

# for. generations to come

A leadership guide  
to renewing  
public school buildings

**21<sup>st</sup> CENTURY  
SCHOOL FUND**

IMPROVING URBAN PUBLIC  
SCHOOL FACILITIES



## Acknowledgements

I am indebted to Pat Bryant, my sister, a former school board member, and long time community volunteer who helped write this guide. I am also indebted to countless mentors in education policy, school finance, facilities planning, real estate, design and construction—board members of the 21<sup>st</sup> Century School Fund, and individuals who are engaged in this work in the private sector who have generously helped the 21<sup>st</sup> Century School Fund. Finally, I want to acknowledge the staff of the 21<sup>st</sup> Century School Fund—present and past, my fellow public education advocates in the District of Columbia and in the Building Educational Success Together (BEST) initiative. Much of their experience and wisdom is woven into this publication.

Mary Filardo  
*Executive Director*

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The 21st Century School Fund works to build the public will and create the public capacity to improve urban public school facilities so they support high quality education and vital communities. This mission is grounded in a broader vision for urban communities in which high quality public schools are both a reasonable expectation and a reality.

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# A Personal Experience, a Public Perspective



In 1984, my oldest child entered the District of Columbia Public Schools. This was one year after the publication of *A Nation at Risk*, a scathing report by the U.S. Department of Education on the quality of the nation's public schools. Although the District's schools were considered some of the lowest performing in the country, I sent my children to our neighborhood school believing they could receive a good public education. I was not disappointed, but took no chances. From the first day of pre-kindergarten, I became an active supporter and advocate for the city's public schools.

My early involvement in my children's educational experience focused on enlisting parental participation to strengthen the science curriculum at the James F. Oyster Bilingual Elementary School. The school had many strengths, most notably its bilingual program (all instruction was in both Spanish and English), but it had problems as well—problems unlikely to be adequately addressed without parental involvement.

The teachers and principal struggled to meet high standards and use best practices in their substandard work environment. Oyster School, built in 1926, had small classrooms and inadequate storage space for teaching materials. There was no place for teachers to gather for planning or cooperative work. There was no dedicated space for music instruction and no gymnasium. Moreover, the building was closed on more than one occasion for fire code violations; the roof leaked; there were few outlets available for computers, and the three 20-year-old "temporary" classrooms housing the early childhood program were in horrendous condition.

Realizing that the curriculum problems and the poor condition of the building were linked, a small group of parents and community activists came together to work with the principal and teachers to implement a school improvement campaign. When the dilapidated school was slated to be closed, the entire school community rallied to support a complete modernization project or construction of a new school. This was a tall order in a financially strapped urban district with no funds designated for school construction.

Meanwhile, I founded the nonprofit 21<sup>st</sup> Century School Fund to explore ways of creating new revenue to finance public school facility improvements. The 21<sup>st</sup> Century School Fund, working with the local school, the school district, and the private sector, created a public-private partnership that financed the design and construction of a new school for the Oyster community by subdividing the school property and allowing a developer to build both the replacement school and an apartment building on the school site. The result: in 2001, the first new public school in the District of Columbia in 20 years was opened.

This guide results from nearly 20 years of work to support and improve teaching and learning in public schools, focusing primarily on the condition of school buildings. There is tremendous satisfaction in working to provide children with nurturing, healthy, educationally appropriate public school facilities. I encourage others to become involved—your efforts will benefit our communities for generations to come.

A handwritten signature in blue ink that reads "Mary Filardo".

Mary Filardo, Executive Director  
21<sup>st</sup> Century School Fund



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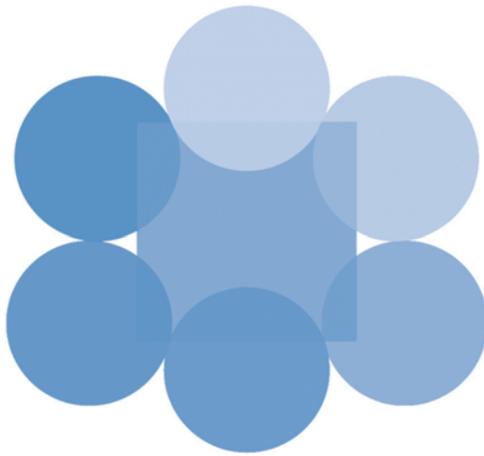
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You Are Not Alone





# About this Guide

There are many reasons to work to improve the school buildings in your community. Perhaps the school building is unsafe, it is too large, the classrooms are crowded and the enrollment is growing, or art is taught from a cart and the wiring cannot support computers. Or there may be facilities problems at the district level, with some schools overcrowded while others have empty classrooms, or the district may be considering a change from neighborhood to magnet schools.

This guide provides a framework for community involvement in the complex process of modernizing or building new public school buildings. The guide reflects two fundamental premises:

1. The condition and design of school buildings and grounds affect the quality of education and the vitality of the school and its community; and
2. Broad community involvement in decisions affecting public schools results in better education, better facilities and stronger communities.

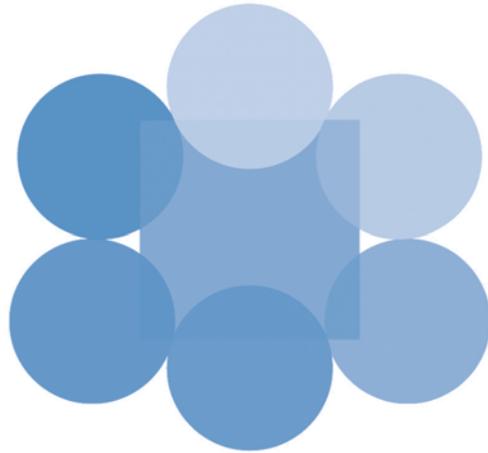
We have attempted to make this complex and demanding process less intimidating by breaking it down into five steps:

- Step 1: Assessment
- Step 2: Envisioning
- Step 3: Planning
- Step 4: Development
- Step 5: Implementation

The introduction to this guide provides an overview of how facilities affect the quality of education and community, and how to initiate and manage the process of improving a public school building. After describing how to get started, we devote a chapter to each step in the process. While the steps are presented sequentially, there may be overlap depending on your project and your district.

By explaining the process in detail, we hope to empower community members and help you prepare for the challenges you will likely confront as you plan for, push for, and implement a public school building project. Throughout this guide are actual stories of communities working their way through this process. By following the five steps for community involvement presented in this guide, you will end up with a better school building and with a stronger community that is able to support all aspects of student learning and achievement.





# Why School Buildings Matter

There are more than 90,000 public school buildings in the United States that come to life with students and staff, educational programs, and services. The people involved in and responsible for schooling—the teachers, administrators, clerical and maintenance staff, parents, students, and members of the community—have the greatest influence on the nature and quality of education. The educational programs—the curricula, standards, materials, training, and services available to the students are also critical. But the school building itself—the place where the people and programs converge—can support quality education or it can obstruct it.

## EDUCATIONAL QUALITY

Rundown, overcrowded, oversized, or poorly designed schools can demoralize even the best-intentioned people and render ineffective otherwise good programs. Inadequate or decrepit school facilities are a result of and contribute to a lack of public support for public education. Substandard school buildings reflect poorly on the people and programs that are housed in them. Conversely, attractive, well-maintained, educationally appropriate school facilities support teaching and learning and enhance the community.

A growing body of research suggests that poor building condition and design are a liability to students and teachers, and that neither students nor teachers perform their best in unhealthy, crumbling, or overcrowded schools. New state standards and federal mandates hold teachers and

principals to higher levels of accountability, yet many continue to work in sub-standard buildings that are desperately in need of repair or modernization. Improving school facilities is an important part of ensuring that high standards for teacher effectiveness and student achievement can be met.

Educational programs have changed over the past few decades in response to new standards for student performance and research findings about how children learn. These changes include a major expansion of early childhood and special education schooling, increased “hands-on” and laboratory learning, integration of technology in the classroom, the addition of an array of school-based health and social services, and extended-day programs. Meanwhile, the school buildings and individual



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## A School Story

### Roof Collapse

*Cleveland Plain Dealer*

In the fall of 2000, the gym roof collapsed at a Cleveland, Ohio public high school. For more than a year, the students at East High were bused a mile away to the Thurgood Marshall Recreation Center for gym classes.

classrooms needed to support these programs, for the most part, have not been modernized or redesigned to meet these new and expanded demands.

Educational facilities that are oversized, overcrowded, underutilized, poorly maintained, poorly designed, or environmentally unsound are inadequate. Any of these conditions can adversely affect a school's educational program.

## SCHOOL SIZE

Research on school size consistently finds that smaller schools correlate to improved student achievement and lower dropout rates, particularly for children from low-income families. Small schools are typically characterized by increased student motivation, a greater sense of belonging, and less bullying. Teachers and administrators spend less time on "crowd control" in small schools.

KnowledgeWorks, Dollars and Sense, *The Cost Effectiveness of Small Schools*, points to a "surge of research and experience showing that small schools are better places in which to educate children." The report notes that small schools can be created in a cost-effective manner and that "the cost of large schools is higher, considering their negative outcomes."

### *Inadequate school facilities may result in:*

- Alienated students
- Low staff morale
- High rates of teacher attrition
- Inability to provide specialized curricula
- Reduced learning time
- Distractions from learning
- Reduced ability to meet special needs
- Lack of technological proficiency
- Health problems for staff and students
- Safety hazards
- Less supervision of students' behavior

## CLASS SIZE

Numerous studies indicate that small class size contributes to improved student achievement. Students in small elementary classes have been shown to progress more quickly and to retain the educational advantage of having been in small classes throughout their school careers.

Small class size is not just relevant to elementary school students. Middle school and high school teachers often have 25 to 30 students in a class for up to five periods each day making them responsible for more than 125 students. Research suggests that a teaching load of 80 is optimal. But it is impossible to reduce the number of students in a class or the teaching load of secondary school teachers if there are not enough classrooms.

## TEACHER ATTRITION

A major problem facing school districts is attracting and keeping good teachers. The shortage of teachers is a result of higher certification standards, rising student populations, and vast numbers of teachers reaching retirement age. The shortage is exacerbated by the poor working conditions with which teachers must cope. A 2002 survey of Chicago and District of Columbia public school teachers sponsored by the Building Educational Success Together

(BEST) initiative found that 57 percent of the teachers in Washington, D.C., and 31 percent of the teachers in Chicago were dissatisfied with their school facilities. More than 75 percent of the D.C. teachers gave their facility a grade of C, D, or F, and more than one quarter of these teachers reported that they were considering leaving teaching because of poor facilities conditions.

#### CURRICULUM AND INSTRUCTION

The variety of instructional approaches and the content of the curriculum may be limited when a classroom is not designed for a particular use, when it is too crowded, or when it has not been upgraded to accommodate computer access or other technology. Even though teachers have proven themselves to be endlessly adaptable when faced with facility shortcomings, the average teacher cannot be as effective working in substandard conditions as in a state-of-the-art facility. This is true for art teachers, for example, who “make do” even when they lack storage space for art supplies and artwork in progress and have no sink in the classroom. The same is true for science, physical education, music, career tech, and other curricular areas that are enhanced by specially designed and equipped classrooms.

#### LEARNING TIME

Poor school design and substandard physical conditions reduce the time available for teaching and learning. Many old multi-story elementary schools, for example, have bathrooms and water fountains only on the first floor. Students waste time standing in line to get a drink and use the bathrooms. Emergency closings caused by a variety of factors (e.g., excessive heat or cold; fire code violations, exposed asbestos, or mold) also cost students precious instructional time.

#### CLASSROOM ENVIRONMENT

Student achievement is adversely affected by problems with lighting, noise, and temperature—all a result of the design and condition of the school. Students who are in classrooms with more natural daylight have been shown to achieve higher scores on standardized tests, progress faster in math and reading, pay attention longer, and even miss fewer days of school.

There is also a growing understanding of the relationship between the acoustics in classrooms and educational performance in general and, more specifically, learning to read. High noise levels not only decrease reading comprehension, but have been found to increase stress, raise blood pressure, reduce success with cognitive tasks, induce feelings of helplessness, and make it difficult to concentrate.

Maintaining a stable and comfortable temperature also affects student success and teacher performance. In many districts, antiquated heating systems that leave the schools both too hot and too cold in the winter are the rule, rather than the exception. And, whereas almost all adult work environments are air-conditioned, most schools are not. Again, the research supports what most students and teachers already know from experience: it is hard to concentrate and stay mentally alert when you are too hot or too cold.

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#### **A School Story**

Carpet Ban Could Snag School Opening

*The Boston Globe*

August 1, 2002

A teacher in Massachusetts claims that mold spores in the carpeting at her school made her sick. Her complaints, supported by her physician, prompted the town's board of health to remove carpeting from all heavily-trafficked areas of public buildings, including schools, police departments, and municipal buildings.

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### **A School Story**

Two Schools to Add Health Centers

*The Cincinnati Enquirer*  
August 1, 2002

Two Cincinnati public schools will offer school-based health centers, thanks to a \$700,000 grant awarded to Cincinnati Children's Hospital Medical Center by the Health Foundation of Greater Cincinnati. The school health centers will offer services such as immunizations and routine physical exams to children who otherwise wouldn't have access to them. The centers will employ a full-time pediatric nurse practitioner, social worker, and health technician. A physician will also work one half-day per week in the schools.

### HEALTH AND SAFETY

Inadequate ventilation and poor air quality in school buildings can trigger allergies or asthma-related illnesses in students and staff. Old carpet, exposed asbestos, peeling lead paint, mold and mildew, chemical fumes, and toxic pesticides are some of the environmental hazards that pose a health threat in many schools. Moreover, research has shown that children may be particularly vulnerable to pollutants and other environmental health hazards, and that such hazards can not only make them sick but impair their ability to learn. In schools that have been chronically neglected, fire code and other safety violations—such as faulty wiring, holes in ceilings that breach the fire stops, and locked exit doors—are also common.

