

Existing Schools

Major Renovations (Pages 2-4)

- Two prioritized lists
 - Whole Campus
 - Partial Campus
- Includes Structural, Mechanical, Environmental, Electrical, Plumbing, Codes, and Educational Program
- Target 40 year old square footage
- Need to average renovating over 540,000 sf/yr
- Priority based on Health and Safety, Facility Condition Index, Student Assignment and Academic Program
- Currently 933,000 sf over 40 years old

Life Cycle (Page 5)

- Summary showing components, years and cost
- Individual systems replaced before failure
- Replacement cycle 5 – 20 years
- Priority based on health/safety and remaining service life
- \$173 M in life cycle at 148 schools thru 2015

Support and Athletic Facilities (Page 6)

- List of potential projects
 - Enrollment growth, normal wear and efficiencies may require renovation and expansion of existing facilities and/or construction of new facilities
 - New facility initiatives
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PARTIAL CAMPUS

IIIA	Bond (\$M)		Potential New Permanent Seats (000s)	SF over 40 years old in 2015	% of campus over 40 years old in 2015	Schools	Comments	RANKINGS				TOTAL
	2000	2004						2006	Academic Program 15%	Student Assignment 15%	Campus Bldg Cond 35%	
4	28	10	26	71	22%	Cary High	Complete Phase III of the Master Plan. Demo Bldg B (1959/1975/1989) & Bldg D (1959). New construction to include: CNS, CRs, CTE, faculty support areas. Minor renovations to media ctr. Renovate PE/athletic support spaces. Site upgrades to include: playgrounds, basketball courts, vehicular & pedestrian circulation, and parking upgrades.	8	7	5	14	8.9
2	30		64	59	17%	Millbrook High	Demo Bldg C (1986). New construction to include: CRs, science, special ed, art, dance/drama, CTE, health/PE, admin, CNS & plant ops. Renovate for special ed, music, CTE, media ctr, health/PE/athletics. Address site circulation.	3	16	2	16	9.2
3			0	16	18%	Hunter Elem	Renovate Gym & CNS Bldg (1926) & provide new group toilets. Repair steps, replace windows & lighting in stairwells. Replace finishes in K wing, media ctr & CRs. Upgrade play areas. Address site circulation. Upgrade/expand	6	6	11	11	9.5
3	4		0	5	7%	Knightdale Elem	Renovate kitchen (1953). Add walls & doors to address sound transfer problems between 1st grade CRs (1981 Bldg). Upgrade play equipment. Re-roofing.	16	13	12	9	11.7
1	14		0	29	16%	Fuquay Varina Middle	Bldg C (1975) - renovate gym & locker rooms. Bldgs E (South Bldg) & F (Media Center) (both 1991)- provide new HVAC & associated finish upgrades, and re-roof.	11	12	14	10	11.9
20			0	52	19%	Sanderson High	Renovate East Bldg (1989) (Science), including HVAC & re-roofing. Replace kitchen equipment. Re-roof auditorium. Ramp to field level at stadium.	4	15	15	15	13.4
5	8	9	25	5	12%	Erlbe High	Renovate remaining portions of Main Bldg (West Bldg - 1965) not accomplished in 2007 major CI project. Site upgrades.	13	14	16	13	14.2

NOTES

East Wake High has 97,818 sq.ft. over 40 years old on the north campus, which is slated for demolition when E-29 is constructed.

Of the Cary High square footage over 40 years old, 62,219 sq.ft. will be demolished in the next project.

All of the East Garner Middle square footage over 40 years is slated for demolition.

Most programs were developed in 2005, or earlier, and therefore the scope, capacity, and estimates indicated may need to be revised.

