Maintenance Task Force, National Forum on Education Statistics (2003) National Center for Education Statistics, Washington, DC.

### Facilities Management: A Manual for Plant Administration

[http://www.appa.org/resources/publications/pubs.cfm?Category\\_ID=1](http://www.appa.org/resources/publications/pubs.cfm?Category_ID=1)

A four-book publication about managing the physical plant of campuses. Its 67 chapters cover general administration and management, maintenance and operation of buildings and grounds, energy and utility systems, and facilities planning, design and construction. Middleton, William, Ed. (1997) APPA: Assn. of Higher Education Facilities Officers, Alexandria, VA.

### Facilities Management Software

<http://www.edfacilities.org/rl/software.cfm>

A resource list of links, books, and journal articles describing and evaluating computer-aided facilities maintenance management systems for handling priorities, backlogs, and improvements to school buildings. National Clearinghouse for Educational Facilities, Washington, DC.

### FacilitiesNet

<http://www.facilitiesnet.com/>

A commercial web site for facilities professionals sponsored by Trade Press Publishing Corporation and developed by the editors of Building Operating Management and Maintenance Solutions magazines. It includes a chat room on educational facilities.

### Facility Management

<http://www.facilitymanagement.com/>

The online home of American School and Hospital Maintenance Magazine. This site is intended to help facility managers stay informed about current issues and the latest products.

### Floor Care

[http://www.edfacilities.org/rl/floor\\_care.cfm](http://www.edfacilities.org/rl/floor_care.cfm)

A list of links, books, and journal articles about the maintenance of a variety of floor coverings in K-12 school classrooms, gymnasiums, science labs, hallways, and stairs. National Clearinghouse for Educational Facilities, Washington, DC.

### FMEP: Facilities Management Evaluation Program

<http://www.appa.org/FMEP/>

A program to provide the chief facilities officer at APPA member institutions with the opportunity to receive an evaluation by a team of APPA members from organizations with similar educational, financial, and physical characteristics. This document is designed to help an institution assess the value of this program and the commitment required to conduct such an evaluation.

### Good School Maintenance: A Manual of Programs and Procedures for Buildings, Grounds and Equipment

[http://www.iasb.com/shop/details.cfm?Item\\_Num=GSM](http://www.iasb.com/shop/details.cfm?Item_Num=GSM)

A manual that describes the fundamentals of good school maintenance, including managing the program and staying informed about environmental issues. Procedures for maintaining school grounds are detailed, as are steps for maintaining mechanical equipment, including heating and air-conditioning systems, sanitary systems and fixtures, sewage treatment plants, and electrical systems. Harroun, Jack (1996) Illinois Association of School Boards, Springfield, IL, 272pp.

### Green Schools

<http://www.ase.org/greenschools/>

A comprehensive program designed for K-12 schools to create energy awareness, enhance experiential learning, and save schools money on energy costs.

### Grounds Maintenance

[http://www.edfacilities.org/rl/grounds\\_maintenance.cfm](http://www.edfacilities.org/rl/grounds_maintenance.cfm)

A resource list of links, books, and journal articles about managing and maintaining K-12 school and college campus grounds and athletic fields. National Clearinghouse for Educational Facilities, Washington, DC.

### Guide for School Facility Appraisal

A guide that provides a comprehensive method for measuring the quality and educational effectiveness of school facilities. It can be used to perform a post-occupancy review, formulate a formal record, highlight specific appraisal needs, examine the need for new facilities or renovations, or serve as an instructional tool. Hawkins, Harold L. and Lilley, H. Edward (1998) Council for Educational Facility Planners International, Scottsdale, AZ, 52pp.

### Guide to School Renovation and Construction: What You Need to Know to Protect Child and Adult Environmental Health

A guide that presents cautionary tips for protecting children's health during school renovation and construction projects. It includes a checklist of uniform New York state safety standards during school renovations and construction, and several examples of the potential negative consequences of disregarding the risks of renovation and construction on occupant health. (2000) Healthy Schools Network, Inc., Albany, NY, 6pp.

### Hazardous Materials

[http://www.edfacilities.org/rl/hazardous\\_materials.cfm](http://www.edfacilities.org/rl/hazardous_materials.cfm)

A list of links, books, and journal articles about the identification, treatment, storage, and removal of hazardous materials found in school buildings and grounds. National Clearinghouse for Educational Facilities, Washington, DC.

### Healthier Cleaning & Maintenance: Practices and Products for Schools

A paper that provides guidance to schools with regard to selecting, purchasing, and using environmentally preferable cleaning products. Healthy Schools Network, Inc. (1999) New York State Association for Superintendents of School Buildings and Grounds, Albany, NY, 8pp.