### SPECIAL EDUCATION

Instruction for special education or basic skills students can require spaces different from regular classrooms. With fewer students per teacher, smaller learning spaces with specialized areas or equipment often are appropriate. Regular classrooms need to be larger (or class sizes smaller) to support inclusion of special education students. Inadequate spaces also cause teachers, students, and parents to feel that the special needs of these students are burdensome. Work space for the psychologists and other specialists needed to support new programs and services for special needs students rarely are adequate.

Many districts have not made the federally mandated changes in their schools to accommodate children and adults with special physical needs, including providing wheelchair access to offices, classrooms, common areas, playgrounds, and bathrooms. Making the changes is expensive, but some districts have learned that lawsuits are more costly.

### COMMUNITY VITALITY

Public school buildings are a signature part of public education. They are part of a community's permanent infrastructure—usually lasting for many generations. Educating children is a primary public function. It is everyone's business to be informed about, to participate in, and to pay for the provision of adequate public education.

Community involvement in school facility assessment, planning, design, and construction provides the community an opportunity to improve local schools, increase their suitability for community use, and build and strengthen connections among community members.

### COMMUNITY USE

In many neighborhoods, school buildings are the only public facility. As such, schools often need to go beyond the important job of educating our children and support wider community use. Increasingly, schools are being called upon to be open to the local community before and after school and throughout the year for child care and enrichment programs, recreational use, adult education classes, performance space, and public meetings.

Particularly in schools with a large number of children from low-income families, schools are also making space available for health clinics and social service providers. Co-locating and coordinating social and health services in the schools can be an effective way to counteract barriers to student learning. However, since most schools were not designed to accommodate these programs and services, they often occupy makeshift rooms unsuited to their current use. In addition, without appropriate security features, public use of



schools while school is in session presents safety issues for administrators, and high levels of access for community users places school property at risk to damage or theft.

#### COMMUNITY AND ECONOMIC DEVELOPMENT

Neighborhood development is both reflected in and affected by the quality of the schools in a community. Large schools can overpower a residential neighborhood and serve to depress residential housing values. Schools in poor condition—with graffiti, yellowed windows, peeling paint, falling fences, and unkempt grounds—signal a neighborhood in decline. Conversely, a revitalized school can help turn a neighborhood in decline into a neighborhood in transition. Good neighborhood schools can be beacons that attract families and raise property values.

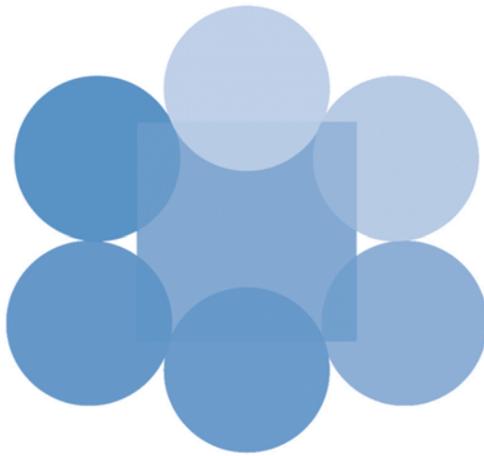
The construction of new schools or major facilities improvements can also provide jobs that strengthen the local economy. Moreover, the involvement of local firms (architects, designers, contractors, construction crews, and landscapers) gives the community added “ownership” and has the potential to improve the quality of workmanship in the schools.

#### CIVIC AND HISTORIC LANDMARKS

Schools are a prominent feature in the landscape, civic life, and history of most communities. They may provide the setting for community events, town meetings, voting, and even emergency shelter. Often school grounds double as public playgrounds, recreation areas, and ball fields. For people who leave the community in which they were raised, as well as those who stay, the school may be a place to connect to one’s past.

Many older schools have design features and architectural details that are rare in newer buildings. Rather than tearing down these historic landmarks or allowing them to deteriorate, communities can preserve, restore, and upgrade these facilities to meet the requirements of a modern school.





# Community Involvement

Community involvement in school decision-making, especially as it relates to facilities, is challenging. There is a strict hierarchy of authority and control in most school systems that isolate the local school and community they serve from facility management at the district and the facilities planners, architects and construction contractors who plan, design, build and manage school facilities. But just as there is a growing understanding that parental, local school and public involvement is necessary to organize and support a school and district for student success, such involvement is also essential for creating and sustaining the school facilities that support high quality education and are revitalizing forces in our communities.

## IMPORTANCE OF COMMUNITY

In general, school districts understand the importance of obtaining public support for school facility improvements, since approximately 75% of all school districts need direct voter support before they can spend on a new school or major renovations. Without buy in, the school districts could not get the support of the voters.

However, once school districts have voter approval, the push is to get a project done with as “little interference” as possible from the public. Broad community involvement in the planning, design, and construction of a new or improved school often meets with considerable resistance from the school administration and more often, it is not even considered. The resistance to involving parents, teachers and staff, as well as the larger

community is that public involvement will delay the project and increase its cost. School district facility managers, as well as the planners and architects with whom they work, see the school district and not the local school and community as the client. Because of this role of the local school and community in the assessment, envisioning, planning and development of a new school or major renovation is poorly developed and understood.

This guide is written to help overcome resistance and describe roles for community participation. It will provide school and community leaders with the groundwork and tools to ensure an open, responsible public process that will not just result in a new or improved school building, but will result in a better school and community.

## A SCHOOL STORY

*Des Moines Register (Iowa)  
January 8, 2004*

Urbandale school board members made their first pitch to voters to woo support for a property tax increase to pay for a new west-side elementary school and renovate the aging high school. Officials approved the question to be placed on a March bond referendum ballot. The vote would call for a tax increase expected to shovel between \$16.5 million and \$18 million back into school coffers. Urbandale remains the lowest for city and school tax rates in the metro area, at a total of \$32.81 per \$1,000 in property-tax values. At the next board meeting, members plan to outline specific plans for how the referendum money would be split between the new west-side elementary school and the high school.



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## A School Story

*(Washington, DC)*  
2004

A public elementary school, a public charter high school and the District of Columbia Department of Recreation are exploring the development of a shared multi-purpose room, gymnasium and classroom addition to meet the educational, physical education, athletic and recreation needs of an underserved neighborhood. A pooling of resources and effort creates the possibility for such a solution.

If school districts and communities just want to recreate the buildings of the past and not use the considerable funds and energy required to rebuild a school to improve education and neighborhoods, little public participation is required. But a major construction project in a neighborhood is a once-in-a-generation opportunity to transform an educational program and a neighborhood. However, this transformation must be deliberate and integrated into the assessment, envisioning, planning and development.

### LOCAL KNOWLEDGE AND EXPERTISE

Residents of a community know their community best. They are the best interpreters of their community. While they understand the rhythm and patterns in a neighborhood, their expertise is often undervalued or overlooked. Since there is so much specialization and stratification of public services and programs in the government sector and in the not-for-profit service sector, the nexus for health, recreation, education, transportation, housing and community development is the resident. Creative interagency solutions can come from an assessment, envisioning and planning process that uses the local knowledge and expertise of local school personnel and community members. Local school teachers, principal, staff, students and parents understand the educational needs of their school, but the residents in the community will be the best interpreters of the community needs.

Working with residents and the not-for-profit community can strengthen a planning effort by adding resources at low or no cost. In this way, understaffed school districts and municipalities can reduce the need to hire consultants. In addition, a process that encourages meaningful community participation is likely to broaden acceptance of the sacrifice often inherent in implementing solutions—such as increased taxes or the inconvenience of school construction. Community involvement with the local school district, from the earliest stages of a project, makes possible new or improved facility that will enhance the quality of education and the vitality of the community.

### THE PUBLIC PARTNERSHIP

Understanding the roles, responsibilities, and capacity of the various public entities with authority over school facilities is crucial to effective community involvement. Once these are understood, the strategic exercise of democratic freedoms of speech, assembly, and suffrage can be undertaken to facilitate a community driven process for school building improvements.

Community and school leaders can create the political environment for improving school facilities. Important political work involves:

- creating public support for school facilities that meet a higher standard;
- securing the cooperation of all governmental entities having authority over schools to embrace a full partnership with community and school representatives in the facilities improvement process;
- winning the confidence of the taxpaying public who must ultimately pay for better school facilities; and
- overseeing and monitoring the process, quality, and cost of facilities improvements.

### LOCAL SCHOOL DISTRICTS

School boards across the country make decisions regarding the design, construction, repair, sale, and purchase of school facilities, spending billions of taxpayer dollars in the process.

But far too often, these decisions about complex facilities problems are made without adequate information and without the involvement of the community that will live with and pay for their decisions. At the completion of a facility improvement project, it is not unusual for the school board and administration to hear comments from teachers or the public such as, “It’s brand new, but it’s not right for the way we teach.” “The school has just opened and already it’s full! Why didn’t they build it a little bigger?”

There are many reasons the school facilities improvement process is vulnerable to poor results:

- The primary function of the school administration and school board is to provide instructional programs and services, not to modernize or build new schools.
- School districts do not regularly manage major school construction initiatives or projects, so they are not skilled at it.
- School district staff have limited capabilities and few resources available to hire specialists in the early stages of planning.
- Building projects are often done under intense political pressure because of a crisis situation or a fear that, once the money is available, it will disappear if it is not used immediately.
- School district leadership often is not in place long enough to shepherd a project to completion because of staff turnover.
- School districts function under a “command and control” culture, unaccustomed to listening to teachers, students and community for guidance in decision making.

The school board, as an agent of the state, is responsible for providing healthy, safe, and educationally appropriate schools. The school board’s members, who are elected or appointed to represent the community, are responsible for ensuring public involvement so they can represent a broader public than the board itself.

#### MUNICIPALITIES

The cities, counties, and towns within which schools are located have various roles and responsibilities for school facilities. The approval of municipal planners, including permits from municipal building departments, will be required before land is purchased or buildings are modified or constructed. If the school building has historic significance, a municipal or state entity may also have authority over aspects of the project.

A school building project is an opportunity to advance the community, not just the school. Working with municipal planners, even when it is not required, can help coordinate school facility improvements with transportation, housing, and economic development decisions.

#### STATES

States are providing an increasing amount of funding for local school facilities. As they increase their funding, they also become more involved in school facilities management, oversight, and regulation.

Where the state has a strong role, it may exercise primary control over specific projects and contracts, setting a maximum allowable reimbursement cost per square foot as well as setting guidelines for space and site size. If the state pays a smaller portion of facilities improvement costs, it may collect information and set guidelines but not review specific projects or contracts. When the state provides no funds for school construction, it may simply collect informa-

tion on school construction projects but have no oversight role.

Some states require that facilities master plans and capital projects be approved by the state before they are eligible for state funding. Other states provide block grants that districts can use to maintain, build, or improve school facilities, but they then audit the local districts' capital programs to ensure that funds are being properly spent.

### **GETTING STARTED**

To initiate or lead broad community involvement in improving school facilities, there must be open, impartial, and informed decision-making. These are the same qualities that the community-based facilities committee should expect from district and city or state authorities and officials but may need to work to bring about.

### **FACILITIES COMMITTEE**

Ideally, a facilities committee will be established by the superintendent, school board, or possibly by the school principal on individual school projects. As such, the committee will be able to utilize many of the resources of the school district and will have easier access to reports and information. The facilities committee may be newly formed or become a subcommittee of an existing group.

The committee will assist the school district and principal with the many decisions that are required in planning and designing a major school project or a new or renovated school.

The facilities committee should be open to all members of the community who are interested in school improvements, and it should be representative of all stakeholders: parents, teachers, administrators, other school staff, including custodians or building specialists, students, representatives of local school management teams, neighborhood residents without school-aged children, representatives of community associations, and local business leaders. Be prepared to personally solicit additional members if all stakeholders are not initially represented.

The committee should include no more than 15 to 20 members—or, if larger, it should be broken up into subcommittees that are small enough to work efficiently. To be most successful, leadership continuity throughout the five step process is essential. But the continuity can actually be provided by as few as one or two people if the process has been well documented—with strong public participation.

Local foundations may be willing to provide funds to cover preliminary study costs. The private-sector community of developers, real estate, architectural, engineering, and construction specialists also may be willing to contribute services pro bono.

### **COMMITTEE RESPONSIBILITIES**

At each step of a facilities improvement project, following some basic guidelines will help ensure success. This will assist you in defending your position and convince the voting (and tax-paying) public or other decision-makers that your process has been thorough, impartial, inclusive, and open.

**Become educated** A large part of the facilities committee's job is to become well informed and educated about your school, its operation, and overall organization. It is equally important to become knowledgeable about your district



as a whole. Equity among all the schools in a district is a valid and important concern. Understanding the needs of other schools in the district will help put your needs in context and lead to greater success.

**Identify your goals** Get a consensus among your group or committee as to its purpose. Initially the goal of the committee may be to evaluate the condition of your school building and make recommendations to the board of education on needed repairs. It may be to save a small historic school or get a new school built to relieve crowding. Failing to reach an agreement on the committee's purpose at the outset can undermine the work that needs to be done down the road.

**Be inclusive** Be inviting, open, and friendly throughout every step of the process. School construction projects are long-term undertakings, typically taking years, with participants dropping in and out of the process. You want anyone who had involvement at any point in the process to be an outspoken proponent of the group's work. Being inclusive doesn't just mean open invitations; it means working diligently, listening and talking with many people to secure broad representation and regular participation. Not only must the public be invited to meetings, they must be made to feel, and in fact be, welcome and needed.

**Involve teachers and staff** There is no question about the importance of teacher and staff input in improving school facilities, but as employees of the school district, they will not likely participate in the same way as other volunteers. Find ways to involve them throughout each step, especially those who live in your district.