WHOLE CAMPUS

IIIA	IIIB	Bond (\$M)			Potential New Permanent Seats (000s)	SF over 40 in campus 2015 over 40 in 2015	% of campus in 2015	Schools	Comments	RANKINGS					TOTAL
		2000	2004	2006						Academic Program 15%	Student Assignment 15%	Campus Bldg Cond 35%	Health & Safety 35%		
3					187	31	43%	Green Elem	Preliminary Design (swing to Spring Forest)	2	2	2	5	3.1	
2					293	42	58%	Vandora Springs Elem	Preliminary Design	7	10	1	1	3.3	
	5				TBD	44	53%	Lincoln Heights Elem	No Preliminary Design	5	1	6	3	4.1	
	2	1			0	0	0%	Wiley Elem	Preliminary Design	6	12	4	2	4.8	
	5				63	40	53%	Brooks Elem	Preliminary Design (swing to SF after Green).	10	6	3	4	4.9	
	3				496	135	52%	Garner High	Preliminary Design (use H8 for swing for 1 yr).	4	5	5	6	5.2	
2		1			398	35	51%	Stough Elem	Preliminary Design (swing to SF after Brooks)	8	4	7	7	6.7	
					359	0	0%	East Wake Middle	Preliminary Design	1	3	8	10	6.9	
	5				26	22	15%	West Millbrook Middle	Preliminary Design	12	7	9	8	8.8	
	9				584	108	44%	Apex High	Preliminary Design	3	11	10	12	9.8	
					TBD	27	39%	North Ridge Elem	No Preliminary Design	9	9	12	9	10.1	
	7				584	105	44%	Fuquay Varina High	Preliminary Design	11	8	11	11	10.6	

NOTES

Over 40 SF means there has not been major work to update the square footage in 40 years (it is not based on date of construction)

Most programs were developed in 2005 and therefore the scope, seats, and costs indicated may not be entirely accurate

PARTIAL CAMPUS

IIIA	IIIB	Bond (\$M)		Potential New Permanent Seats (000s)	SF over 40 years old in 2015	% of campus over 40 years old in 2015	Schools	Comments	RANKINGS				TOTAL
		2000	2004						2006	15%	Student Assignment	15%	
3	8	78	21	14%	East Garner Middle	14%	Demo Bldg D (1961) & Bldg E (1964) and replace with new construction to include: CRs, science, art, music, CTE, plant ops. Renovate student support services. Address site circulation.	1	5	1	3	2.3	
3	4	0	50	63%	Conn Elem	63%	Demo 1955 portion of Bldg A, and replace with new construction to include: CRs, special ed, art, music, PE, CNS, staff areas, plant ops. Renovate for media ctr, pre-K, kindergarten CRs, admin, SSS. Upgrade & expand fields & play equipment. Provide canopies for student drop-off equipment.	2	4	7	1	3.7	
1	2	0	9	12%	Rolesville Elem	12%	Demo Bldg A (1955) - one-room music bldg. Demo CR wing of Bldg D (1952) and construct new addition to include: CRs, music room, plant ops, teachers' lounge. Address site circulation.	5	3	9	2	5.1	
1	1	0	0	0%	Wendell Elem	0%	New construction to include: admin, SSS, CNS, plant ops. Renovate CRs, special ed, art, music, media center, auditorium (Bldg C - 1953). Re-roofing. Address site circulation and increase parking.	9	11	4	4	5.8	
2	6	0	0	0%	Washington Elem	0%	Renovate Gym bldg, including AC. Replace front doors of main bldg (obtain approval from Historic Preservation). Replace marker boards in CRs & carpet in media ctr. Upgrade Pre-K play area, and other play equipment areas. Address pedestrian site circulation.	15	9	6	5	7.5	
1	15	0	19	6%	Broughton High	6%	Renovate CNS Bldg (1957), including loading dock. Renovate Science Wing (1991). Renovate masonry shop (1951) for M&O cluster and general receiving. Replace lockers. HVAC - replace 2 chillers. Re-roofing. Provide covered entries at aux. gym. Address site circulation.	7	10	3	12	7.8	
1	1	0	9	13%	Swift Creek Elem	13%	Renovate Gym Bldg (1954). Upgrade kitchen & provide new equipment. Replace flooring in Kindergarten Bldg. Address traffic issues & site circulation. Impervious surface issues.	14	8	8	6	8.2	
2		TBD	4	6%	Fuller Elem	6%	Construct new CRs, CNS, plant ops & storage. Renovate existing CNS for CRs, admin, SSS, staff. Replace carpet in 1990 CRs. Relocate service yard away from front entry. Upgrade play areas. Address site circulation.	12	2	10	8	8.4	
4		TBD	37	53%	York Elem	53%	Main Bldg (Bldg A - 1965/1996) - renovate older CRs, corridors, toilets, CNS (including equipment). Replace boiler. Resolve ground floor moisture issues. Provide front canopy. Upgrade play equipment. Improve site circulation & parking. Re-roof 1996 addition.	10	1	13	7	8.7	

