

**A Capital Improvement Plan (CIP) For 2007-2009  
For Wake County Public Schools  
May 16, 2006**

**Introduction: Changes in CIP Development Over Time**

The proposed Capital Improvement Program described in this document is the culmination of a long process in which important planning goals were identified and a series of scenarios were used to explore the implications of various strategies for accommodating projected enrollment growth. The following paragraphs describe the most important points in the process.

**September 2005: The Adoption of Planning Assumptions and Goals**

The Board of Education and the Board of County Commissioners jointly adopted a set of planning assumptions. Assumptions addressed 21 key issues, which included:

- Elimination of the backlog of deferred major renovation projects and deferred life cycle replacement projects by 2015;
- Reduction of the percentage of students in mobile/modular units, including modular schools (but not including swing space for renovations) to no more than 8% by 2012;
- Reduction in crowding, as measured by the utilization of permanent seats, to 95% in elementary and middle schools and 97.5% in high schools by 2015;
- A five-year replacement cycle for school technology;
- Consideration of multi-track year-round calendars for all future elementary and middle schools as part of a comprehensive facilities plan;
- Utilization of high-end projections for calculating long-range student enrollment (+1% for the first five years, +1.5% for the next five years, and +2% for succeeding years) and an annual review of projections versus actual enrollment.

**December 2005: The Potential Cost of Achieving The Planning Goals**

Five scenarios were presented with costs through 2010 ranging from \$1.559 billion to \$2.291 billion and costs through 2015 ranging from \$4.247 billion to \$5.593 billion. Some attributes of these scenarios were:

- Base costs per school were estimated using a 12% inflation “Katrina effect” recommended by a consultant;
- Costs beyond 2010 were not included in the 2007-2010 subtotals;
- Mobile unit and utilization targets as specified in the planning assumptions were achieved;
- The estimated cost for existing facilities renovations was \$428.5 million, based upon generic models that utilized building age and square footage;
- Costs were estimated at intervals (2007, 2010, 2012, 2015) rather than annually;
- Standard (655 capacity) single-track elementary schools were utilized in the two most expensive scenarios.

**February 2006: Looking At Options For A CIP**

Three new scenarios were presented to narrow down the options and focus discussion on a few key issues. Costs were estimated for a three year CIP (all expenditures that would be needed for fiscal years 2007-2009) and ranged from \$1.375 billion to \$1.975 billion. These costs included construction of schools that would open after 2010 but needed to be bid in 2009. Some attributes of these scenarios were:

- Lower base costs for schools resulted from elimination of the “Katrina effect” inflation in favor of the 5% inflation identified in the September 2005 planning assumptions and revisions to facilities designs;

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- Only large (800 student single-track capacity) elementary schools were utilized;
- Revisions were made to cost estimates for existing school renovation/replacement projects based upon more detailed data from site visits and project evaluations, and inclusion of all systemwide life-cycle projects, increasing the total estimate for existing school projects from \$428 million to \$528 million;
- Projects were added that were not included in the December scenarios (such as a warehouse for Child Nutrition Services and two additional bus transportation centers);
- Start-up funding for land and design of future CIP projects was included;
- Only minimal progress was made toward the mobile unit and utilization targets adopted in September 2005.

### **April 2006:**

Staff prepared a recommendation for a capital improvement program for fiscal years 2007-2009. The recommendation was based upon a more detailed study of the instructional impact of the potential conversion of elementary and middle schools from single-track to multi-track calendars and consideration of student assignment implications and potential family disruption generated by conversion. The final recommendation limited conversion to most elementary schools, with the goal of adding 7000 seats to elementary capacity. The designation of which schools to keep on a single-track was to be made at a later date. All future elementary and middle schools were anticipated to be multi-track year-round schools.

Costs in the staff recommendation were consistent with costs utilized in preparing the February scenarios, but there were changes based upon Board of Education directives and refinement of cost models by staff in the WCPSS Facilities Department. For example, the cost of an elementary school was reduced through reduction in the square footage of most classrooms. Similarly the square footage was reduced for middle schools, but the Board requested larger middle schools and the cost per school was higher than in previous scenarios.

Recommended funding of projects at existing schools and support facilities was reduced to keep the total CIP cost as low as possible. This required that some projects be deferred to a subsequent CIP.