### Healthy School Handbook: Conquering the Sick Building Syndrome and Other Environmental Hazards In and Around Your School

A compilation of 22 articles concerning "sick building syndrome" in educational facilities, with attention given to determining whether a school is sick, assessing causes, initiating treatment, and developing interventions. Miller, Norma L., Ed. (1995) National Education Association, Alexandria, VA, 446pp.

### Healthy Schools Network, Inc.

<http://www.healthyschools.org/>

A not-for-profit education and research organization dedicated to securing policies and actions that will create schools that are environmentally responsible for children, staff, and communities.

### High Performance School Buildings

[http://www.edfacilities.org/rl/high\\_performance.cfm](http://www.edfacilities.org/rl/high_performance.cfm)

A resource list of links and journal articles describing "green design," a sustainable approach to school building design, engineering, materials selection, energy efficiency, lighting, and waste management strategies. National Clearinghouse for Educational Facilities, Washington, DC.

### HVAC Systems

<http://www.edfacilities.org/rl/hvac.cfm>

A resource list of links, books, and journal articles about HVAC systems in school buildings, including geothermal heating systems. National Clearinghouse for Educational Facilities, Washington, DC.

### IAQ Overview in Schools and Preliminary Design Guide

<http://www.healthybuildings.com/s2/Schools%20-%20IAQ%20Design%20Guide%2001.01.pdf>

An educational tool and reference manual for school building design, engineering, and maintenance staff. Healthy Buildings International, Inc. (1999) Healthy Buildings International, Inc., Fairfax, VA.

### Impact of Facilities on Learning

[http://www.edfacilities.org/rl/impact\\_learning.cfm](http://www.edfacilities.org/rl/impact_learning.cfm)

A list of links, books, and journal articles examining the association between student achievement and the physical environment of school buildings and grounds. The National Clearinghouse for Educational Facilities, Washington, DC.

### Indoor Air Quality (IAQ)

<http://www.edfacilities.org/rl/iaq.cfm>

A list of links, books, and journal articles about indoor air quality issues in K-12 school buildings, including building materials, maintenance practices, renovation procedures, and ventilation systems. National Clearinghouse for Educational Facilities, Washington, DC.

### Indoor Air Quality and Student Performance

<http://www.epa.gov/iaq/schools/performance.html>

A report examining how indoor air quality (IAQ) affects a child's ability to learn, including case studies of schools that successfully addressed their indoor air problems, lessons learned, and long-term practices and policies that have emerged. Indoor Environments Division, U.S. Environmental Protection Agency (2000) U.S. Environmental Protection Agency, Washington, DC.

### Indoor Air Quality (IAQ) Tools for Schools

<http://www.epa.gov/iaq/schools/>

A U.S. Environmental Protection Agency kit showing schools how to carry out a practical plan for improving indoor air problems at little or no cost by using straightforward activities and in-house staff. The kit includes checklists for school employees, an IAQ problem-solving wheel, a fact sheet on indoor air pollution issues, and sample policies and memos.

### Integrated Pest Management

<http://www.edfacilities.org/rl/pests.cfm>

A list of links, books, and journal articles about integrated pest management guidelines, the use of pesticides, staff training, and program implementation and management in school buildings and grounds. National Clearinghouse for Educational Facilities, Washington, DC.

### International Facility Management Association (IFMA)

<http://www.ifma.org/>

The web site of a group that is dedicated to promoting excellence in the management of facilities. IFMA identifies trends, conducts research, provides educational programs, and assists corporate and organizational facility managers in developing strategies to manage human, facility, and real estate resources.

### Janitorial Products: Pollution Prevention Project

<http://www.westp2net.org/Janitorial/jp4.htm>

A site sponsored by the U.S. Environmental Protection Agency that includes fact sheets, product sample kits, purchasing specifications, and other materials to advise users on the health, safety, and environmental consequences of janitorial products.

### Lead-Safe Schools

[http://socrates.berkeley.edu/~lohp/Projects/Lead-Safe\\_Schools/lead-safe\\_schools.html](http://socrates.berkeley.edu/~lohp/Projects/Lead-Safe_Schools/lead-safe_schools.html)

A site established by the Labor Occupational Health Program at the University of California at Berkeley to house publications about lead-safe schools, provide training to school maintenance

### Maintenance & Operations Costs

[http://www.edfacilities.org/rl/mo\\_costs.cfm](http://www.edfacilities.org/rl/mo_costs.cfm)

A list of links, books, and journal articles citing national and regional maintenance and operations cost statistics and cost-reduction measures for the upkeep of school buildings and grounds. National Clearinghouse for Educational Facilities, Washington, DC.