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Component	Year												Grand Total
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
ADA					\$655,304	\$7,384,879	\$6,486,331		\$8,988,201				\$23,824,516
Asbestos					\$70,688	\$39,665	\$578,580		\$1,116,479				\$1,905,421
Asphalt Elem Track									\$2,099,227				\$2,099,227
Asphalt Paving					\$39,879	\$3,711,593	\$539,799	\$868,228	\$615,113	\$1,398,672	\$2,744,842	\$1,458,923	\$11,374,640
Boiler	\$1,303,305	\$319,413	\$195,534	\$225,063	\$117,963	\$509,796	\$412,029	\$782,085	\$154,377	\$871,182	\$489,035	\$332,010	\$5,721,792
Carpet	\$922,300	\$1,532,970	\$313,038	\$687,056	\$1,364,368	\$1,960,962	\$681,835		\$219,276				\$7,671,906
CCTV						\$35,700							\$35,700
Chair Lift	\$85,680				\$24,786		\$432,684	\$27,540		\$137,700	\$137,700	\$416,160	\$1,604,766
Chiller						\$75,728		\$432,684		\$287,436	\$197,064	\$230,112	\$1,604,766
Cleaning - Exterior	\$25,500	\$20,400											\$139,188
Communication System	\$217,684												\$45,900
Controls & Instrumentation	\$61,761	\$66,938	\$3,182,890		\$95,268								\$3,425,842
Cooling Tower	\$138,720		\$66,938		\$47,226	\$40,520	\$115,235	\$123,165	\$158,967	\$125,766	\$253,470	\$993,047	\$993,047
Elevator			\$66,340		\$68,340	\$68,340				\$68,340	\$277,440	\$136,680	\$962,880
Exterior - Windows	\$93,000		\$74,001	\$109,548	\$45,084		\$32,436		\$90,566		\$47,328	\$205,163	\$90,566
Exterior Doors									\$59,040				\$659,600
Exterior Walls	\$380,927		\$716,665	\$410,723		\$538,834	\$109,885	\$109,885	\$1,530,000				\$1,530,000
Exterior Windows							\$79,992	\$63,381	\$120,127	\$254,692	\$557,731	\$56,117	\$2,157,034
FAR roof system									\$28,678				\$1,134,040
Fascia													\$28,678
Fencing	\$474,300	\$602,797	\$550,035	\$326,400	\$1,300,500	\$1,753,925	\$229,500	\$420,240	\$318,240		\$612,000	\$216,240	\$6,803,776
Fire Alarm System	\$229,529	\$336,220	\$78,045	\$248,567	\$43,906	\$48,959	\$222,293	\$47,756	\$150,360	\$88,287			\$2,266,750
Hardwood Flooring	\$1,428,288		\$8,580,131	\$485,979	\$831,402	\$8,532,528	\$19,129,815	\$933,239	\$2,261,466	\$618,977	\$2,380,700	\$489,802	\$43,652,327
HVAC System					\$30,600								\$30,600
Interior Doors					\$28,560								\$28,560
MB roof system					\$64,811	\$26,768	\$1,979,513	\$1,451,961	\$4,035,350	\$1,678,727	\$2,622,117	\$2,125,140	\$13,984,388
Paint	\$30,600		\$40,639			\$114,240					\$40,800		\$197,880
Paint - Exterior	\$1,674,453	\$1,623,783	\$858,510	\$2,161,937	\$2,517,080	\$2,669,720	\$1,256,463	\$1,017,053	\$1,539,941		\$652,732	\$1,217,164	\$17,578,840
Paint - Interior	\$66,309						\$213,384						\$279,884
Plumbing Fixtures	\$41,580	\$25,500	\$56,100	\$153,000	\$91,800	\$290,700	\$69,300	\$91,800	\$170,865		\$20,410	\$89,250	\$991,950
Sealant								\$52,691	\$127,500				\$39,089
Security System			\$42,905				\$185,009			\$2,202,918	\$76,947	\$40,290	\$2,548,069
SHINGLE													\$21,803
SSMR roof system	\$2,782,866	\$166,984			\$904,049	\$370,627	\$55,661	\$194,789	\$816,000				\$123,389
Stone Wall					\$202,738		\$142,176		\$764,371	\$740,110			\$5,414,367
Switchgear	\$1,400,496	\$2,658,229	\$168,572	\$93,828	\$1,534,964	\$2,111,033	\$242,471						\$2,978,528
Synthetic Surfacing													\$381,862
VCT													\$9,049,593
Wall Panels													\$24,192
Grand Total	\$11,357,288	\$7,553,234	\$15,176,369	\$6,109,678	\$10,264,659	\$29,065,373	\$33,387,108	\$6,453,926	\$25,395,904	\$8,333,107	\$11,631,207	\$8,053,950	\$172,781,804

