



PREPARING FOR THE FUTURE -

What to Expect from a K-12 Facility Study

July 2010

412.201.4900

www.lrkimball.com



L.R. KimballSM

**TARGETED RESULTS. EXPERTLY MANAGED.
WE STAKE OUR REPUTATION ON IT.**

A CDI Company

**ARCHITECTURE
ENGINEERING
COMMUNICATIONS TECHNOLOGY**

AVIATION
CIVIL
CONSTRUCTION SERVICES
DATA SYSTEMS
ENVIRONMENTAL
FACILITIES ENGINEERING
GEOSPATIAL
NETWORKS
PUBLIC SAFETY
TRANSPORTATION

HIGHLIGHTS

The L.R. Kimball Difference

- More than 50 years of architectural, engineering and consulting experience
- Projects with more than 80 school districts across eight states
- Educational portfolio that offers a wide range of integrated services
 - Facility studies
 - Master planning
 - Land development
 - Building design
 - Traffic impact studies
 - Geotechnical engineering
 - Hazardous waste analysis and removal
 - Environmental remediation
 - Stormwater management
 - Landscape architecture
 - Building security and communications systems

In the last decade, primary and secondary education has exploded with change. Technological innovations, changes to state and federal edicts, shifting demographics and other issues have dramatically altered the educational landscape. In response, many school district administrators and board members are taking a closer look at their educational model. To prepare for the future, they are examining their curriculum, studying enrollment projection numbers and evaluating their campus infrastructure.

Many are finding that their classrooms are too small to provide the interactive learning opportunities that are defining 21st century education. Others recognize that their buildings fail to meet current code requirements. Still more wrestle with the financial challenges that come with operating inefficient school structures.

Faced with these and other concerns, school districts across the Commonwealth often consider building renovations or new construction to help address these issues and position their districts - and their students - for success. But it's one thing to consider a building project and another to begin the process.

Effective facility planning is the critical first step in any school district building project. With this in mind, this white paper introduces school administrators and board members to the Facility Study Process, including its key components and the steps school districts should follow to obtain the best results.

Key Components of the Facility Study

The Pennsylvania Department of Education (PDE) requires that a facility study, also known as a facility plan or a facility assessment, be complete before it will consider a building project for reimbursement. Once the facility study is finished, the district can begin its mandatory submission of Parts A – K of the Planning and Construction (PlanCon) Workbook. PlanCon is used to document a school district's planning process and determine its construction reimbursement levels.



About the Author

John Hummel leads L.R. Kimball's K-12 Education Architecture Practice. He brings more than 23 years of K-12 education-related design expertise to every district he serves, including feasibility studies, renovations/additions and new construction projects that have ranged in

budget from \$1 million to \$58 million. In addition, he participates in senior management project audits, project organization/planning and design reviews, and provides senior leadership level support to school districts.

For more information, contact John Hummel at 412.201.4900, john.hummel@lrkimball.com or visit www.lrkimball.com/education.

HIGHLIGHTS

What is PlanCon?

The PDE Planning and Construction (PlanCon) Workbook is a set of forms and procedures that school districts must submit to PDE to be eligible for state reimbursement. It is an administrative tool that PDE uses to document a district's planning process and determine the appropriate subsidy levels.

PlanCon consists of:

- Part A – Project justification
- Part B – Graphic representation of the schematic site and floor plans
- Part C – Process for acquiring any property or buildings
- Part D – Project accounting based on initial estimates
- Part E – Design development
- Part F – Construction documents/Bid documents
- Part G – Project accounting based on actual bids
- Part H – Financing summary
- Part I – Interim reporting for change orders and/or supplemental construction contracts
- Part J – Final project accounting
- Part K – Project refinancing

The facility study must be complete before the PlanCon process can begin.

The facility study can be completed up to two years before Part A submission begins. Key components of the study include:

- Overview of the school district, including its geography, population, wealth and any distinguishing features
- Overview of the district's educational program, including special facility or design needs related to future curriculum or instructional practices
- Objective analysis of projected enrollment for each grade
- Analysis of each building's capacity related to the educational program, including the number of students each building can support, the type of educational spaces that are required, the number and length of classes per day, grade alignments and room sizes
- Assessment of each building's physical condition, including the useful life of its mechanical systems, and its accessibility, code adherence, energy efficiency and cost to upgrade each building to current standards
- Analysis of construction options, including cost estimates

The study also requires a summary of buildings, options and costs, as well as documentation of the author's credentials. These credentials should include educational and licensure information, and a discussion of professional experience.

Several factors will determine the time it takes to complete the study, including:

- Depth and breadth of the consultant's experience
- Size of the school district, including the number of students, faculty and staff
- Number of buildings within the district
- If and when a study was completed in the past
- District decision-making process

Conducting the Facility Study

Effective facility studies incorporate the findings and lessons learned from a comprehensive nine-step process, outlined below.

Project Kick-Off

Facility study consultants and a "core group" of school district decision makers outline the goals and objectives of the study and develop the final project scope and strategic timelines.

Information Gathering

Consultants gather all drawing and educational information regarding the construction of and complete use of the facilities, including PDE school district population information.

HIGHLIGHTS

The Decision-Making Team

Before the Facility Study process begins, school districts should assemble a “core group” of decision-makers to represent key internal constituencies. Although every school district is different, this group often includes:

- District Superintendent
- Business Manager
- Director of Facilities (if applicable)
- Board Member who serves on the Building and Grounds Committee or related committee
- Other individuals as deemed appropriate by the Board and Administration

Later on, the group can be expanded to include community representatives and other stakeholders. By the end of the Facility Study process, key constituencies will have the data, analysis, options and recommendations they need to make an informed decision.

Existing Building Survey

The decision-making team tours all facilities to gain perspectives from administrative, educational, community, architectural and engineering vantage points. Existing interior and exterior building conditions are analyzed, including:

- Mechanical, electrical and plumbing systems
- Facility code compliance, including ADA accessibility requirements
- Life safety and fire detection systems

Upon completion, the consultant outlines recommended facility improvements.

Determining Educational and Space Requirements

Working with the core team, the consultant outlines current space needs and constraints based on current and projected levels of enrollment, implications of state-mandated programs, and educational and extracurricular programs.

Program Verification and Analysis of Facilities for Use

The team tests the design direction, the consultant reports the study findings, and decisions should be made regarding the development of possible facility options.

Preliminary Facilities Options

Facility options are tested against educational criteria established for each area within the facility such as:

- Number and type of classrooms, labs and support spaces
- Grade configurations
- Organization
- Circulation patterns

Cost Estimates

Preliminary cost estimates, proposed project timelines, state reimbursement and logistical issues for each option are outlined. Logistical issues could include preparing for displacement of students during construction or phasing in construction to minimize classroom disruptions.

“Draft” Study

A draft study that encompasses all study findings is presented to the district’s administrative team and the School Board for input before the final Facility Study is complete.

Final Study

A final Facility Study marks the end of the process, pending review by the School Board.

Because every school is unique, consultants should be prepared to modify this process as needed to ensure that the specific needs of the school district are met.

Although some facility studies take several months to complete, most studies are finalized within three to four months.