The staff proposal did not accomplish the planning objectives adopted in September that were related to reduction in the backlog of major renovations and deferred life-cycle replacement projects, reduction in permanent facility utilization rates, or reduction in the percentage of students in mobile classrooms.

### **May 2006:**

After extensive review and discussion of staff proposals, the Board of Education adopted a CIP with a total cost of \$1,055,874,837. A list of the projects for which funding will be requested from the Board of County Commissioners is shown on page six. Key considerations in the final CIP were the limitation of year-round conversion in elementary schools to that level required to generate 3,000 seats to address crowding in 2007-08, and the request that staff consider converting some middle schools to year-round calendars in order to generate at least some of the 2,000 additional seats needed in middle schools by 2008-09 and to provide families with siblings in elementary and middle school the opportunity to have siblings on the same track.

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**The CIP proposal requests county funding to :**

1. Provide adequate classroom space for teaching and learning to serve a 35% increase in enrollment over five years (from 120,504 students in September 2005 to 162,371 students in September 2010).
2. Make some progress on deferred major renovation and life cycle projects at existing schools to protect student health and safety and maintain adequate instructional environments.

**Key features include:**

1. A building program that recognizes the fiscal and instructional accountability of the school system to our community;
2. Conversion of enough single-track (traditional and modified calendar) elementary schools to 45/15 multi-track calendars to generate 3,000 additional seats for the 2007-08 school year, while maintaining single-track calendars for many elementary schools, most middle schools and all high schools.
3. Generation of 2,000 additional seats in middle schools by 2008-09 either through conversion of some single-track middle schools to a 45/15 calendar or through acquisition of additional mobile or modular classrooms.
4. Funding for opening 16 new schools in July 2008, July 2009, and July 2010 (eleven multi-track elementary, three multi-track middle, and two high schools), and one new middle which will open in 2011;
5. Funding for land and startup design of 13 more schools planned for 2011, 2012, and 2013 (seven multi-track elementary, four multi-track middle, and two high schools);
6. Partial funding for establishment of 6 ninth-grade centers in 2007 and 2008 to serve the most overcrowded high schools for a 5-10 year period;
7. Funding for relocation of up to 100 mobile classrooms each year in 2008 and 2009 because districtwide space utilization will remain above 100%;
8. Funding for some of the initiatives identified by the Board of Education and Board of County Commissioners in September 2005, including a five-year technology replacement program and a regular assessment of existing facilities;
9. Assumption of a 5% annual inflation rate through 2010. (If inflation is greater than this amount, some projects will need to be deferred.)

**Objectives that are not achieved in this CIP:**

1. Sufficient progress toward the ten-year reduction in utilization rates called for in September 2005 planning guidelines;
2. Sufficient progress toward the seven-year reduction in the use of mobile classrooms called for in September 2005 planning guidelines.
3. Elimination of the backlog in deferred major renovation projects and central support facility needs called for in September 2005 planning guidelines.

Estimated cost of this CIP program using inflation rates approved in planning strategies adopted by the Board of Education and Board of Commissioners in September 2005:

New schools and crowding solutions.....	<b>\$675,631,413</b>
Most critical major renovation projects and districtwide needs .....	<b>\$380,243,424</b>
Total 2006 Draft CIP request to the county.....	<b>\$1,055,874,837</b>

The following pages explain some of the assumptions and decisions that guided this draft proposal.

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**Why convert traditional single-track elementary schools to multi-track year-round calendars?**

Conversion of some elementary schools to multi-track calendars will be done to generate an immediate capacity gain of approximately 3,000 seats for the 2007-08 school year. The 18 new elementary schools opening in the next five years will all open as multi-track year-round schools. Over the next 25 years, the utilization of the multi-track elementary calendar will reduce the number of new elementary schools needed from 101 to 72, saving over one billion dollars in school construction costs. Delivery of instruction in elementary schools will not be negatively impacted by conversion to a multi-track calendar.