### Maintenance Planning, Scheduling and Coordination

A book focusing on the preparatory tasks that lead to effective utilization and application of maintenance resources: planning, parts acquisition, work measurement, coordination and scheduling. Nyman, Don and Levitt, Joel (2001) Industrial Press, New York, NY, 320pp.

### Mercury

<http://www.epa.gov/mercury/index.html>

A web site of the U.S. EPA intended to provide information about reducing the amount of mercury in the environment. It includes both general and technical information about mercury and mercury-reduction strategies.

### Mercury in Schools and Communities

<http://www.newmoa.org/newmoa/htdocs/prevention/mercury/schools/>

Information from the Northeast Waste Management Officials' Association (NEWMOA), which was funded by the Massachusetts Department of Environmental Protection and the Massachusetts Executive Office of Environmental Affairs, to assist in identifying and removing elemental mercury and products containing mercury from schools and homes.

### National Best Practices Manual for Building High Performance Schools

<http://www.eren.doe.gov/energysmartschools/order.html>

A manual by the U.S. Department of Energy to help architects and engineers design or retrofit schools in an environmentally friendly manner. U.S. Department of Energy, Washington, DC.

### National Clearinghouse for Educational Facilities (NCEF)

<http://www.edfacilities.org>

A web site that includes reviews of and links to cutting-edge education facilities news; a calendar of conferences, workshops, and other facilities management-related events; a gallery of photos showing off innovative and provocative building design and construction from real schools across the nation; categorized and abstracted resource lists with links to full length, online, publications; and pointers to other organizations that provide online and off-line resources about education facilities management. NCEF can also be reached toll free at 888-552-0624.

### National Program for Playground Safety

<http://www.uni.edu/playground/about.html>

A site that describes playground safety issues, safety tips and FAQs, statistics and additional resources, and action plans for improving playground safety.

### National School Plant Management Association (NSPMA)

<http://www.nspma.com/>



A membership organization that facilitates the exchange of information about school plant management, maintenance and care.

### National School Safety Center

<http://www.nssc1.org/>

An internationally recognized resource for school safety information, training, and violence prevention. The web site contains valuable summaries of school safety research, including contact information for locating the studies.

### Occupational Safety and Health Administration (OSHA)

<http://www.osha.gov/>

The web site of OSHA, which has as its core mission to save lives, prevent injuries, and protect the health of America's workers. To accomplish this, federal and state governments works in partnership with the more than 100 million working men and women and their 6.5 million employers who are covered by the Occupational Safety and Health Act of 1970.

### Operation and Maintenance Assessments: A Best Practice for Energy-Efficient Building Operations

<http://www.peci.org/om/assess.pdf>

A publication that describes what an operations and maintenance assessment is, who should perform it, the benefits of an assessment, what it costs, and the process of performing an assessment. Includes a glossary of terms, sample site-assessment forms, a request for proposal checklist, sample procedures and plan, and a sample master log of findings. (1999) Portland Energy Conservation, Inc. Portland, OR, 54pp.

### Operational Guidelines for Grounds Management

[http://www.appa.org/resources/publications/pubs.cfm?Category\\_ID=2](http://www.appa.org/resources/publications/pubs.cfm?Category_ID=2)

A comprehensive guide to maintaining and managing grounds and landscaping operations. Chapters discuss environmental stewardship, broadcast and zone maintenance, grounds staffing guidelines, contracted services, position descriptions, benchmarking, and environmental issues and laws. Feliciani, et al. (2001) APPA: Assn. of Higher Education Facilities Officers, Alexandria, VA, 159pp.

### Planning Guide for Maintaining School Facilities

<http://nces.ed.gov/pubs2003/maintenance/index.asp>

The *Planning Guide* has been developed to help readers better understand why and how to develop, implement, and evaluate a facilities maintenance plan. It focuses on: (1) school facility maintenance as a vital task in the responsible management of an education organization; (2) the needs of an education audience; (3) strategies and procedures for planning, implementing, and evaluating effective maintenance programs; (4) a process to be followed, rather than a canned set of "one size fits all" solutions; and (5) recommendations based on "best practices," rather than mandates.