**Be organized** Set a regular meeting schedule, make reminder calls, start on time, take attendance, take votes, take minutes, and get them approved. Keep records of all meetings and all votes.

**Communicate** Establish a communications plan to keep the parents, public, and school and district personnel informed of the facilities committee's work. Decide what is communicated, who communicates, to whom, and how often. Committee reports may be presented at PTA meetings, school board and local government meetings, and in school newsletters and local newspapers.

Surprising the larger community won't generate support for a project, especially when it involves spending money or undertaking major construction in a residential neighborhood, so regular and informative communication is important. To be supportive, the public and other decision-makers will want to know the various options that were explored before you reached the conclusion that your proposal is the best one for your community in terms of cost, quality, and scope.

#### BUILDING TRUST

Successfully completing small projects can build trust and support for more comprehensive solutions to improving the school environment. Examples of short-term projects that a community-based facilities committee can sponsor include a school clean-up or school organizing day. These types of projects cost little, but can go a long way to boosting school morale. Moreover, they provide a way for the committee to meet active community members and to become familiar with the design, condition, and utilization of the building.

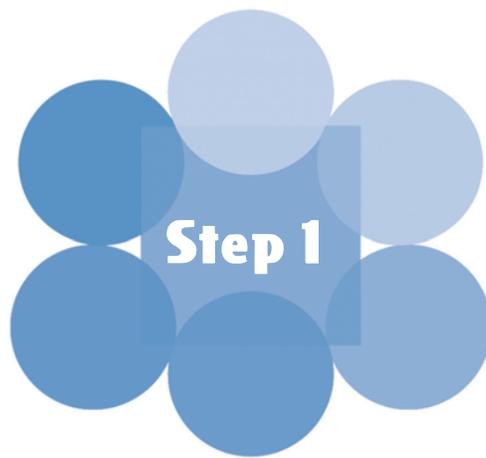
**School clean-up day** Parents and community members spend one weekend day cleaning up the playground, planting flowers, trimming bushes, washing windows, scrubbing the lunchroom tables and desks, and thoroughly cleaning the bathrooms. Other tasks might include painting the front hall, putting up bulletin boards to display student work, and placing a comfortable couch for parents to sit on while waiting for a conference or meeting their children.

**School moving and organizing day** Traditional patterns of use in a school often are left over from years ago. For example, Ms. Jones has had the same classroom for 20 years, so even though she has a small class this year, she still has the largest classroom. It is often difficult for schools to get the central office to move library shelves or classroom equipment from one room to another or to remove old furniture from the building. Parents and community members can contribute in this area.

### **READY, SET, GO**

With a facilities committee in place, and an understanding of the roles, responsibilities and policies of your state and local government regarding public school facilities, you are ready to start the process.





# Assessment

This section describes how to conduct an assessment so that you fully define the problems a school building improvement project or new school can solve. The problems identified in the assessment will form the basis for the design and construction solution. If the problem is not defined thoroughly and honestly, the remedy may fall short. To make sure more than building problems are resolved, it is essential to assess the community and educational program issues and conditions, not just the physical school building deficiencies. This will ensure that the school building project is relevant to the educational mission and activities in the school, is connected to community needs and that it takes advantage of other private or municipal initiatives that are planned and funded in the community. Another important part of assessment is understanding the government’s capacity to address the problems raised in the assessment.

## SCOPE OF ASSESSMENT

Assessment is the process of getting a thorough and accurate picture of what exists and of beginning to document what is needed in a school and its related neighborhood and community. It entails doing research, taking tours of the school and community, and listening to students, teachers, principals, custodians, other local school staff, parents, and neighbors. A community assessment will describe what is needed and what exists in a community that may connect to or influence how a school project is developed. The educational assess-

ment will describe all aspects of a school’s operation—its educational program and the physical plant. A public sector assessment will describe the capabilities of the school district, municipality and state to meet the needs of its community. It will describe the potential sources and amounts of funding available or possible for a project, the priority such a project might have in a community or school district, and whether or not the school district has the time and expertise to implement major plans for design and construction.

A realistic assessment of the dis-

trict will help ensure that solutions envisioned or planned are doable. The assessment process culminates with a report documenting the condition of the building; how it is used; and how well it supports teaching, learning and the community. Since the assessment report becomes the foundation for any improvements that are ultimately recommended, it is important that it be both thorough and accurate.

## COMMUNITY ASSESSMENT

Community assessment will look at housing development within the neighborhood, housing being added



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### A School Story

Collaboration to Build an Unusual Hybrid

*Engineering News Record (California)*  
February 2, 2004

In South Central Los Angeles, an area long plagued by overcrowded schools, the offspring of a partnership between the district and a state-owned science museum is taking shape. The progeny of the collaboration will serve two needs, as a neighborhood elementary school with a math- and science-focused curriculum and as a resource center for educators and the local community. The goal is to “create a place where people could get very excited about science,” says Dave Combs, California Science Center deputy director for education. The structure, now approaching completion will house 24 classrooms for first through fifth grades, clustered in groups of six that each share a common room to be used for group experiments.

and eliminated, the character of the housing-multi-family, single family; for low income families or high income singles, or a mixture. How much population growth and where it is, is a critical part of a community assessment. This assessment will look at the profile of the people in the neighborhood related to the school-their income, culture, employment patterns and opportunities. A community assessment will also look at other public and private institutions in the community in order to explore opportunities for partnership and synergistic development. It is with the community wide assessment and participation that creative efficiencies will be formulated.

There are tremendous opportunities for students for program-related partnerships with museums, universities, libraries, and recreation centers. There are also opportunities for partnerships with other public agencies and non-profits that can offer and integrate social services into a school program to eliminate barriers to learning and increase the likelihood of student success in school.

#### THE COMMUNITY SCHOOL ADVANTAGE

Simply stated, community schools have the capacity to do more of what’s needed to ensure young people’s success. Unlike traditional public schools, community schools link school and community resources as an integral part of their design and operation. As a result community schools have three major advantages that schools acting alone do not. Community schools can:

- Garner additional resources and reduce the demands on school staff.
- Provide learning opportunities that develop both academic and nonacademic competencies.
- Build social capital—the networks and relationships that support learning and create opportunity for young people while strengthening their communities.

*Making the Difference: Research and Practice in Community Schools,*  
Coalition for Community Schools May 2003

The community assessment will describe the program needs and begin to identify resources in the community that may be connected to these needs.

#### BUILDING ASSESSMENT

Before developing an assessment of the building condition, it is important to understand the educational and non-instructional programs and services provided in the school. These may all be provided by the school district, or some programs or services may be provided by other governmental agencies or by for-profit or non-profit organizations. To be able to evaluate the effect that design, condition and utilization have on the educational or community use of a school, it is critical that the educational and community programs and services are spelled out. During the assessment, the facilities committee will document:

- overall organization of the school, by grades or academies, for examples;
- educational philosophy of the school-self-directed, student-centered program, highly regimented curriculum, programs and schedule controlled by principal or central office, for examples;

- required or basic academic classes offered, by grade levels and content areas;
- elective or special classes offered in special education, English as a second language, career-technical, or internships, for examples;
- schedule of when and how long classes are held;
- instructional methodology—individualized instruction, direct instruction, computer-aided instruction, group project based instruction, hands-on or laboratory instruction, for examples;
- health, counseling or other services provided to students; and
- on-site support or training provided to teachers.

Once the programs and services that are provided at and by the school are understood, it is time to assess the building itself. Throughout this assessment, the overarching question should be: “Is this a good place for teaching and learning?”

#### PHYSICAL CONDITION

Even if you think you know the shortcomings and deficiencies of your school building all too well, the first step of any broad-based facilities initiative must be a thorough, systematic examination of the school building. Documenting the condition of the school building involves an assessment of the exterior and interior building systems. Measures of condition can be the age of a system or component, its repair history, or a determination by the onsite facility manager of its condition. In assessing condition, you want to understand how well the system or component functions under the demands of regular operation. The following definitions—from a guide for local and state school districts on facilities information published by the National Center for Education Statistics—may help with this assessment:

<b>Excellent</b>	New or easily restorable to “like new” condition; only minimal routine maintenance is required.
<b>Good</b>	Only routine maintenance or minor repair is required.
<b>Adequate</b>	Some preventive maintenance and/or corrective repair is required.
<b>Fair</b>	Sometimes fails to meet code or functional requirements; failures are inconvenient to school operation.
<b>Poor</b>	Consistently substandard performance; failures are disruptive and costly; fails most code and functional requirements; requires constant attention, renovation, or replacement. Major corrective repair or overhaul is required.
<b>Non-operable</b>	The system or component cannot be used or operates at a significantly substandard level. Replacement is required.
<b>Urgent building condition</b>	An existing condition seriously affects the safety, environment, or educational mission, or could result in damage to the facility or equipment.
<b>Emergency condition</b>	A condition that could result in injury, loss of life, or major damage to the facility or equipment.

#### A School Story

##### Emergency Condition

A school in Chicago had a problem with peeling paint. The school was repainted three times, and soon after the final job, the roof collapsed. The paint problem was actually the result of severe water damage caused by an overlooked roof leak, which eventually led to the collapse. Considerable costs could have been avoided by a more-detailed inspection of the roof and better record-keeping by the school district.

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### **A School Story**

Students to Fill Kmart Stores in Overcrowded District

*CNN.com (Florida)  
December 30, 2003*

Lee County officials have purchased two Kmart stores to convert to schools by 2005. Renovating them will be slightly less expensive than building new ones, and since the structures are already in place they can open sooner. Estero High Principal Fred Bode said. "We need to get beyond the aesthetics of a school." The vacant Kmart buildings were bought for \$11.6 million, and officials expect site work, remodeling and furniture to cost an additional \$17.4 million. They are supposed to open by August 2005. School districts across Florida are trying to comply with an amendment approved last year that requires smaller class sizes. The school district has also purchased land in Estero and Bonita Springs for schools.

The exterior building assessment includes an evaluation of the roof, windows, exterior walls, gutters, down spouts, and exterior doors. The condition of sidewalks, steps, retaining walls, fencing, landscaping, exterior lighting, parking areas, and hard and soft play and athletic areas should also be evaluated.

The interior assessment includes the heating, ventilation and air-conditioning (HVAC) systems, plumbing and electrical systems, finishes (floors, walls, and ceilings); as well as furniture and fixtures. Survey forms are readily available at [www.edfacilities.org](http://www.edfacilities.org).

### DESIGN

An evaluation of the design of a school building documents building size, classroom size and layout, stairs and hallways, specialized common areas (such as the library, cafeteria, gymnasiums, and auditorium), and support spaces (offices, teacher lounge, and storage areas). These and other design elements should be evaluated in terms of how well they support educational programs, student services and administrative and operations functions of the school, as well as how well they support community use of the school outside normal school hours.

To help you conduct the design assessment, you might begin by making a list of questions that are relevant to your particular school and program. If your school serves preschool or bilingual students, for example, you will want to examine how well the design of the school building meets the needs of each targeted group.

In addition, the design should be evaluated in relation to security concerns and the feel of the space, how well it is situated on the site, and how well the exterior space is utilized and improved and how easy it is to find your way around the school.

### UTILIZATION

The facilities assessment should also document and analyze how the space in a school is used and by whom. This room-by-room survey should include:

- Size of space
- Type of space (classroom, office, etc.)
- Number of staff assigned to the space
- Number of adults assigned to the space
- Hours of use
- What activity takes place in the space
- The public or private agency using the space (for example, the school district, department of recreation, or private after-school program).

This survey may reveal that closets have been turned into classrooms, or that classrooms have been turned into offices. (Perhaps an elementary school library is being used by a non-school agency after school hours for adult education.)

Or a crowded school may reveal an overabundance of office space, suggesting that crowding could be relieved by reassigning space.

### EDUCATIONAL DESIGN ASSESSMENT QUESTIONS

- Does the elementary building allow for active learning?
- Are the high school science laboratories adequate?
- Does the building allow for use of technology throughout?
- Does the building support up-to-date, specialized career and technology programs?

- Does the building have dedicated spaces for physical education?
- Does the building have dedicated spaces for the arts?
- Is the building compliant with the Americans with Disabilities Act?

#### ENROLLMENT CAPACITY

A utilization survey provides the basis for determining the enrollment capacity of the school. Enrollment capacity is defined as the maximum number of students that a school building can satisfactorily accommodate at one time for the particular educational program and curriculum offered.

Factors that determine how many students can be accommodated include the number and sizes of classrooms in the school and state laws or teacher contracts.

The number of students assignable to a classroom varies by grade level and by the type of instruction being offered. For example, high school classrooms typically are designed to accommodate more students than elementary school classrooms. Also, fewer students would be assigned to a science lab than to a social studies class.

The calculation of enrollment capacity also differs by type of school. For example, both regular classrooms and specialty instructional spaces (such as art or music rooms) are counted toward capacity in high schools, but not in elementary schools. This is because regular classrooms are typically left unoccupied while elementary-age students get art or music instruction, whereas this is not the case at the high school level.

Secondary school capacity is the sum of capacity for each type and number of classrooms multiplied by a utilization rate, which may range from 75 percent to 90 percent. A utilization rate recognizes the impossibility of scheduling classes so as to fully utilize every classroom every period. For example, an advanced science classroom may be able to accommodate 20 students, but there may be only 16 students in the fifth-period class. Even if some other classes are over-capacity, the school utilization rate is never 100 percent.

Elementary school capacity is calculated by multiplying the number of regular grade-level classrooms by the maximum number of students who can be assigned to a teacher in those classrooms. The number of students will vary by grade level and by program—for example, a self-contained classroom for emotionally disturbed children may have a limit of 8 to 10 children.