**Why not convert all elementary schools to multi-track year-round calendars?**

Some existing elementary schools have an insufficient number of classrooms to organize a multi-track calendar. Some schools have instructional programs (such as the Primary Years I.B. program) that would be severely limited by a multi-track program. Magnet schools have been established in order to fully utilize existing building capacity and to maintain diversity within schools in certain areas. They may be in older neighborhoods that lack sufficient children to fully utilize the school facility or they may be in socio-economically isolated neighborhoods comprised largely of low-income families, so they offer a program designed to draw voluntary enrollment from other areas of the county. Maintaining some elementary magnets on a single-track calendar that matches the single-track middle school and high school calendar will provide an additional reason for parents to consider enrollment in magnet schools over the convenience of enrolling in their geographically closer assigned school. This continues the program of choice originally established with the magnet program. The Board of Education will consider the potential negative impact of a multi-track calendar on existing magnet schools and will consider whether additional traditional calendar “magnet” need to be established in order to maintain opportunities for families to request a traditional calendar elementary program.

**Why not convert all middle schools to multi-track year-round calendars?**

Middle schools are usually organized into four-teacher instructional teams with each teacher having a different area of certification—language arts, social studies, mathematics and science. The four core teachers teach four “homeroom” classes within each team. Organizing teams for each grade level within four tracks for each grade level is challenging. The optimum arrangement is one team per track per grade level, which serves approximately 1,248 students. Any enrollment pattern less than the optimum will need some two-teacher teams, requiring teachers to have more than one area of certification and to teach multiple subjects. Optional multi-track middle schools can enroll the appropriate number of students through the application process and maintain the teaming structure. Conversion of existing middle schools from a single-track calendar to a multi-track calendar will result in differing numbers of students at each grade level and require the organization of more two-teacher instructional teams with smaller schools facing more disruption to the team organization than larger schools. Conversion of all middle schools would require many more teachers with dual-certification (e.g. math and science or language arts and social studies) or force more teachers to teach out-of-field, make it harder to attract and retain highly qualified teachers for middle schools, and negatively impact instructional planning and delivery. The adopted CIP calls for opening new middle schools as multi-track year-round schools and consideration of possible conversion of some existing schools to a multi-track calendar. Offering opportunities to apply for voluntary enrollment in a year-round middle school will enhance the ability of the schools to optimize team organization.

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**Why not convert high schools to multi-track year-round calendars?**

Offering a full curriculum to separate tracks of 700 students requires more teachers than the same curriculum offered to a school of 2100 students and operating expenses would increase significantly if the existing diverse curriculum was to be maintained. The additional operating costs would outweigh the initial savings in construction costs after approximately ten years. Significant operational problems would challenge the administrators responsible for a four-track high school. School security would be a major problem as groups of students tracked in or out and extra-curricular activities spanned the track calendars. Providing equitable access to clubs, sports, and various school activities would be difficult. Recruitment and retention of highly qualified teachers would be difficult because of the need to have one teacher teaching many levels and sections of courses to small groups of students. For example, one French language teacher serving one track, would be responsible for teaching five different levels, with the advanced levels each having just a few students, and there would not be enough students taking French in one track to fill more than three course sections during a year. Therefore the French teacher would need to be qualified to teach another language or some subject other than foreign language. Few teachers would be able to teach multiple sections of the same course within a track, requiring additional planning time and contributing to teacher burnout.

**Why do we not reduce reliance on mobile classrooms as called for in planning assumptions adopted in September 2005?**

The goals established by the Board of Education and Board of Commissioners in September called for reducing the percentage of students housed in mobile or modular classrooms to 8% by 2012. In 2005, about 27% of elementary students, 15% of middle school students, and 14% of high school students were in classes in mobile or modular classrooms. 109 additional mobile or modular classrooms are being installed for the 2006-07 school year. Significant progress toward the goal would require at least three additional new elementary schools, two additional middle schools, and an additional new high school and add more than \$250 million to the funding request. The current proposal reduces the percentage in elementary school to approximately 19%, increases the percentage in middle school to 18% and slightly increases the percentage in high schools to about 15%.

**Why do we not propose to lower utilization rates as called for in planning assumptions adopted in September 2005?**

The goals established by the Board of Education and Board of Commissioners in September called for a reduction in current utilization rates by 2015 to 95% in elementary and middle schools (currently 105% and 99%) and 97.5% in high schools (currently 100%). Such a reduction would reduce the stresses caused by annual variations in student enrollment patterns and reduce the amount of student reassignment and mobile unit relocation required each year. However, making significant progress toward these goals would require the additional schools identified in the previous question. In the 2010-11 school year, under this draft proposal, the elementary utilization rate would be unchanged, middle school utilization would drop slightly to 96% and high school utilization would drop slightly to approximately

