

COLUMBIA PUBLIC SCHOOLS

LONG-RANGE FACILITIES MASTER PLAN EXECUTIVE SUMMARY

OCTOBER 31, 2006



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OVERVIEW

The Columbia Public School District has historically approached funding for new and renovated facilities with a five-year planning process. The last long-range facilities plan expired in 2006. The Board of Education charged the Long-range Facilities Planning Committee to develop a new plan for the next five years, but yet look to the future for a comprehensive plan that the district could implement in the next ten years.

The thirteen members of the committee include community representatives, parent representatives, district staff, and three Board of Education members. The basic committee was supplemented by a qualified planning consultant who served as facilitator of the process. The consultant, Dr. Daniel Keck, has extensive experience in school planning as a practitioner and academician. His experience includes academic positions at Ohio State and Saint Louis University as well as practice as a superintendent in several states, and he was a research associate for the Council of Educational Facilities Planners International at Ohio State.

In addition to Dr. Keck, the committee also relied on the assistance of a district-developed facilities evaluation team, which included sixteen people from throughout the district—administrators, teachers, and Building Services staff.

To ensure appropriate community engagement, a Community Engagement Task Force was developed. Thirty-three community leaders were recruited to take part in the task force as a communications team and an engagement forum team. The Community Engagement Task Force was supported by district communications staff and research staff.

The Long-range Facilities Planning Committee provided direction for the development and review of databases, analysis documents, goals, planning assumptions, and planning principles to be used by current and future policymakers in the district. These initial goals, assumptions, and principles are found under **Tab 2 and 3** of this planning guide.

Membership of the Long-range Planning Committee, the Facilities Evaluation Team, and the Community Engagement Task Force is found in **Appendices B, C, and D**.

BUILDING A DATA-BASED PLAN

The major components of the plan included developing school and community databases; evaluations of all district facilities, for both educational adequacy and a comprehensive engineering study; and gathering information from the community.

SCHOOL AND COMMUNITY DATABASES

Data collection involved numerous aspects of the community and the school district. The table below reflects the data that was reviewed and included in the facilities master plan.

Community	School District
<ul style="list-style-type: none"> • Community/regional development plans and demographic profiles • Columbia Area Transportation Study Organization (CATSO) report • City of Columbia citizen survey data • Sanitary sewer utility capital projects report • Boone County master plan • Columbia/Boone County economic development master plan • Mid-year Boone County real estate market analysis <p style="text-align: center;">(Community development planning data is available under Tab 1)</p>	<ul style="list-style-type: none"> • The structured evaluation of all schools in the district to determine the educational adequacy of each • An analysis of the capacity and utilization of all school buildings • District planning guidelines, assumptions, goals, and priorities • District enrollment data, growth analyses, and school improvement information • School enrollment and building capacity data using 10/6/06 enrollments • District attendance pattern data • High School Task Force information • Science program evaluations for 2005-06 • State requirements <p style="text-align: center;">(District data is available under Tab 4)</p>

Beyond initial data gathering, the plan required two major studies and an extensive community survey to be conducted to assess district needs. The studies were an educational adequacy study and an engineering study. Assessment of community needs was completed by open forums and an online survey process. Finally, support spaces were assessed.

THE EDUCATIONAL ADEQUACY STUDY

The educational adequacy of a school is generally described as the current state of a school building and its ability to support current and future instructional programs. Educational adequacy consists of the relationship between educational program and physical structure. The environment provided by the school building will deter or enhance the instructional program.

In order to evaluate the schools on the basis of educational adequacy, the district adapted and combined several nationally respected planning instruments. The first of these is the Council of Educational Planners International (CEFPI) publication *Guide for School Facility Appraisal*, developed by Harold Hawkins and Edward Lilley. The other instrument used is *School Building Assessment Methods* by Henry Sanoff. Four teams of district employees made up of educators, administrators, and Building Services staff members were trained in the application of these rating instruments and completed the assessments for the study. (**Appendix C** lists the Facilities Evaluation Team.) Validation reviews were conducted by Dr. Daniel Keck, who was the resident planner and facilitator for the district long-range planning study, to assure reliability and validity of the assessments.

The educational adequacy evaluation guide developed for use in the district and the resultant educational adequacy evaluation study results are found under **Tab 6** of this planning guide. The study identified three major issues—overcrowding, substandard physical environments, and substandard educational environments—which result in deteriorating levels of educational adequacy in many buildings.

THE ENGINEERING STUDY

In conjunction with the evaluation of each building per the educational adequacy guidelines, the buildings were also evaluated from a technical perspective, which provided an assessment of the current condition of the mechanical and building infrastructure in relation to current construction standards. In addition, the study also analyzed energy conservation and cost savings, and assessed the current level of operational efficiencies. The district engaged the DLR Group and Custom Energy to conduct this study. The results of the study indicated a need for infrastructure upgrades to reduce the rising costs of energy, maintenance, and operations. Specific results by building are summarized under **Tab 6**, immediately following the results of the educational adequacy study.