Calculation of enrollment capacity is a sensitive issue. School districts use it as the basis for making decisions for closing schools or for constructing new ones. But enrollment capacity is not a fixed number for the life of a school, and changes often cause credibility issues with the public as they try to understand the changing nature of this number. Local, state and federal initiatives to reduce class size have drastically changed the enrollment capacity of many schools. Program changes, current teaching methodologies, and increases in special education classifications have also caused school and district capacities to decrease. Understanding the capacity and utilization of a school is essential to developing appropriate solutions to the problems facing the school.

#### **BUILDING ASSESSMENT PROCESS**

Many people can be involved in assessing the school building. Professional engineers, architects or planners can be utilized to evaluate the condition, design and utilization of the school building, but it can also be done from the point of view of those who use the school every day and the custodians and school based engineers who operate it. Both perspectives can be valuable. In either



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## A School Story

### Low Standards

In a survey school principals were asked to rate student bathrooms in their schools as good, fair or poor. One elementary school principal chose "fair" even though toilet partitions were missing from the stalls.

case, findings will have to be compiled and presented in a compelling way to justify the public effort required to improve your school building.

### RESEARCH

Researching relevant topics, such as how school size affects learning and the current thinking on laboratory science classrooms or technology needs of schools can help you formulate a better understanding of the problems in your school and support your case for action. The Internet is a great research tool. Perhaps a committee member has access to a research library. Research findings can be discussed so that committee members become better informed and are able to work toward a shared understanding of the problem. Research should also be used to support any recommendations on class size, grade configuration, the need for school-based social services for children and their families, or whether a school should be replaced or modernized. The National Clearinghouse for Educational Facilities has an extensive website ([www.edfacilities.org](http://www.edfacilities.org)) and will also respond to requests for information by phone (888-552-0624).

### RELEVANT REPORTS AND ASSESSMENTS

- Board of Education policies affecting facilities
- Previous facility reports
- Long-range educational facilities master plan
- Capital improvement plan and budget
- Bond prospectus
- Demographic studies and enrollment projections
- Building engineering assessments
- Architectural drawings
- School history
- List of current fire, building, or health code violations
- Copies of outstanding repair work orders
- Strategic or school improvement plan

### OBSERVATIONS

Observations and impressions from people who know the school are important. Collecting people's stories requires asking questions and listening. In conversations, group discussions, and surveys, ask teachers, principal, custodians and other staff, students, parents and neighbors about their experiences in the school. Pay close attention and keep a record of what they say. Such anecdotes and comments will help you present a more complete picture of the building condition and how it affects stakeholders. They likely will help you uncover more information to build your case for a better school. Moreover, the process of listening helps develop relationships that will be important in the future.

Not every comment warrants the same concern. But facilities problems tend to be understated, not overblown. Often school staff members and students are so accustomed to making do in deteriorating buildings-and are so far removed from safe and adequate learning environments-that they come to regard unsafe, inadequate conditions as normal.



## SURVEYS

Well designed surveys can be another useful tool for obtaining information about the condition of a facility. Teachers, staff, parents, and community members can express their opinions about facility problems and issues relating to community accessibility. A survey can be used to gather information about the building itself and how it is being utilized. Be sure to distribute the results of your survey to those who participated and to the larger community.

## TOURS

Taking a tour of your school and neighborhood is a good activity for the entire committee. Do a walk-through of the school with the principal and a teacher or custodian—someone who knows the building well. Principals who take pride in their building will be happy to have a community group advocating for improved facilities. Take photos to use in your final report. If possible, take a tour during the school day when teachers and students are present. Verify and detail the personal observations that you have collected about the effects of the building condition on students, teachers, and other staff members. Carefully observe and identify facility problems you find. Keep asking: Is this a good place for teaching and learning? And how well does it support community use?

Tour other schools to serve as comparisons, ideally ones that are more like what you want for your school. If your district doesn't have good school facilities to model, visit schools in a nearby district that have undertaken building improvements in recent years.

## **PUBLIC SECTOR CAPABILITIES**

The *capability assessment* involves collecting basic information and doing an evaluation of the government's:

- relevant plans and policies,
- financial situation and funding opportunities, and
- facilities management capability.

Even if there is tremendous need to improve the design, condition and utilization of public school buildings, the state, municipality and school district may lack the *capacity* to plan, manage or finance school planning, design and construction projects.

In communities with perennially limited budgets, responding to emergency repairs only almost invariably takes precedence over conducting routine maintenance and long-term facilities planning. Beyond dollars, it takes careful planning, sustained focus, and professional expertise to manage capital improvement projects. But in communities that have put off major school construction projects for decades, there is rarely school district staff to support these functions.

An experienced superintendent can make a tremendous difference in the ability of a school district to successfully and efficiently plan, design, finance and implement school facility improvement projects. At the same time, a district needs capacity beyond the superintendent since a building project may well exceed his or her tenure.

During the assessment step you need to determine the public sector's political, management, and fiscal capacity to manage a school facility improvement process.

A great deal can be learned by reading previously prepared reports that school district may have done. Start with district policies on maintenance, facility planning, or health and safety, depending upon your particular issue. There is likely a strategic plan for your district that describes the educational mission,



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### **A School Story**

Construction Requests Exceed Available Money

*Baltimore Sun (Maryland)*

*January 29, 2004*

Maryland's school superintendents asked the Board of Public Works for more school construction money than is on offer. At the annual "beg-a-thon," Baltimore County requested nearly all of \$26.1 million to be distributed statewide this year. Howard County requested \$48.3 million, nearly twice what is available for the state. Maryland's school systems initially requested a total of \$378 million, but the state has only \$101.6 million. Of that, officials have divvied up \$75.5 million, and school systems compete for the rest. The Board of Public Works will decide how to distribute the \$26.1 million after approval of the state's capital budget. Money could be added to or subtracted by then. State Superintendent said that school systems established priorities well.

goals, and objectives for the district. There may be a local school improvement plan. The educational plans should be at the heart of a vision for better buildings.

Get copies of any relevant reports or studies previously done by local community groups. When you talk with people about what you are doing, you may learn that another group has studied a topic that relates to your effort.

If your school or district is dealing with enrollment changes, a current demographic study is a must. Enrollment projections that are five or more years old need to be updated. Your school district may do its own projections, hire a consultant, or work with a local university or the municipal planning office. Demographers look at birth rates, in-migration, and the "capture rate" (the percentage of children who are born in the district who will be enrolled in public schools).

Every school district should have a facilities master plan for all of its capital improvement projects and a capital improvement plan that establishes the priority projects over the next five or six years.

Your district's capital plan will tell you whether your school is on the list for small or large capital projects. If not, the assessment report may help get your school on the list - or accelerate or change the work that is planned - by making a solid case to the school district.

Smaller facilities projects (such as boiler replacement) may be included in your school district's maintenance operating budget. Unforeseen building repairs or improvements may be paid for out of operating funds or may be funded from an emergency repair fund that is part of the capital budget.

### **FISCAL CAPACITY**

Understanding the fiscal environment and the operating and capital budgets is a necessary prerequisite to providing leadership to improve school facilities. For communities accustomed to being promised things that are rarely delivered, it is important that there be some likelihood that funds for school building improvements can be raised.

The amount of indebtedness the school district is allowed by law and the amount of debt currently being carried are important facts. If the school district has its own taxing authority (fiscal independence), it can borrow money and repay it over time from its own tax revenues. A public bond referendum is required for permission to increase taxes to repay borrowed funds. State and local laws dictate the amount of indebtedness a school district can assume and the process for bond referendums.

In fiscally dependent school districts, the district secures its funding for capital projects from the county or city through an annual appropriation. If a municipality must borrow money on behalf of the schools for the design and construction of a school, the level of city, town, or county debt will be a factor in how much money is available for school district projects.

If the district is funded by its county or city rather than by its own taxing authority (fiscal dependence), it must seek an appropriation for capital funds. This appropriation is funded through borrowing by the city or county; the school district then receives capital funds as part of the annual capital budgeting process. In this scenario, schools are part of the larger municipal capital budget that includes transportation, water and sewer, libraries, police stations, etc.

Increasingly, states are a major source of capital funds for school design and construction. Often the state contributes to school construction costs in proportion to the wealth of the district with poor districts sometimes getting all state funds, leaving little to no funds to other districts. If your state helps to fund (or completely funds) school construction, you need to know how much



is available from the state and under what conditions.

The school district's business administrator or superintendent should be knowledgeable about the process. The state school board association is a good resource for learning about the bond referendum process, as well as other funding methods used by school districts.

#### OPERATING BUDGET

Funds are used for the day-to-day operations of the school—salaries, books, utilities, and supplies.

#### CAPITAL BUDGET

Funds are usually borrowed and repaid with interest over 15–35 years and used for major construction and repair projects that will have value for many years—preferably for the entire life of the bond.

#### ASSESSMENT REPORT

The end product in the assessing step is a thoughtful written analysis of the school's condition and the district's capacity to improve it. This assessment report should position your committee to move forward. It is the foundation for the entire project that will be referred to for many years. Find a parent, teacher, community member, or principal who can write a descriptive story backed up by the research, anecdotes, inspection results, and photographs. The report will represent the efforts of your group to school officials and to the public, so you will want it to have a professional look. The report does not need to be long, but it needs to be accurate, honest, and fair. Exaggeration is not helpful.

#### WRITING PROCESS

The writing of the assessment report must be collaborative and inclusive. You must get committee consensus on the problems that were identified during the assessment and on the committee's recommendations. The writing of the report itself will help with this.

Have the committee approve an outline of the report, then share drafts of the report. Consider your audience: community members and neighbors, parents, teachers, the principal, custodian, other school staff, elected officials, and the superintendent of schools. Keep in mind that there may be many competing priorities and challenges. Your school may not have the greatest or most pressing needs. Be sensitive to the larger picture.

#### REPORT CONTENTS

To give credibility to the group's efforts, as well as to provide each committee member with a sense of accomplishment, the assessment report should include the names of each committee member, the committee's goals, methodology, accomplishments, and recommendations.

The report should include positive observations as well as descriptions of problem areas and should provide possible solutions. For example, if the school was found to be 30 percent over capacity and the community is expected to continue growing, you might recommend a new school and a study to identify what type of school. Or, if your conclusion from the assessment is that the school has an outmoded design and is in poor condition, the recommendation might be to modernize the school for the current number of students. From what was discussed and learned during the assessment process, your committee may want to develop recommendations on specific parameters such as: student capacity, class size, building size, grade levels, or community space.

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#### A School Story

Kindergarten Teacher Expresses Frustration *(Connecticut)*

"Teachers were in on the planning but none of our suggestions were used. We teach in a pretty building that has curves—like petals around the gym area. But round rooms cut out space, so all classrooms are smaller than before. I have 27 children in a classroom built for 15. We have no room for movement and can barely sit on the floor for a story. There was no provision for storage of big books, or large chart paper, etc. But believe it or not, the school got an award for innovation in building."



## ASSESSMENT CHECKLIST

- Review municipal plan and planned housing
- Conduct building assessment for physical condition, design, utilization and enrollment capacity
- Become well informed about your school and district through research, school tours, observations, and surveys
- Prepare assessment report
- Present the final report at a board of education meeting
- Issue a press release highlighting the report findings and recommendations

The report and your committee's recommendations will be the starting point for the next step of envisioning. The final assessment report should contain the following sections:

- Community context
- Educational program
- Student needs for social services
- Description of the school building-age, size, and condition
- Documentation of building utilization
- Report of the process and activities of the facilities committee
- Survey results
- Write-up of school tours and interviews
- Relevant literature reviews
- Committee recommendations
- List of facilities committee members
- Meeting dates, agendas and minutes
- Photos

### FINAL REPORT PRESENTATION

The committee's final assessment report should be presented broadly to the public and specifically to the board of education and other decision making authorities related to the project, such as the city council or whatever municipal body might be involved. For the board of education, request that the presentation of the report be included on the board's agenda, and have a strong showing of the members of the facilities committee to give it added credibility. This report will become a public document when presented and accepted by the board. Be prepared to tell the board what you want them to do now that they have the report. Ask for a written response to your report and recommendations by a specific date. You should also prepare a press release summarizing the report findings and recommendations.





# Envisioning a New or Better School

This section describes how members of the school, community, and district reach consensus on a vision for improving the school. Meeting future facility needs requires a balancing and integration of many elements—changing demographics, higher educational standards, increased community use of public school buildings and financial constraints. During this step a community-based group that includes parents, neighbors, teachers, local school staff, and district officials articulate and clarify their expectations for the school building. They will describe how it will be used and envision the appropriate character of the school for educational and community purposes.

At the end of the envisioning step, you will have a description of the values and priorities that will guide the planning of your school. It is this vision that should be realized in the public effort to improve the school, and for which school officials should be held accountable. The vision is communicated in a report and forms the basis of the project plan.

## IMPORTANCE OF A VISION

**Assessing** an existing school is a process that should be grounded in reality. On the other hand, **envisioning** a new or improved school entails looking beyond what is, to imagine what should—and could—be. The process should push committee members to learn about facilities solutions in other schools, districts, and communities; new standards and trends in teaching and learning; creative approaches in school architecture and design; other community assets to incorporate into the school and land use; and social or other community problems that a

new or improved school may alleviate. The urgency for school improvements—due to crowding or major under-utilization, deferred maintenance, or obsolescence—is sometimes so intense that the school system and community just want relief from the most pressing problems. If you have documented a long list of facility problems in the assessment step, your impulse may be simply to work on fixing the immediate, known problems. Some health and safety problems may, in fact, need immediate attention, but resist the impulse to stop there. It will serve your school and community to



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### A School Story

Cherry Hill Plan Offers Suggestion on Schools

*The Philadelphia Inquirer*  
September 11, 2002

In Cherry Hill, a Project 2020 committee presented a report last night at the school board's regular meeting, offering suggestions for the district's next 18 years. With new housing developments poised to bring more students to the New Jersey district, officials are looking for long- and short-term solutions for managing expected growth and aging facilities. Led by a former school board member, a group of 42 parents, students, teachers, and other community members met six times this summer to analyze the state of the district. According to the community leader, "It really enabled us to think outside the box and make suggestions that weren't bound by the necessities of reality. The group's conclusions are idealized and the board will have to determine whether they will work."

go beyond these stopgap measures and develop a big-picture vision instead.