### Plant Operations Support Program

<http://www.ga.wa.gov/plant>

A self-sustaining consortium comprised of facility managers from Washington state agencies, educational facilities, municipalities, and port districts. This web site includes a library of

practices, policies, research studies, and other references on subjects including emergency preparedness, energy savings, maintenance management, IAQ, and accessibility.

### Playgrounds

<http://www.edfacilities.org/rl/playgrounds.cfm>

A list of links, books, and journal articles about playground design for varying age levels, including resources on safety, accessibility, equipment, surfaces, and maintenance. National Clearinghouse for Educational Facilities, Washington, DC.

### Poisoned Schools: Invisible Threats, Visible Actions

<http://www.childproofing.org/poisonedschoolsmain.html>

A report that includes more than two dozen case studies of schools built on or near contaminated sites or where children have otherwise been exposed to pesticide use in and around school buildings. Gibbs, Lois (2001) Center for Health, Environment and Justice, Child Proofing Our Communities Campaign, Falls Church, VA, 80pp.

### Portland Energy Conservation, Inc. (PECI)

<http://www.peci.org/>

Provides information about commissioning conferences, case studies, procedural guidelines, specifications, functional tests, and the model commission plan and guide specifications.

### Practical Guide for Commissioning Existing Buildings

<http://www.ornl.gov/~webworks/cppr/y2001/rpt/101847.pdf>

A document that describes commissioning terminology, the costs and benefits of commissioning, retro-commissioning, steps to effective commissioning, and the roles of team members in the commissioning process. Haasl, T. and Sharp, T. (1999) U.S. Department of Energy, Washington, DC.

### Principal's Guide to On-Site School Construction

<http://www.edfacilities.org/pubs/construction.html>

A publication that explores what school principals should know when construction takes place in or near a school while it is in session. It covers pre-construction preparation, including how to work with architects/engineers and other school staff; actions to take during construction, including proper information dissemination and student and property protection; and post-construction activities, including custodial and maintenance staff training and post-occupancy evaluations. Brenner, William A. (2000) National Clearinghouse for Educational Facilities, Washington, DC, 5pp.

### PECI Model Commissioning Plan and Guide Specifications

<http://www.peci.org/ex/mcpgs.html>

A resource that details the commissioning process for new equipment during both the design and construction phases. It goes beyond commissioning guidelines by providing boilerplate language, content, format, and forms for specifying and executing commissioning.

### Preventive Maintenance

<http://www.edfacilities.org/rl/maintenance.cfm>

A resource list of links, books, and journal articles about how to maximize the useful life of

school buildings through preventive maintenance, including periodic inspection and seasonal care. National Clearinghouse for Educational Facilities, Washington, DC.

### **Preventive Maintenance Guidelines for School Facilities K-12**

<http://www.rsmeans.com/index.asp>

A five-part manual that is intended to increase the integrity and support the longevity of school facilities by providing easy-to-use preventive maintenance system guidelines. It includes a book, wall chart, and electronic forms designed to help maintenance professionals identify, assess, and address equipment and material deficiencies before they become costly malfunctions. Maciha, John C, et al. (2001) R.S. Means Company, Inc., Kingston, MA, 232pp.

### **Project Management**

[http://www.edfacilities.org/rl/project\\_management.cfm](http://www.edfacilities.org/rl/project_management.cfm)

A list of links, books, and journal articles about the management of school construction projects by school administrators, business officials, board members, and principals. National Clearinghouse for Educational Facilities, Washington, DC.

### **Radon Prevention in the Design and Construction of Schools and Other Large Buildings**

<http://www.epa.gov/ordntrnt/ORD/NRMRL/Pubs/1992/625R92016.pdf>

A report outlining ways in which to ameliorate the presence of radon in schools buildings. The document presents the underlying principles (suitable for a general audience) and also provides more technical details for use by architects, engineers, and builders. U.S. Environmental Protection Agency (1994), Washington, DC, 51pp.

### **Roof Maintenance and Repair**

[http://www.edfacilities.org/rl/roof\\_maintenance.cfm](http://www.edfacilities.org/rl/roof_maintenance.cfm)

A list of links, books, and journal articles about maximizing the life-cycle performance of school roofs. Roof inspection strategies, scheduling, documentation, and repair resources are also addressed. National Clearinghouse for Educational Facilities, Washington, DC.

### **The Rural and Community Trust**

<http://www.ruraledu.org/facilities.html>

The web site of the Rural and Community Trust, which works with many small towns and counties in which the school remains the center of the community. The Rural and Community Trust provides a network for people who are working to improve school-community facilities, increase community participation in the facilities design process, and expand the stakeholders these public resources can serve.