Cumulative Yearly Total \$11,357,288 \$16,910,523 \$34,086,892 \$40,196,570 \$50,461,229 \$79,526,602 \$112,913,710 \$119,367,636 \$144,763,540 \$153,096,647 \$164,727,854 \$172,781,804

SUPPORT AND ATHLETIC FACILITIES

Four Regional Bus Transportation Centers	>\$30M
Deferred from Last Bond; currently have two sites acquired Additional Maintenance Capacity Needed/Efficiency Gains	
Athens Stadium Upgrades	\$1-7M
Distance from main building results in additional requirements ADA issues/Program shortfalls	
Elementary School Tracks (53 schools need track upgrades)	\$2M
Schools that do not have a track or the track lacks suitable surface	
Convert 3 High Schools with Limited Outdoor Program to Artificial Turf	\$2-3M
Allows more PE, athletic and non-athletic programs on same field	
Energy Savings Initiatives	\$5-15M
Alternative to Performance Contracting	
Rock Quarry Industrial Complex Upgrades and Repairs (22 yrs Old)	>\$5M
HVAC and Roof repairs Bus maintenance and Purchasing warehouse capacity increase	
Regional Athletic Stadium or Complex	\$10-30M
Basketball/Volleyball Baseball/Softball Football/Soccer/Lacrosse Tennis/Track and Field Band Performances/Competition	
<u>Cary HS /Apex HS/Garner HS/Euquay HS/Athens HS Stadium (Major Renovations)</u> <u>West Apex HS/H7/H8/H13/+2</u>	Add missing programs to tight school sites and reduce cost of major renovations
<u>Regional Bus Transportation Center</u>	Reduce cost of new HS construction
<u>Joint Use and Maintenance with Municipality</u>	Reduce cost of Trans Ctr construction
	Reduce cost of Regional Complex construction and maintenance

School Facilities Proposal

Originally prepared for September 20, 2011 and revised for February 7, 2012

1. Innovation in School Programs:

- a. Establish new Wake Young Women's Leadership Academy for students in grades 6-12 beginning in 2012; location to be finalized.
- b. Establish new Wake Young Men's Leadership Academy at a location to be determined to serve students in grades 6-12 beginning in 2012; location to be finalized.
- c. Transition Hilburn Elementary to a traditional calendar K-8 school beginning in 2012;
- d. Initiate planning for a K-5 science academy at a site to be determined to open for 2013/14 school year;
- e. Explore feasibility of establishing a career and technical education school for 2013;

2. Innovation in School Building Design & Construction:

- a. Award guaranteed energy savings contracts for retrofits of existing school buildings;
- b. Implement additional sustainable design strategies in construction projects, focused on greater energy and water efficiency, such as geothermal heating/cooling;
- c. Reduce cost of school construction by opening the Request for Proposal process and requiring that designers design to a reduced budget.