A broad community-based envisioning step provides the opportunity to consider improvements to the educational program and services, not just to the building. Moreover, by looking beyond the immediate crisis, a facility improvement project can be developed and promoted in terms of its broad community benefit, resulting in greater support for its implementation.

The envisioning process can also help a diverse community recognize competing values and aspirations and then find common ground around a goal that is worthy of the investment of major public effort. It must be a goal that can generate the energy—time, money, and public priority—to implement it. A school built with quality and beauty, a school innovatively designed, financed or constructed, may not cost more than an uninspired building, but it may take a little more time to get to.

The work done at this stage will pay off many times over. If your community is engaged in setting the course and creating the vision for a school improvement project, it will be there when the time comes to support a bond referendum or appropriation of public funds.

### SHAPING THE FUTURE

In the envisioning step, you will articulate the educational and community purposes a building will serve, the core values that should guide its planning, development, and implementation and the basic parameters of your school improvement project. The goal is to reach a consensus on the kind of school you want for your community.

During the envisioning process, your school community will add specific details to the vision for the school. Someone will say, "Wouldn't it be great if we had ..."—and he or she will suggest a gymnasium, media center, auditorium, swimming pool, and so on. That's fine. While envisioning it is appropriate to consider many options, especially if there is strong support for them. Start big, then begin to prioritize. This is the time for considering many options before agreeing, collectively, on what is *most* important for the school you share.

A community's values should be reflected in any public school project. Your community should be able to answer such questions as these:

- What is the appropriate character for the school building?
- How might a building tell our students they matter and that their education is important?
- How does this project link to other community and economic development needs and activities?

### EDUCATIONAL IMPROVEMENT

Parents, teachers, and school administrators need to use envisioning to explore how building improvements can improve the educational program and instruction in their school. Teachers and administrators may need to be pressed to consider what they could do better if they were not constrained by the existing facility—for example, conduct laboratory experiments, combine classes and do joint classroom projects, or work individually with troubled students. Parents may express a desire for their school to have the best science program in the city.

Envisioning provides parents, teachers, and administrators with a non-threatening forum in which to express and explore their ideas. Often teachers and administrators are not asked their opinions about how schools can be improved, even though they are the front-line educators. The envisioning process works, in part, because it focuses on the future. Teachers are asked to envision what would support their best work.

## COMMUNITY USE

The public understands the value of public school buildings as a resource beyond basic K–12 responsibilities. Many communities use their local public school for civic purposes such as voting and town meetings. And the gymnasiums and cafeterias of most schools in the nation are regularly used for local recreational or adult ed purposes. In addition, as educators face the daunting task of educating many children with increasingly serious health and social needs, schools offer the logical place for locating social services that can help eliminate barriers to learning.

During the envisioning step, the community and school district need to clarify whether community and civic programs and activities or school-based social services will *share space* with the school, or whether *dedicated space* within the school is more desirable. If dedicated space is needed, additional funds to expand or improve the community-dedicated space should be a clearly defined part of the vision. If additional space is not an issue, decisions about how the school and community will share space can be solved later during planning and design.

## OTHER COMMUNITY INTERESTS AND CONCERNS

The envisioning step gives your community the opportunity to address environmental issues related to the quality and kind of design and construction. During envisioning your community may want to articulate its values on “green” architecture and whether the community is more concerned about the initial cost of building or fixing a school or the long-term cost of operating the school. Replacing or modernizing old schools raises environmental and historic concerns that should be clearly defined during envisioning.

Your community may envision school construction projects as a way to strengthen the local economy. School construction could provide skilled jobs and new employment in your community if there is a preference for local labor and contractors. This is particularly important in communities with high unemployment. It is important to articulate related interests early, as they can be extremely difficult to incorporate later on.

## CHALLENGES TO CONSENSUS

It is important to understand the challenges to developing a consensus on the future of your community. Many people are ambivalent about public education, even as they may have strong opinions about the control, governance, and funding of public schools. There may not be consensus on the priority of schools for limited public funds, especially where the number of elderly, low-income households, and households with no children is high. The cost of fixing schools and keeping them in good repair can seem exorbitant in the face of competing financial needs.

In high-growth, formerly rural, suburban communities, you may encounter tension between residential development and a desire to protect green space. School districts can get caught in the middle of the battle, pitting “cows versus kids.” New schools require large parcels of land that may be in short supply in fast-growing areas where town planners failed to include sufficient space for new schools in their master plans.

Many rural communities, faced with declining enrollments and small, deteriorated schools, face the untenable choice of losing state funds to fix existing school buildings or building large consolidated schools. While school districts argue that the economics favor consolidated schools, children often are faced with long commutes to and from school and research on student achievement in large schools calls consolidation into question. Moreover, by taking the

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### A School Story

#### Improving Educational Programs

New Jersey will not fund swimming pools in its public schools. But in a low-income seaside town, ensuring that their children know how to swim is an important safety concern of parents. Also, job opportunities for young people will increase with swimming and lifeguard training. Community members are brainstorming about how to fund this important part of their vision.



school out of the town center, this fiscally motivated movement strains transportation, water, and other public infrastructure.

Community members should be aware of these and other obstacles that will affect the likelihood that their vision for their school will become a reality. The earlier the hard issues are raised and discussed, the more likely that new ideas or approaches to resolving these problems will be presented. Difficult problems may simply require more creativity or determination to resolve.

### **THE ENVISIONING PROCESS**

The facilities committee, with key school district staff such as the principal, designated teacher or superintendent, will collaborate to create a consensual vision, articulate values and priorities, and define basic parameters for project planning. If your district is managing the envisioning process, the facilities committee should help set the agenda and make sure there is broad community representation at meetings.

In many ways envisioning is a simple step, but due to the large numbers of people involved—it could number in the hundreds—it is the most unwieldy step. The facilities committee should ensure that there is extensive participation in the process by diverse members of the community, including all stakeholders. The process of creating a vision for your school involves the basic tools of community engagement—community meetings, surveys, focus groups, and good communication. Professionals can help by facilitating community meetings, developing surveys and writing newsletters or press releases. Encourage your committee members to attend multiple community meetings and focus groups to observe and take notes. The notes are important and should include details such as the number of participants, date, time, and place but more importantly, the key discussion points and conclusions from the meeting.

Time is an important element of the envisioning process. Sometimes an idea may be rejected, initially, but when the community has had an opportunity to consider, ponder, and debate, it may come up for reconsideration. There needs to be time for shifts in thinking to take place.

### COMMUNITY MEETINGS

The heart of the envisioning step is a series of well-publicized, open community meetings where a vision for the future of the schools will be explored and agreed upon. The number of meetings depends on how ready community members are to communicate, how much trust there is among the disparate groups participating in the meetings, and how knowledgeable they are concerning the school building and community needs.

These meetings must be facilitated by someone who is committed to an expansive and inclusive process, not someone who is associated with a predisposition for a particular outcome. You may want to use a professionally trained facilitator who is skilled at leading community meetings. Nearby universities or your state school board association may be able to provide or recommend an experienced facilitator.

Your community-based facilities committee will need to ensure the integrity of the public engagement process. The district should be held accountable for following through on the vision and values that were articulated through the envisioning process. For example, if your community expresses a desire for a middle school with an enrollment no greater than 600, but you end up with a school of 800, there needs to be justification that is acceptable to the community for such a major change to the vision. Documenting and publicizing your vision and values throughout the process will make it easier to hold the district accountable.



## SURVEYS AND FOCUS GROUPS

Surveying staff, parents, and the public about features they would like to see in the school increases the variety and extent of public input. Surveys can help you get input from people who do not have the time or inclination to attend community meetings. But surveys must be well developed with a system for compiling and disseminating results in order for them to be worth the effort. Seek expert assistance or modify successful surveys from other school districts. Focus groups provide another way to get input from people who don't attend open community meetings. You might target specific groups such as teachers, community members who do not have English as a first language, students, or elderly residents, for example. The focus groups will help deepen the conversation and broaden participation in the envisioning process and will also help identify obstacles to implementation.

## SCHOOLS TOURS

During the assessment step, school tours helped provide a broader perspective to understanding the deficiencies in your school. School tours can be used again during the envisioning step to help expose committee members to facilities and ideas beyond what they have considered. Since your frame of reference may be an old, deteriorating building, visiting other schools may help clarify what you would like (or would not like) in an improved facility. You'll want to tour newer or modernized schools and talk to teachers and students about their classrooms and other school spaces. You may have to travel outside your city to find these schools. To study innovative use of space in urban schools on small sites, it is often most useful to visit new or modernized schools in other cities.

## CRAFTING THE VISION

The input from your community meetings, focus groups, surveys and tours should enable your facilities committee to create a vision statement for the building project. The vision statement should be compatible with and expand on your district's educational vision. Preparing a written vision statement helps to develop a consensus about the vision itself. It should capture the essence of the kind of school your community has in mind. Essentially, the vision statement describes how the school would look, feel, and function after all building improvements are made.

To finalize a detailed vision for your school community, different perspectives and input from the tours and surveys must be considered together. The facilities committee will review the notes from the public meetings and surveys to identify the common elements.

The vision may result in several options being recommended to the school district. The vision may include recommendations such as: build a new school, replace a roof, renovate the library and build computer labs, if these became obvious solutions during the envisioning discussions. It may also include parameters for class or school sizes or space for an expanded music program if the community expressed such desires. It may have become clear that the community recognizes the need for additional space, but it may be less apparent what type of school to build—elementary or intermediate—or even additions. The vision and recommendations will form the basis of the actual plan to follow. The more specific the vision, the less room there is for the vision to erode during planning, development, and implementation.

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### **A School Story**

Two Intermediate Schools Favored

*The Indianapolis Star*

July 13, 2002

A small group of Decatur Township residents and teachers told officials this week how they envision the district's two proposed intermediate schools. They asked specific questions about cost, construction time, class size, and school capacity. But none was critical of the plan for the two-school campus for fifth and sixth-graders.



## ENVISIONING CHECKLIST

- Define educational and community values and priorities through open meetings, surveys and focus groups
- Get consensus on a vision and recommendations
- Prepare an envisioning report
- Present the report and vision statement to the board of education
- Issue a press release describing the vision statement and report

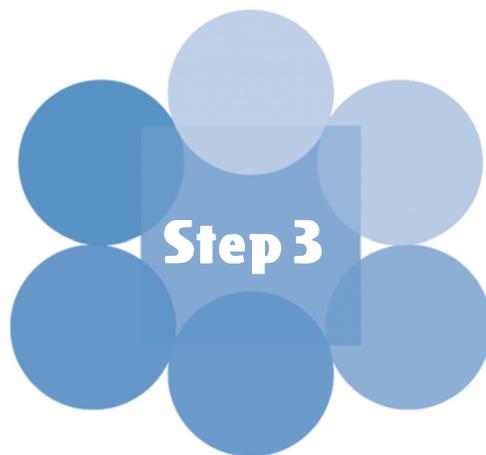
## PREPARING THE ENVISIONING REPORT

Once the facilities team or committee has reached consensus, the vision should be put in writing. Your committee's work should be documented with a report that includes:

- Vision statement
- Statement of values and priorities
- Analysis of major obstacles
- Description of the envisioning process
- Recommendations

Circulate the envisioning report among members of the school community and provide an opportunity to comment, change, or add elements to it. Make revisions and circulate the vision statement and report again. If you envision a project that would result in substantial changes to the neighborhood, allow time for neighborhood organizations, community groups, and municipal agencies to weigh in. An open, honest approach will help build support for your vision of the future and pay you back many times over.





# Planning the Project

This section describes how to plan your school improvement project. During this step, the community and school district develop a plan that will solve the problems identified in the assessment and capture the vision for an improved school. The objective of this planning step is to develop a solution to your school building problems that furthers your educational and community vision, is consistent with common community values and priorities, and is doable. During planning, educational specifications, a schematic design and feasibility study are produced. At the end of the planning step, you will have an approved building improvement project that will be the precursor to the final architectural plans.

### IMPORTANCE OF PLANNING

Your school facility needs may be great and your vision inspiring, but you will not solve your problems or realize your vision without a good plan. The planning step is the time for creating realistic objectives to close the gap between what is and what should be. During planning your facilities or planning committee, including key school officials, will work through the difficult process of resolving conflicts and working within programmatic, budget, site, and space constraints.

Budgetary discipline is an important part of the planning process. Conflicts in priorities are easily solved by adding more space or spending more money, but then the plan becomes unaffordable.

During the planning process, trade-offs must be discussed and decisions made.

### WHAT TO PLAN

Major building improvement projects require extensive planning. What is planned depends on the problems identified during assessment and the vision, values, and priorities articulated during envisioning. You may have identified problems that can be solved without major design and construction. These less ambitious projects can sometimes change the daily lives of teachers and students in significant ways at relatively low cost. Deferred maintenance, health and safety problems, and minor design deficiencies may fall into this category.

Some examples of small capital projects include:

- Redoing a particular space, like a library, gymnasium, cafeteria or science labs;
- Replacing one old system or component such as a roof, boiler, chiller, windows, doors, lighting, or electrical system;
- Renewing interior finishes such as floors, walls, and ceilings; or
- Abating asbestos and lead.

However, when there is severe overcrowding or underutilization, major design deficiencies, or multiple systems and components that have aged well beyond their optimal life expectancy (boilers that are 40 years old for example), small capital projects will not be adequate.



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## A School Story

### Tradeoffs

In planning for the modernization and expansion of a small high school, each teacher wanted a dedicated classroom. But because of a block schedule, classrooms would be unused for extended periods each day. After much discussion, the teachers agreed that dedicated office space on each floor would meet their needs.