### **Safe and Drug-Free Schools Program**

<http://www.ed.gov/offices/OESE/SDFS>

A program dedicated to reducing drug use, crime, and violence in U.S. schools. The web site contains many full-text publications on school safety and violence prevention.

### **Safeguarding Your Technology**

<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=98297>

Guidelines to help educational administrators and staff understand how to effectively secure an organization's sensitive information, critical systems, computer equipment, and network access.

Technology Security Task Force, National Forum on Education Statistics (1998) National Center for Education Statistics, Washington, DC.

### Safety and Security Design

[http://www.edfacilities.org/rl/safety\\_security.cfm](http://www.edfacilities.org/rl/safety_security.cfm)

A list of links, books, and journal articles about designing safer schools, conducting safety assessments, implementing security technologies, and preventing crime through environmental design. National Clearinghouse for Educational Facilities, Washington, DC.

### Safety in Numbers: Collecting and Using Crime, Violence, and Discipline Incident Data to Make a Difference in Schools

<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2002312>

Guidelines for use by school, district, and state staff to improve the effectiveness of disciplinary-incident data collection and use in schools. It provides recommendations on what types of data to collect and how the data can be used to improve school safety. Crime, Violence and Discipline Task Force, National Forum on Education Statistics (1998) National Center for Education Statistics, Washington, DC.

### School Design Primer: A How-To Manual for the 21st Century

<http://www.edfacilities.org/pubs/li/little.html>

A resource that describes the school planning and design process for decision-makers (e.g., superintendents, planning committee members, architects, and educators) who are new to school construction and renovation projects.

### SchoolDude

<http://www.schooldude.com/>

A site that connects school facility professionals with each other to solve problems, share best practices, and improve learning environments. This includes tools for work management, information, and resources, as well as online procurement for equipment and school supplies. Some sections are accessible only to fee-paying members.

### SchoolFacilities.com

<http://www.schoolfacilities.com>

A professional support network for school facility administrators and support personnel that provides school-related news, products, resources, and facility management tools.

### SchoolHouse Plant Operation & Maintenance Resource Center: School House Library

<http://faststart.com/cps/Library.html>

An online library containing reports dealing with various aspects of plant operation and maintenance that relate to the operation of school buildings.

### Schools as Centers of Community: A Citizen's Guide for Planning and Design

<http://www.cefpi.org/pdf/schools.pdf>

This guide provides parents and other citizens with ten examples of innovative school designs, and outlines a step-by-step process about how parents, citizens and community groups can get involved in designing new schools. Bingler, Stephen and Quinn, Linda (2000) U.S. Department of Education.

### Software for Facilities Management

<http://www.edfacilities.org/rl/software.cfm>

A resource list of links, books, and journal articles about computer-aided facilities maintenance management systems for handling priorities, backlogs, and improvements to school buildings. National Clearinghouse for Educational Facilities, Washington, DC.

### Storm Water Runoff

<http://www.epa.gov/fedsite/cd/stormwater.html>

A list of Storm Water Management Regulatory Requirements provided by the U.S. EPA.

### Underground Fuel Storage Tanks

<http://www.cefpi.org/issue4.html>

A briefing paper about the responsibilities associated with owning and securing an underground fuel storage tank. McGovern, Matthew (1996) Council of Educational Facility Planners, International, Scottsdale, AZ, 5 pp.

### U.S. Environmental Protection Agency (EPA)

<http://www.epa.gov/>

The main web site of the EPA, whose mission is to protect human health and safeguard the natural environment - air, water, and land - upon which life depends. The EPA works with other federal agencies, state and local governments, and Indian tribes to develop and enforce regulations under existing environmental laws. The web site includes an alphabetical index of topical issues available at <http://www.epa.gov/ebtpages/alphabet.html>. EPA Regional Office and Linked State Environmental Departments can be found at <http://www.epa.gov/epapages/statelocal/envrolst.htm>.

### U.S. Green Building Council

<http://www.usgbc.org>

A web site intended to facilitate interaction among leaders in every sector of business, industry, government, and academia with respect to emerging trends, policies, and products affecting "green building" practices in the United States.

### A Visioning Process for Designing Responsive Schools

<http://www.edfacilities.org/pubs/sanoffvision.pdf>

A guide for helping stakeholders establish the groundwork for designing and building responsive, effective community school facilities, including an explanation of the benefits of community participation and how to go about the process of strategic planning, goal setting, articulating a vision, design generation, and strategy selection. Sanoff, Henry (2001) National Clearinghouse for Educational Facilities, Washington, DC, 18pp.