3. School Construction Projects:

- a. Projects to be funded with available savings in CIP 2006:
 - i. Construct new H-10 high school to open in 2015;
 - ii. Construct new E-25 elementary school to open in 2014;
 - iii. Complete design of Cary High;
 - iv. Complete design of E-20 to be ready for construction at start of next capital program;
- b. New school projects that are a high priority for construction in next capital program (school opening dates are contingent on date of bond referendum):
 - i. Construct new H-7 high school:
 1. Begin design in 2012 (funds are available in CIP 2006);
 2. Consider using new building as swing space for other renovation projects;
 - ii. Construct new H-8 high school:
 1. Begin design in 2012 (funds are available in CIP 2006);
 2. Consider using new building as swing space for other renovation projects;
 - iii. Construct new E-20 elementary school; resume design in 2012;
 - iv. Construct new M-8 middle school;

May 16, 2006

Existing School Projects Included in Funding Request:

Priority One Major Projects (E.Millbrook, Lynn, Aversboro, Martin II, E.Wake High)	\$105,955,329
Priority Two Major Projects (Lacy, Root, Poe, Wilburn, Bugg)	\$101,910,764
Cary High Phase IIa (Crowding Solution)	\$10,752,136
Enloe Phase IIa	\$7,335,208
Smith Elem	\$18,658,255
Deferred and Scheduled Life-Cycle Replacements Systemwide	\$72,838,896
Child Nutrition Warehouse	\$2,933,138
Assessment of existing facilities (as called for in September 2005 Planning Assumptions)	\$1,768,692
100% of requested technology replacement (up from 25% in first draft)	\$37,142,535
25% of life-cycle furniture and equipment replacement in existing schools	\$4,863,903
75% of environmental and ADA compliance in existing schools	\$7,163,204
Design startup for existing school projects in next bond	\$8,921,364
Subtotal	\$380,243,424

New School And Crowding Solution Projects Included in Funding Request:

All costs for eleven elementary schools	\$259,790,123
All costs for four middle schools	\$177,612,929
All costs for two high schools	\$136,503,299
2000 seats in middle schools through conversion or mobile units	\$6,000,000
Land for future schools for 2011-2013 (7 elem, 4 middle, 2 high, trans centers)	\$32,991,607
Design startup for schools opening in 2011, 2012, and 2013	\$15,694,752
Five 9 th -grade centers (unfunded portion) and other 2007 crowding	\$17,081,316
Conversion of elementary schools to multi-track to gain 3000 seats	\$13,240,645
Relocation of 100 mobile classrooms per year (2008 and 2009)	\$7,245,887
Offsite Improvements At New Schools (road, water, sewer)	\$9,470,855
Subtotal	\$675,631,413
Total CIP Funding Request	\$1,055,874,837

Existing School Projects Deferred to The Next CIP Funding Request In 2008:

Priority 2-L Projects (WFRHS, Brooks, Conn)	\$79,230,349
Priority 3 Projects (Enloe Phase III, West Millbrook, Apex High,	
Cary High Phase III, Millbrook High Phase II)	\$102,765,444
School and Office Complex On Noble Road	\$45,222,566
75% of furniture and equipment replacement in existing schools	\$14,591,710
25% of environmental and ADA compliance in existing schools	\$2,387,734
Total	\$244,197,803

New School Projects Deferred to The Next CIP Funding Request In 2008:

(Note: This would make the progress toward utilization rates and percentage of students mobile or modular classrooms called for in planning assumptions adopted in September 2005.)

All costs for three elementary schools (in 2010)	\$80,988,489
All costs for two large middle schools (in 2010)	\$96,367,518
All costs for one large high school (in 2010)	\$82,582,830
Four Regional Bus Transportation Centers	\$43,859,621
Pre-Kindergarten in Eastern Wake County	\$6,332,748
Total	\$310,131,206