Serious problems with design, condition and utilization are not new and communities and school districts have developed some basic ways to address these problems.

#### **Solutions to overcrowding:**

- Build an addition
- Install temporary classrooms
- Build a new school
- Use nontraditional space (for example, basement space)
- Lease space
- Redistrict
- Reconfigure grades
- Begin double sessions
- Incorporate multi-track year-round schedule.

#### **Solutions to underutilization:**

- Demolish excess space (for example, 1960s and 1970s classroom additions)
- Consolidate use within a school, and lease excess space
- Bring in students from another school
- Close the school and move students to another school and sell or lease the building (or demolish it, leaving the former school as parkland).

#### **Solutions to design problems:**

- Redesign and equip specialty spaces for early childhood, library/media center, art rooms, career tech, and laboratory science, as applicable
- Demolish parts of the existing building and build a modern addition
- Fully modernize the school to meet health and safety and design standards
- Purchase specialty furniture and equipment to transform standard space into specialized educational or administrative space.

#### **Solutions to condition problems:**

- Exterior modernization, where all exterior components are made to be like new—roof, windows, brick joints, gutters and downspouts
- Interior modernization—where the interior systems, components and space relationships and amenities are new.

## **PLANNING PROCESS**

The essential elements of a project plan are site identification, educational specifications, schematic design, and a feasibility study. Like envisioning, a good planning process involves intense participation from teachers, parents, students, principal, neighbors—all those who will use the school. At the planning step, professionals—real estate specialists, lawyers, facility planners, architects, construction estimators, financial advisors—will help your facilities committee and school district work through the details of how to solve the problems identified in the assessment and bring to life the vision of the stakeholders. For large or complex projects, additional facility committee members may be brought in from government agencies or neighboring businesses.

The professionals bring needed and important expertise to your planning process. But communications tend to become even more challenging when the school district tries to keep the cost for professional support down by meeting during the work day, or through phone conversations, making public involvement difficult. Your facilities committee may have to develop a system for being kept informed of the activities of the consultants.



## SITE IDENTIFICATION

If your project involves building on a new site, you need to identify the site that best meets your needs in terms of location, size, and infrastructure such as road access and adequate utilities. Laws governing school districts and relationships between school districts and towns are complex. Consult with your town planner, school district attorney, and superintendent or business administrator to understand the land acquisition process before you proceed.

Most school districts have the right to eminent domain, which means if land is needed for a public purpose, they can force its sale and compensate owners the fair market value. This is a difficult but sometimes necessary avenue to take.

The facilities committee can help in site identification by meeting with the appropriate zoning official to map out all sites that meet your minimum requirements. Tour each site to identify the best choice. The school district may need to obtain preliminary studies of wetlands, brown fields or other areas of environmental concern.

Be sensitive to prospective neighbors of a new or improved school. The impact of increased traffic or lights should be addressed early on. Agitated neighbors have been known to defeat referendums.

Once the proposed building site has been selected by school officials, it must be appraised to establish its fair market value. The appraisal should be done by a credible and experienced appraiser. Property is not actually purchased until after the bond referendum (or appropriation) passes.

Consult with local officials to determine if the selected site calls for rezoning. If so, they will work with you on the process and schedule.

## EDUCATIONAL SPECIFICATIONS

Educational specifications describe in writing the facility requirements that will fulfill the educational and community vision for your school. They include a description of the site development, educational and community philosophies and programs, performance expectations, and space requirements for the school improvement project. Large school districts may have educational facility planners on staff or facilities planners or architects to develop the ed specs. In small districts, the superintendent or designer will spearhead the effort. Regardless of the size of the district, the ed specs need to be formulated with input from teachers, parents, students, the principal, other local school staff, neighbors, and any program or service agencies that use the building or may be part of a plan to use the building in the future. Teachers and other staff, as permanent users of the space, should be particularly involved in the development of the ed specs.

There are challenges to developing good educational specifications. School districts and states often have standards they use to determine allocation of funds and to ensure equity among schools and districts. For example, your school district may only fund a single multipurpose room for an elementary school. This multi-purpose room would need to function as a gymnasium, cafeteria and auditorium. If your elementary school is also a community center and the district has no flexibility to meet its particularized needs, this may not be an acceptable standard, and the standard becomes a problem.

Further, architects and educational facility planners often reuse plans and designs. These prototypes and boilerplates offer descriptions of classrooms and specialized spaces that can often be used from one school to another. But, while modifying a prototype and boilerplate may be more efficient for the architect, special circumstances or opportunities for innovation and creativity can easily be overlooked. You should insist that the educational specifications

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### A School Story

Keep New Schools Out of Greenbelts, Educators Urged  
*September 4, 2002*

A group of advocates in Ventura County, CA are calling for the preservation of as much "green space" as possible, calling for more two-story schools and rehabilitating existing buildings. Following these guidelines will help keep bulldozers out of prime farmland and avoid political fights that can cause expensive building delays for school districts, proponents say. Efforts to preserve greenbelts are becoming increasingly difficult in the wake of the population boom the area is experiencing.



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### A School Story

#### School Approved for Full Modernization

Noyes Elementary School in the District of Columbia was approved for a full school modernization. This urban public school was originally built in 1930 and was added to in 1960. An educational facility planner was hired to develop educational specifications, and community members participated in meetings to provide input about their vision and plans for the school. When the schematic designs were presented, the community was shocked because the architects proposed that the existing school be demolished. The community had never seen the final ed specs and so didn't realize that their desire to preserve the original building had not been reflected. After the community objected strenuously, the old school building was preserved as part of a new design.

reflect your school and community values and priorities even though this takes more time and may cost the school district more money than boilerplate and standards. Remember, this school will be there for generations. It is worth fighting for a plan your community will take pride in.

Educational specifications should include:

- A description of the *educational program* (such as curriculum and instruction methods, support staff, technology for instruction and school management, and related programs).
- Plans for *community-based programs* operating in the school during or after school hours, and the extent of public access to the school after hours for community- or school-sponsored activities.
- *Activity areas* such as early childhood education, library/media center, art, music, physical education, special education, career tech, guidance, staff lounge, and community meeting spaces.
- Project *design factors* such as site conditions, outdoor program areas, general building considerations, codes and regulations, spatial quality, specific design criteria, mechanical systems, energy efficiency and indoor air quality, special features to make the design or construction more environmentally friendly, and whether the old or historic character of the building should be preserved.
- Description of *spatial relationships*, with diagrams showing what activities should be close to each other (for example, the office situated near the front door and early childhood classrooms situated near the multipurpose room and outdoor play areas).
- Summary list of *space requirements* describing the room-by-room space needs of programs, activities, and administration and support operations for the building interior and exterior (including parking, playing fields, bus drop-off area, etc.).

The educational specifications are used to guide the architect through the design of the project. Before being delivered to the architect, they should be thoroughly reviewed by the facility committee, administrators, teaching and other staff. Reviewing them before schematics helps to avoid developing a flawed design for your school improvement project.

### SCHEMATIC DESIGN

Since design fees may run from 4 to 10 percent of the cost of construction and since your project doesn't yet have full funding, design is only done to schematics at this point. A schematic design, based on the ed specs, is a simple architectural drawing of every space in the building that shows how each space would be used and relate to each other. It gives detail such as where doors and windows are located, but not the electrical, plumbing, mechanical or structural detail. At the schematic phase, an artist rendering of the building is often prepared so the public can see how the new or modernized building will look. The schematic drawing also shows how the building sits on the site and the relationship of major site improvements to each other—student drop off, playgrounds, athletic fields and parking, for example.



Schematics provide a visual reference for helping to hone in on the plan and a basis for establishing cost estimates in a feasibility study. The architect typically develops two or more preliminary site and building design solutions, each meeting major program goals. The facilities committee should participate in the schematic design process. An evaluation of the schematics should determine how well the requirements defined in the ed specs have been met.

#### FEASIBILITY STUDY

Once educational specifications and schematics for two or three options are in hand, the facilities committee will need to explore the best way to make them a reality.

This determination of feasibility should be based on the facilities assessment, vision statement, educational specifications and budget realities. The feasibility study provides an analysis and comparison of the various options as defined by the problems being solved. It will address such questions as: Are the core facilities in a school sufficient to support a large classroom addition? Can the existing structure support the addition of a second floor? How does the cost to modernize a school compare to replacing it? Ultimately, the cost of each option is key to finalizing a plan.

The feasibility study can be done by an architect or construction specialist. If the feasibility study is being done by the same architect who did schematics, it is a good idea to have the cost estimating done by a construction specialist.

#### PLAN APPROVAL

The facilities committee and superintendent will weigh the pros and cons of each option to determine which plan is the best. The plan is based on all work that has been done by the district and facilities committee over many months, or even years. The superintendent or designee presents the options that were studied to the board of education with a recommendation for a specific plan.

It is important that the facility committee members and other members of the supporting public attend the board of education meeting to hear the superintendent's presentation to the board. The superintendent's recommendation will be voted on by the board of education before any action can be taken on it. In some districts, the board may solicit comments from the public prior to their vote.

If your project is not initially approved, it may need to go back to the planning stage for further discussion and possibly modification. More studies may be required, such as different site options, modifications to school size or grade configuration, or changes in design due to cost considerations. While all of these issues should have been addressed in your assessment, envisioning and planning, the environment within which school facility improvements take place is a changing one, and aspects of your communities or your schools may have changed. The facilities committee will need to stay on top of the approval process until the board grants its final approval.

### PLANNING CHECKLIST

- Identify site, if applicable
- Prepare ed specs
- Prepare schematic design
- Conduct feasibility study







# Developing Financing and Quality Controls

This section describes the final major tasks before completing design and beginning the construction. These major tasks are raising the funds through a bond referendum, from local and or state appropriations or from a non-traditional financing alternative; and setting up or activating internal and external controls on the procurement, management, cost and schedule of the project.

## **DEVELOPMENT**

At the development step the school district must put in place or designate the financial, management and oversight capabilities of the district to ensure that the actual design and construction of the school are carried out to the specifications of the plan and according to law.

In many large districts, the money may actually be available before a plan for a district or school is developed. In these cases, it is critical to ensure that the same public processes for assessment, envisioning and planning are followed.

The public and your facilities committee are critical to the success of development. Without broad public support—beyond those who have been involved in the planning process—it will not be possible to raise the funds to actually implement the

project. The clear goals, inclusiveness, broad public involvement, organization, sensitivity to cost, and good communication that should have characterized your facilities committee will pay off when the time comes to seek the help and support of taxpayers.

Public confidence and trust in the experience and ability of school districts to manage major construction programs or projects may be limited, especially in districts that are embarking on school design and construction for the first time in many years. Your facilities committee has a key role in providing credibility to the school district's work. The internal and external controls will ensure that the procurement, design and construction are managed efficiently and responsibly.

## **FINANCING**

Since school design and construction projects are not annual operating requirements, they are usually funded through general obligation bond financing. The school district, municipality or state borrows money from private investors and promises to repay it over a period of 20–30 years from taxes collected. In general obligation bond borrowing, the “full faith and credit” of the government secures these bonds. This means that the risk of nonpayment for the private investor is low, so the interest rates are among the lowest, depending on the economy and the overall interest rate climate. These “school bonds” are also usually tax exempt, meaning the private investor does not have to pay tax on the interest income from the bonds. The challenge for many school districts is that their “full



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### A School Story

Construction Requests Exceed Available Money

*Baltimore Sun (Maryland)  
January 29, 2004*

Maryland's school superintendents asked the Board of Public Works for more school construction money than is on offer. At the annual "beg-a-thon," Baltimore County requested nearly all of \$26.1 million to be distributed statewide this year. Howard County requested \$48.3 million, nearly twice what is available for the state. Maryland's school systems initially requested a total of \$378 million, but the state has only \$101.6 million. Of that, officials have divvied up \$75.5 million, and school systems compete for the rest. The Board of Public Works will decide how to distribute the \$26.1 million after approval of the state's capital budget. Money could be added to or subtracted by then. State Superintendent said that school systems established priorities well.

faith and credit" provides little help because they are a low wealth district. They have more obligations to residents than revenue, so no one, particularly banks, will loan them any money. This problem with school finance has contributed to widespread finance equity and adequacy lawsuits against states, as some school districts can afford to borrow and fix up their schools and others have no possibility of doing so. Where low wealth school districts have succeeded in winning their cases or persuading the state legislature of the validity of their claim, the state steps in to fund school construction, as in New Jersey, Ohio, California, Arizona, and Texas.

When school districts do have fiscal capacity, the traditional ways to fund the design and construction of public school facilities are:

- Spending down a surplus fund balance (for small projects and usually in affluent districts);
- Borrowing by the local school district to be repaid by local taxes or fees;
- Borrowing by the county or city repaid by municipal taxes or fees; and
- Grants or reimbursement from the state, often from state bonds.

You will know whether or not your district can afford to take on major school facility improvement projects from the assessment of its fiscal capacity done at the beginning of your initiative.

### BOND REFERENDUM

In fiscally independent school districts, once the board of education has approved a plan that will require an increase in taxes, they will have to pass a resolution to hold a bond referendum. Passing a referendum requires public involvement similar in scale to what was required for the envisioning step. For a referendum to pass, the natural passivity of voters needs to be overcome, and ultimately, more "yes" votes than "no" votes are needed.

Even if there is community consensus about the need for school facility improvements, if there was not consensus on the specifics of the plan, active opposition to a bond issue can emerge. Contentious issues might be: the location of the school; the size of the school; whether to modernize or replace an old school; the scope and cost of the improvements; and priority of this project over another.

To pass a referendum, it is important to have an aggressive plan for educating voters on the need for the project and why your plan offers a good solution to the problems. Good schools benefit the entire community, but the majority of support will come from current and future users of the improved school, so it is important to target them in your efforts to get out the vote.