COMMUNITY ENGAGEMENT

Community engagement was a major component of the planning model. The process provided for involvement of community members to provide opinions and insight on future district planning.

A community engagement development team, comprised of community representatives, met with the planning facilitator and district staff to design the engagement process and format. The team constructed a community survey instrument and designed a community engagement/outreach process. As a comprehensive survey, the instrument contained a number of questions directly related to the future direction of facility development in Columbia Public Schools. These included sampling community opinions on:

- Grade level configurations
- Number of school transitions for students
- A four-year high school configuration
- Extended-day and full-year school options
- Air-conditioning schools
- School and class size
- Building accessibility
- Safety and security issues
- Building age
- Building maintenance

The process included a community forum night, online survey access for all community and staff, a staff forum opportunity, and a series of outreach targets to expand community contacts. The survey was presented at several community and school district staff forums in September 2006. It continued to be available to both staff and community members online through the district Web site through October 17, 2006. In all, 1,044 survey responses were received by the district.

A copy of the survey instrument, a complete analysis of survey results, a copy of the open-ended community comments, and community forum field notes are found in this planning guide under **Tab 7**.

ANCILLARY SUPPORT SPACE STUDY

A subcommittee of the Long-range Facilities Planning Committee reviewed ancillary support spaces in the district. The subcommittee recommended that the district develop a specific assessment of support space standards and needs to ensure a cost-effective approach in assigning support space and moving to totally-owned space rather than leased spaces. Specific information regarding ancillary spaces is located under **Tab 5**.

FINDINGS

Analysis of the data generated from two major studies (the educational adequacy study and the engineering study) and the community engagement responses revealed a number of major findings. Results from each study and the community engagement process tended to overlap and provide specific direction for the committee. In isolation, the findings are described below.

THE EDUCATIONAL ADEQUACY STUDY

- A need to reduce serious overcrowding (10 out of 28 schools are seriously overcrowded).
- A need to improve physical and educational environments, including air quality and air flow issues, acoustics, and temperature ranges.
- A need to provide better learning environments, since the levels of quality learning environments are not equitable and some buildings are in danger of being unable to support current and future program demands.
- An inability on the part of the district to meet housing needs for all students in quality permanent facilities. The district now maintains 152 trailers, which house 22 percent of all students. Energy costs in trailers are more than double those of regular classrooms.

THE ENGINEERING STUDY

- Energy costs are above the local norm in buildings, and especially in trailers.
- Increasing maintenance costs.
- Energy costs are more than the average of the top 20 Missouri schools.
- The potential for \$36 million of energy renovations.
- Estimated potential energy savings of \$630,000 per year that could result in \$9.5 million over 15 years to help fund needed infrastructure modernization.
- A need to continue to retrofit indoor and outdoor lighting, update old equipment in buildings, expand energy management systems, tune or retrofit current systems that will remain in place, and continue roof and window replacement systems.

**THE COMMUNITY FORUMS AND ONLINE SURVEYS
(WITH REGARD TO ITEMS AFFECTING SCHOOL FACILITIES)**

- The community favors reducing the number of school transitions in the district. Currently, there are four transitions.
- The community prefers to reconfigure grade level organizations from K-5, 6-7, 8-9, 10-12 to K-5, 6-8, 9-12.
- The community expects equity in the distribution of educational resources.
- The community is concerned about overcrowding in its schools.
- The community favors air-conditioning the schools.
- The community favors replacing trailers with permanent housing for students.

RECOMMENDATIONS

From an analysis of these findings, the committee established four broad recommendations to maximize student achievement:

Reduce Overcrowding

- The student population is growing, on average, by two percent per calendar year.
- The trailers must be reduced and can no longer serve as a permanent housing solution.
- Overcrowding is impeding the ability of teachers and students to work together as an effective learning team.
- New school construction is urgently needed to reduce overcrowding and provide quality space for both current and future students.

Improve the Physical Environment and Learning Environment in Schools

- The physical environment in all district buildings, especially schools, must be improved in a manner that is equitable for all who work, teach, and learn.
- The physical environment in all district buildings either promotes or impedes productivity.
- The conservation and best use of district resources, both human and financial, will depend on energy efficiency upgrades, improvement of the physical environment, and physical structures in the district.

Reconfigure District Grade Level Patterns to Reduce Student Transitions

- Future planning models will be predicated on a reconfiguration of district grade level patterns from K-5, 6-7, 8-9, 10-12 to K-5, 6-8, 9-12

Increase Building Life and Efficiency

- Optimize building efficiency.
- Increase maintenance and operations efficiency.
- Improve the environmental quality in all buildings.
- Modernize the infrastructure in district buildings to achieve operational cost reduction.