The state and national school board associations have information and materials to help districts get referenda passed. It may be useful to enlist the support of your state association early on. The association may offer services such as assisting with meeting facilitation at no cost if your district is a participating member of the group. A failed referendum costs a district in many ways—time, real money, lost educational benefits—so it is well worth the effort to get it passed the first time around.

Even before the referendum has passed, the school district works with a bond attorney and with financial advisors to prepare for a bond issue that will be used to finance the school construction. Once the referendum has passed, the bond prospectus and other legal documents will be prepared and the financial transactions to borrow the money will be done.

### CAPITAL BUDGET APPROPRIATION

In fiscally dependent districts, to get an appropriation from your municipality, the facilities committee may need to lobby municipal representatives—city or

town council members or aldermen—to ensure that school construction projects are part of the capital budget. School construction projects will compete with recreation centers, transportation, libraries, and other public infrastructure in the capital budget, so you will need to understand the larger capital budget picture to be an effective advocate for your school facility project.

School projects also compete with each other. Your school district should have a capital planning and budgeting process. Members of the facilities committee can give testimony at public budget hearings to make sure their project is included in the schools' capital budget. They need to call municipal and school board representatives to educate them about the importance of the project, how much it is needed and how the plan being proposed is a sound one that was the result of a broad based community process.

#### ALTERNATIVE FINANCING

If raising taxes in the traditional manner is not possible in your community or for your project, there may be other ways to raise funds. When looking for alternatives to traditional taxes and fees, there is no cookie cutter. Each project will be different, but the key is to look for a source of new revenue or enhanced value that you can use to borrow funds for your school construction.

The government owns land, has taxing and zoning authority, and control of many types of construction and design approvals. These are valuable assets that in many instances are under-utilized. They can be used to raise revenue that previously was unavailable for public projects. Several alternative methods for funding a major construction project are possible. With creative thinking and the help of real estate specialists, lawyers, developers, bankers, and construction advisors, there may be more ways to fund your project than traditional general obligation bond financing.

If an alternative financing method is selected, your committee will likely play a significant role in making it happen. You will need to research alternatives, find pro bono help from lawyers, bankers, real estate and construction specialists to help you evaluate the possibilities, and then work with the local government to affect policy and sometimes laws in order to secure the new financing.

**Development Partnerships** This technique uses public school land to generate new revenue from the private sector. School districts sell or lease their land for development to private companies to generate revenue that would otherwise not be available to the district. The municipality will obtain property taxes from the real estate development. The revenue from the sale of the land and the income from the new property taxes can be dedicated to school design and construction.

Development partnerships are a possibility whenever major real estate development is taking place. Many high growth districts, where permitted by law, charge impact fees. Universities hungry for space in urban neighborhoods are potential partners as are housing developers that are rebuilding distressed urban communities. In general, for a single piece of school land to be valuable enough to leverage for a major school project it will have to be zoned for high density use and it will have to be in demand.

**Tax increment financing (TIF)** TIFs are a special financing tool to generate money for economic development in a depressed geographic area targeted for specific development. In a TIF district, the increased property tax revenue from real estate development can be dedicated toward improvements for the distressed neighborhood from which the revenues came rather than going into the city's general fund. These new revenues, or "increments," are dedicated for

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#### A School Story

Public School Partnership

*The Washington Post*  
January 25, 2004

Pending approval, Maya Angelou Public Charter School will be allowed to open a new campus in a D.C. school building. In exchange for using the building, Maya Angelou will pay D.C. public schools \$250 per student the first year and \$500 per student in subsequent years. The charter school's costs will be significantly lower than if it sought its own facility. Students at Maya Angelou will be able to participate in school system athletics, which charter students cannot do now. There are few programs for troubled students in the District's public school system and little money to create them, so it is in DC's interest to support existing programs, whatever their source.



the life of the TIF district (usually 20 to 30 years). Public schools located in TIF districts can benefit from the new revenues if the municipality dedicates TIF funds for school building improvements.

**Sale/Leaseback** This is a specialized form of public/private partnership where a school district takes advantage of private sector efficiency in designing, building, and managing buildings. The school district sells a school or a piece of land to a private developer, generating a one-time infusion of cash, and then agrees to lease back from the developer a modernized or newly built school based on district specifications. The private developer borrows the money to build or fix up the school, using the annual lease payments to secure the loan. In some cases the developer retains responsibility for building maintenance and can even rent out the school for other uses when the district is not using it, in order to generate more income.

This approach to school financing and facilities management is uncommon in school districts, but is becoming more common in other sectors—public health and in the private sector—where a hospital, for example, decides that its core business is medicine, not facilities, and so sells the hospital to a company that specializes in managing health care facilities. The hospital, usually run by doctors and other health professionals gets to focus on health care management, not the facility. There is a QPEF bond that will provide tax-exempt financing to for profit developers who buy and lease back public schools.

**Energy Saving Performance Contract (ESPC)** Utility costs are a major budget item for school districts. Every year the school district pays for its electricity, gas, oil, water and sewer, and communications out of its operating budget. Often, there are substantial energy and other utility savings possible with equipment or systems improvements. There are companies that specialize in finding these savings and selling and maintaining the equipment and systems to maximize the district's savings.

These performance contractors loan the school district the money for energy improvements, based on the expectations that repayments will be made to the performance contractor by the school district from savings achieved through decreased energy costs. Ideally, the savings produced by the project are greater than the costs and a performance contract pays for itself and may even generate a surplus. A single contract is used to purchase a complete package of services in which one contractor is accountable for the design, purchase, installation, maintenance, and operation of major systems or pieces of equipment. Since this contract includes financing of all the project costs, no up-front money is needed.

**Qualified Zone Academy Bond (QZAB)** This financing instrument is a relatively new tool available from the federal government. The federal government pays the interest (through a tax credit to the financial institution that holds the bond) on these bonds which can save school districts up to 50 percent on the cost of a construction project. Only districts that are designated as Enterprise Communities or Empowerment Zones, or have over 35 percent of their students eligible for free or reduced-price lunches are eligible for the \$400 million in QZABs annually allocated by Congress and divided up by state population.

## QUALITY CONTROLS

The care taken with assessing, envisioning and planning assures the quality of the plan for your community. Ultimately, however, the plan must be executed. It will need to be on schedule, on budget and in accordance with approved



plans and specifications. It must also be well designed and skillfully constructed. Many of the schools from the first half of the 20<sup>th</sup> century establish a standard for us. They were simply designed, but built with care and skill and sometimes spectacular artistry. That there are so many schools over 50 years old still serving communities is a tribute to the quality of their original design and construction. Having good internal and external controls over the quality, process and cost of projects may help build support for your referendum or appropriation and then will enable your district to make good use of these funds in design and construction.

#### INTERNAL CONTROLS

The school district will have various policies and procedures that regulate public procurement and reporting of major design and construction projects. These policies should address issues such as conflict of interest, contractor qualification, the bid and award process, contractor invoicing, school district financial reporting requirements, and an approval process for making changes in approved plans.

Beyond the policies, there should be procedures in the school district that define such things as: roles and responsibilities of school district project managers, lines of communication with the local school and community, how to document and manage changes in plans or specifications, and when and what reporting must be provided to the superintendent and board of education. The procedures provide a structured environment for competent management that prevents waste, fraud or abuse of public funds.

Large school districts or states may have an auditor general specifically assigned to school construction projects. Regular inspection of financial records, policies and procedures and of completed projects can help ensure the local district is managing school design and construction effectively.

#### EXTERNAL CONTROLS

To ensure your school district maintains a responsible level of internal control, an external citizens' oversight committee can play an important role. Your facilities committee can insist that a citizen's oversight committee be established to monitor the implementation of capital projects.

An external oversight committee is an independent entity that works to ensure that the policies and procedures governing school building design and construction are working effectively and fairly. The oversight committee typically obtains its authority from the school board and is chartered to help them with their oversight and monitoring responsibilities. Board of education members are usually consumed by the policy and oversight concerns of the daily operations of the school district and do not have the time or expertise to adequately oversee school construction. A citizen's oversight committee gives the board of education the support it needs to properly execute its responsibilities.

The oversight body is made up of citizen volunteers, usually a mix of persons with expertise in construction or real estate, as well as persons without such expertise. The committee does not perform audits or inspections itself, although it may call for them, but rather reviews audits to determine if changes to policy or practice are required. The oversight committee also keeps the public informed of the progress of the projects.

Often school districts put a citizen's committee in place as a public relations measure to help pass a referendum or secure the budget appropriation but give it no authority to affect the quality of the design or construction process. However, if school district leadership is committed to good oversight and if

## DEVELOPING CHECKLIST

- Secure funding, referendum or appropriation, or alternative
- Establish or activate internal control policies and procedures
- Create citizens' oversight committee

there is a well developed charter for the citizen's oversight committee. This oversight committee will be able to provide oversight also.

The key elements that must be defined in a charter for a citizen's oversight committee are scope, authority, membership, conflict of interest, meetings, reporting, and resources.

With funding and the controls on its use in place, the implementation of the project can begin. Confidence in the project should be high and many of the problems that plague design and construction will have been avoided because of the work done in the preceding steps.





# Implementing Design and Construction

This section describes the final step in a school facility project. During this phase, the school district signs contracts with design and building professionals who will assume the responsibility for the full design, construction and furnishing of the school. The project implementation takes place according to the approved plans and budgets.

## BRINGING PLANS TO LIFE

Once the planning is completed, the funds have been secured, and controls are in place, the work of fully designing and constructing a school facility improvement project can begin. The challenge of design development and construction is to maintain the intent of the educational specifications and schematic design and still keep the project on time and on budget.

## PROJECT DELIVERY METHOD

Before proceeding with the implementation of design and construction, a determination of how the project will be managed needs to be made. The school district will decide on the project delivery method for the project depending on its internal staff capability, the project schedule requirements, the school district's ability to assume risk for cost overruns and the quality and supply of experienced, responsible firms in your

area. This decision will dictate who is hired when and by whom. It will also affect the schedule for the project.

There are three basic project delivery methods, with variations on each one.

**Design-bid-build** is the most common and traditional project delivery method. The school district hires an architect to design a school or building improvement. Then the district puts the construction documents prepared by the architect out for competitive bid and awards a construction contract to the lowest responsible bidder. The selected general construction contractor hires the subcontractors and builds the school or improvements based on the district's specifications.

**Construction management** is a project delivery method where a school district hires a construction

manager (CM) who provides project leadership, administration and services to the school district through the various phases of a building project. These services may begin at any phase of the project. School districts that use construction managers tend to hire them early, as they help coordinate all phases of the building project. The contract with the construction manager needs to clearly spell out the roles and responsibilities of the school district, construction manager, architect and construction firm. Increasing the number of professionals involved, entails a risk that there will be overlapping services or a gap in services.

**Design/build** is a form of accelerated delivery that is becoming more popular as school districts focus on minimizing price and construction time. With this method, a single contractor is responsible for both design



and construction, providing the school district with one point of contact. The design/build contractor has a greater ability to solve problems as they arise in order to keep the schedule and budget in line. However, the design/build delivery method reduces the control school districts are used to having in the project.

#### SCHEDULE

Once a project delivery method is selected, a schedule should be developed and maintained by the school district's representative in collaboration with the project/construction manager. This schedule should include all the major tasks of design, construction, closeout, furnishing and student and staff relocation. It should be updated on a weekly basis to reflect changes as they occur.

#### PROCUREMENT

School construction is a multi-billion dollar industry and the implementation of facility improvements is accomplished through contracts with the private for-profit sector. The controls put in place in development are critical to a responsible procurement process.

Government procurement is highly regulated to prevent corruption, fraud, and abuse, as well as to provide the private sector a fair environment within which to compete for work. It is also intended to provide the opportunity for the public to get the best work at the lowest price. Even so, officials often skirt the rules to get around their own procurement requirements, often having preferred contractors, suppliers and consultants. The quality of your plan will affect the quality of your project, but the experience, care and skill of your contractor and his/her crew is critical to the success of your project.

Make sure your board of education and school district decision-makers show due diligence in spending taxpayer money. Attend board of education meetings regularly and ask specific questions about their decisions on the key players, such as the contractor, prior to the board actually taking a vote. The citizens' oversight committee will help, but they will only be effective if the school district has strong internal controls in place too.

#### BIDDING THE PROJECT

The district representative working with the architects and project/construction manager will prepare contracts for board action and processing. The architect will assemble the approved documents for bidding that meet the district's legal and bidding standards and create bid alternatives for review and approval by the district. He/she will help respond to bidder's questions, prepare addenda, facilitate site visits and assist with the acceptance of bids. The architect will also help evaluate contractor bids and may participate in the recommendations to the board of education.

The school's business administrator or your district's procurement office will place notices in the district's newspapers of record to advertise for bidders on your project. There may be instances when no bids are received, and other times a contractor will bid for only certain parts of the project. You can encourage reputable contractors to bid since it is important to get multiple bids from experienced, quality contractors. The board of education votes on the contractor but is not likely to be involved in the actual selection. Instead, the board votes on the selection presented by the superintendent and business administrator.



## SITE ACQUISITION

The school district's attorney works with the superintendent and board of education to purchase the land if a new school is being built or an addition requires more land. If the land was appraised prior to the referendum or appropriation, the purchase should be straight-forward.

However, there is a possibility that the owner may not want to sell. The school district has the legal right to purchase the land for the appraised value, but the seller has the right to argue for a greater value. This can be costly to the district if the seller can make a convincing case. Proper research during site identification in the planning step should mean there were no surprises in acquiring the site.

## DESIGN

There are three major phases to design: schematic design, design development, and construction documents. Each design phase builds on the previous work and reflects a dynamic process of interaction between the architect and the facilities committee and between the architect and builder. The final design product is an extremely detailed set of instructions for contractors.

### SCHEMATIC DESIGN

The schematic design, which was developed during the planning step, shows the overall dimensions and the relationships among spaces and rooms. It provides a picture of how the school building will look from the outside and how it will be located on the site. If a great deal of time has passed since the development of the ed specs and the schematic designs, the schematic design should be validated by teachers, parents and staff at the school and by community members. Some items that may have changed since the plan was finalized are:

- the amount of funds for construction;
- grade level configuration of the school;
- changes in enrollment; or
- demand for use by other agencies or organizations.

These and other factors will require some modification to the schematic design. The facilities committee, with its local school and community members will be able to provide input into this process.

If the money available for the project is not adequate, either because of reduced funding or because construction costs are expected to be higher, measures will need to be taken to reduce costs. It is important that the facility committee be a part of these difficult decisions. They will best be able to make trade offs that preserve the values and priorities of the users and community. They will also need to prepare the larger community for elements that they anticipated but will not be forthcoming.

### DESIGN DEVELOPMENT

After schematic design, which identifies the size and location of spaces, comes the design development phase in which the quality of those spaces is defined. At design development the plan will be expanded to show where every outlet, window, door, wall, fence, casework, sink, toilet, kitchen appliance, specialty classroom feature and fixture is located. It is important to have teachers, administrators and other staff involved in design development.

The final design also identifies the furniture and its layout, shelving, window styles, lighting fixtures, flooring materials, counters, and even the colors of the walls and floors. These may seem like incidentals when undertaking a major renovation or a new building, but sheer volume makes these purchases very

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### A School Story

Amenities of Linden School Trimmed to Fit Budget

*Columbus Dispatch*

*August 12, 2002*

A new elementary school in Columbus, Ohio, was originally planned to serve as a model for the city's school improvement program. However, it cost \$1.2 million more than estimated, so various features and materials are being downgraded in an attempt to save money.



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### **A School Story**

School Renovations Can Pose Health Risks

*The Philadelphia Inquirer*  
October 11, 2002

At a school in Pennsylvania, 53 students and teachers became ill and were brought to area hospitals before 9:00 am. Those treated complained of dizziness, upset stomachs, headaches, and nausea. The school remained closed for almost a week as engineers searched for the cause. At first, school officials cited noxious fumes from caulking recently installed in the windows; however, the diagnosis was broadened to include odors from a floor cleaner with a chlorine additive, tars, and glues. Later, the local teacher's union filed a lawsuit citing, among other claims, that Pennsylvania does not have a committee to oversee school construction projects occurring while classes are in session, thereby putting students, faculty, and staff at unnecessary risk.

costly. In addition, the builder will not install or build anything unless it is in the plans.

### CONSTRUCTION DOCUMENTS

Construction documents are the most complex of the design documents. They are the “blue prints”—usually done in CAD (computer aided design)—although they are no longer blue. They incorporate all schematic and design development decisions and add the structural, mechanical, plumbing and electrical specifications that the builder will use to purchase material and direct his/her contractors in their work.

Once design development and construction documents are completed, any changes in design will create a tremendous domino effect and will cost the school district extra money.

### PROJECT TEAM

The people most involved in design are:

- School district representative
- School facilities committee
- Construction/project manager
- Architect and engineers

### DISTRICT REPRESENTATIVE

Your school district will assign an individual who will be the district's representative responsible for seeing that the school district is satisfied with the implementation of the design and construction.

During the design process, the district representative will ensure that the design process meets district specifications and timelines, and they will involve appropriate staff members and facility committee, where appropriate, in the process.

The district representative will review architectural plans and coordinate design review by appropriate individuals and groups within the District. The school district representative will facilitate presentations to the board of education, staff and community groups.

The district representative will ensure that each phase of the design process corresponds to approved budgets and that facility designs maximize available funding from the state.

### FACILITIES COMMITTEE

The committee will be involved in validating ed specs and schematics and in design development. Once the architects complete construction documents, the contractor is selected, construction begins, and the role of the facilities committee will lessen.

However, there needs to be a system for communication throughout the design and construction process. Any significant changes should be reported to the committee. The school district representative will be making regular reports to the board of education but they may be written and not necessarily discussed at a board meeting. Your facilities committee should be able to review these reports on a regular basis.

### PROJECT/CONSTRUCTION MANAGER

If the school district engaged a project or construction manager at the beginning of design development, this person has a major role in design. A project manager will manage the design timelines and budgets and assist the district with decisions and options related to value engineering, materials and methods



selections. The project manager will develop “front end” documents with the architect and district’s legal counsel and help determine phasing requirements and/or separate contract options. The project manager will need to identify and procure other consultant services, such as surveyors, civil or environmental engineers. The project manager will also assist the district with information and presentations to the board of education and the public.

#### ARCHITECTS AND ENGINEERS

Generally, the architect who provided the schematic design will be given a contract for the completion of the design. Architectural design fees are negotiable, but typically are for a percentage of the cost of construction. The school district’s attorney, superintendent, and business administrator are usually involved in the negotiation of the architect’s contract. You can ask that a local school and/or community representative be included on the architect’s selection panel. Since the local school will be working through elements of design, a good working relationship can improve the project.

Most school districts are able to engage architects and engineers on a negotiated basis, rather than just as low bid. This can help improve the ability of the district to control the quality of design.

#### GENERAL CONTRACTOR

Construction contractors work in a highly competitive industry. In government projects, bids are awarded to the lowest responsible bidder. In most projects, the general contractor is responsible for hiring subcontractors who will do the masonry, carpentry, mechanical, electrical and plumbing work, and all other skilled workers who are required to construct or modernize a school.

#### SCHOOL CONSTRUCTION

The facilities committee does not want to lose touch with the process during construction in case there are major changes that will require their input. However, with internal and external controls in place, experienced, competent architects, construction managers and builders under contract, the committee should not simply sit back and look forward to the school improvements or a new school. If your project is proceeding in a school that is still being occupied, the committee has an important role ensuring that appropriate safety precautions are in place during construction.

#### PRE-CONSTRUCTION

Once the design documents are complete, there are critical tasks to be completed before construction begins. Engaging competent, honest contractors to construct the school is one of the most important decisions on the project. The quality and consistency of workmanship, the diligence and skill of a contractor in organizing the schedule of subcontractors who must all do their part is critical to the success of a building project. The quality of the subcontractors that the construction manager or general contractor hire will define the quality of building in the end. The detailed drawings, construction standards, building codes, inspections and insurance all exist to protect the owner, but a contractor with a history of high quality projects, good sub-contractor relationships, and an effective problem solving relationship with this builder is the best insurance. In addition to securing good contractors, the school district will need to mitigate the impact of the construction process on existing schools. There needs to be proper preparation for interim housing for students if needed, and guidelines and other measures must be in place to protect the safety of students and staff

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#### A School Story

DC Shows Off School Building

*Washington Post*  
June 15, 2001

The District public school system yesterday unveiled its first new school building in 20 years, a four-story facility in Northwest Washington that will house J.F. Oyster Bilingual Elementary.

In September, about 350 students will move into the brick school at 29<sup>th</sup> and Calvert Streets, NW, which was constructed in an unusual partnership between the District and a private developer. The school, which offers a highly regarded dual Spanish-English immersion program, has been housed near Howard University during construction.

Students, parents and teachers toured the building yesterday, marveling at the 15 classrooms, which are unusually large and painted in bright shades of yellow and green. The building is a stark contrast to many of the city’s aging, crumbling schools.

“It’s really, really good!” said a smiling Joe Levy, a fifth-grader at Oyster. “Mostly the structure—how big the classrooms are, almost double the size of the building I’m in now.”



## IMPLEMENTING CHECKLIST

- Determine project delivery method
- Identify outside (contracted) project or construction management firm
- Purchase site, if needed
- Plan how to minimize disruption to educational program while construction is going on (may require moving to temporary site if major construction is planned)
- Select contractors and consultants
- Complete design development and construction documents
- Obtain permits for construction
- Construct school improvements
- Furnish school
- Relocate students and staff into school
- Celebrate

during construction.

During the pre-construction phase, the project/construction manager will manage timelines, provide detailed cost estimates and review proposed documents. He/she will assist the district and architect with:

- bid alternates to ensure conformance with the budget,
- bid advertisement and outreach solicitation for local, small or disadvantaged business requirements,
- constructability review and cost estimates, and
- analysis of bids and advice to the district on award of contracts.

### CONSTRUCTION

The construction phase begins at award of contract and notice to proceed and continues until notice of completion. During construction, the district representative will monitor progress by attending construction meetings and through communication with the project/construction manager. He/she will monitor change orders and ensure business operations follow the contract for payment schedule to all contractors.

The architect will observe the construction for conformance with the requirements and will advise the district on requests for substitutions and changes. The architect should always be available to respond to questions and requests for information from the contractor, inspector and project/construction manager. He/she reviews and responds to submittals and shop drawings.

The project/construction manager will supervise the construction project. He/she will issue Notices of Award and Notices to Proceed, manage contracts, analyze all proposed change orders and make recommendations to the district. He/she continues to manage project budgets and timelines and works with the contractor to maintain contractual schedules and, in the end, assists the architect with the development of a punch list.

The project/construction manager provides information about progress to the district representative and coordinates communications with all team members. He/she represents the district in negotiations with the contractor regarding change orders and additional contracts and keeps appropriate records to be used for “close-out,” potential claims and “as built” drawings and plans.

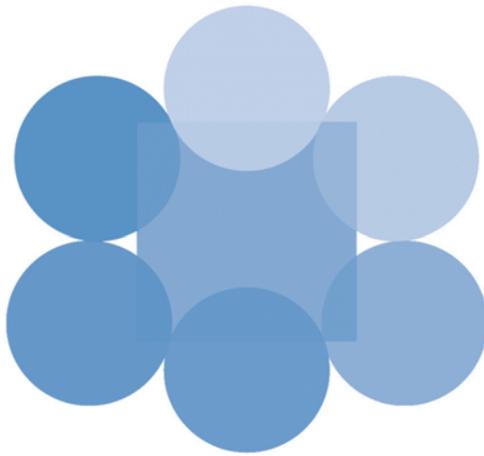
### POST-CONSTRUCTION/CLOSE OUT

At the close out of the construction project, the district representative will ensure appropriate procedures are followed and finalize the budget and expenditures. He/she will coordinate the occupancy of the school, allocate resources for the purchases of furniture and equipment and prepare proper documentation. The architect will assist the district with warranty, review the project prior to the expiration of the one-year warranty for latent defects and respond to the school district's reports of construction deficiencies. The project/construction manager will coordinate the project close with the school district, architect and builder. He/she will assist the district with furniture and equipment purchases, and coordinate the receiving and set up and will coordinate the staff training for the use of new equipment and systems. The project/construction manager will provide the school district with all documentation regarding the project.

### CELEBRATE

Once construction is completed, your district should organize a ribbon cutting celebration. Your community has completed a major project that will benefit the students, teachers and staff of your school and the surrounding neighborhood for generations to come.





# You Are Not Alone

When parents and communities come together to improve their school buildings, they reinforce the central importance of education and improve their neighborhoods. They send out ripples of hope and create new possibilities in students' lives. With growing awareness of the impact of school facilities on teaching and learning, with so many communities building and renovating schools, we have an unprecedented opportunity to broaden and deepen citizen involvement in this process.

Local and state community-based organizations and leaders have worked to involve parents, teachers, principals and community residents, business leaders and foundations in:

- planning school facilities that will improve educational and municipal programs and services;
- ensuring that community access and non-school use of public schools is an integral part of a modernized or new public school;
- monitoring and overseeing the management and financing of school construction programs to ensure effective, efficient, honest and equitable use of school construction funds; and
- lobbying for adequate public funding for facilities maintenance, repair and major improvements, as well as working to develop alternative sources of funds for school construction.

Citizens and groups working to improve school facilities can gain information and technical assistance from the Building Educational Success Together (BEST) collaborative. Launched in 2002 by the 21<sup>st</sup> Century School Fund, and funded by the Ford Foundation, BEST engages in constituency building, research and communications to secure public school facility improvements.

**BEST partners can help your community succeed in improving neighborhood schools. For more information, contact:**

21st Century School Fund  
202-745-3745, [www.21csf.org](http://www.21csf.org)

Education Law Center  
973-624-1815, [www.edlawcenter.org](http://www.edlawcenter.org)

KnowledgeWorks Foundation  
513-929-4777, [www.kwfdn.org](http://www.kwfdn.org)

National Clearinghouse for Educational Facilities  
888-552-0624, [www.edfacilities.org](http://www.edfacilities.org)

National Trust for Historic Preservation  
202-588-6000, [www.nationaltrust.org](http://www.nationaltrust.org)

Neighborhood Capital Budget Group  
312-939-7198, [www.ncbg.org](http://www.ncbg.org)

New Schools Better Neighborhoods  
213-629-9019, [www.nsbnn.org](http://www.nsbnn.org)

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202-745-3745, [www.21csf.org](http://www.21csf.org)

Education Law Center, Newark, NJ  
973-624-1815, [www.edlawcenter.org](http://www.edlawcenter.org)

KnowledgeWorks Foundation, Cincinnati, OH  
513-929-4777, [www.kwfdn.org](http://www.kwfdn.org)

National Clearinghouse for Educational Facilities, Washington, DC  
888-552-0624, [www.edfacilities.org](http://www.edfacilities.org)

National Trust for Historic Preservation, Washington, DC  
202-588-6000, [www.nationaltrust.org](http://www.nationaltrust.org)

Neighborhood Capital Budget Group, Chicago, IL  
312-939-7198, [www.ncbg.org](http://www.ncbg.org)

New Schools Better Neighborhoods, Los Angeles, CA  
213-629-9019, [www.nsbnn.org](http://www.nsbnn.org)

New Visions for Public Schools, New York, NY  
212-645-5110, [www.newvisions.org](http://www.newvisions.org)

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