



**Wake County Board of Education
Facilities Committee**

August 7, 2012
4:00pm

Board Conference Room, Crossroads I

Chris Malone, Committee Chair

Susan Evans, Vice Chair

Jim Martin

Deborah Prickett

PURPOSE: To address facilities and operations issues.

OUTCOMES: By the end of the meeting, Committee Members will have:

- Approved Facilities Committee meeting minutes from July 10, 2012 meeting;
- Received an update on geothermal and guaranteed energy savings contract;
- Received presentation of initial list of new school needs;
- Received presentation of initial major and targeted renovation projects and life cycle projects.

TOPIC	WHO	TIME
Set up <ul style="list-style-type: none">• Comments• Agenda• Desired outcomes	Chair Malone	5
Approve the Facilities Committee meeting minutes from July 10, 2012 meeting	Chair Malone	5
Update on geothermal and guaranteed energy savings contracts.	Joe Desormeaux	15
Presentation of initial list of new school needs	Judy Peppler Christina Lighthall	45
Presentation of initial list of major and targeted renovation projects and life cycle projects	Don Haydon Joe Desormeaux	45
Closure and next steps.	Chair Malone	5

**WAKE COUNTY BOARD OF EDUCATION
FACILITIES COMMITTEE MEETING**

July 10, 2012
4:00 pm – 6:00 pm

<u>Committee Members</u>	<u>Board Members</u>	<u>Staff</u>	<u>Staff</u>	<u>Guest</u>
Chris Malone, Chair	Christine Kushner	Superintendent Tata	Sheri Green	Fred Jernigan
Susan Evans, Vice Chair		Don Haydon	Brian Conklin	Little Diversified
Dr. Jim Martin		Joe Desormeaux	Harold Hinson	
		David Neter		

Chair Malone called the meeting to order at 4:06 pm. The agenda is included as attachment A. Since there were only three members present at the start of the meeting, Mr. Malone asked Ms. Kushner to join the committee for this meeting.

1. **Approve the Facilities Committee meeting minutes from June 12, 2012 meeting:** Chair Malone called for approval of the minutes from the June 12, 2012 Facilities Committee Meeting (attachment B). Ms. Kushner seconded the motion and it was approved.
2. **Receive presentation and approve schematic design of West Apex High (H-10):** Ms. Sheri Green, Director of Facilities Planning, presented the site plan and schematic design drawings for the West Apex (H-10) High School project; drawings are at attachment C. Dr. Martin asked about the potential for traffic congestion on the internal traffic loop when the future elementary school is constructed, and asked staff to review the design with DoT and planners. The committee approved the schematic design and recommended that it be put on the agenda of the regular board meeting in August for consideration by the full Board.
3. **Receive status report and timeline for installation of ground source heating & cooling (geothermal) system:** Mr. Joe Desormeaux, Assistant Superintendent for Facilities, provided a report on the status of staff's study of a geothermal heating & cooling system for the Richland Creek Elementary School. An outline of his presentation is at attachment D. After discussing the pros and cons of the system, the committee directed Mr. Desormeaux to continue studying the proposal and to bring a recommendation back to the committee.
4. **Receive status report and timeline for guaranteed energy savings contracts:** Guaranteed energy savings: Mr. Desormeaux and Mr. David Neter, Chief Business Officer, reported on the status of the initiative to enter into a guaranteed energy savings contract for improvements at 23 school buildings. An outline of the presentation is at attachment D. After discussing the pros and cons of this type of contract, the committee directed Mr. Neter and Mr. Desormeaux to continue studying the proposal and to bring a recommendation back to the committee.
5. **Receive information on process for identifying and prioritizing needs for renovation of existing schools, along with lists of projects identified:** Mr. Desormeaux gave a Power Point presentation on the 20 Year Approach to Existing Schools (attachment E), and explained the process that staff uses to identify renovation/repair needs at existing schools and for prioritizing those needs. The initial listing of projects to be considered for funding in the next bond will be brought to the committee at its next meeting.
6. **Receive a capital improvement program “table of contents”, showing line items typically included in a CIP bond program:** Mr. Don Haydon, Chief Facilities & Operations Officer, presented the “table of contents”, attachment F, and explained the various line items that are typically included in capital improvement program.

Ms. Evans asked that several edits purging the term “choice assignment plan” be made to the draft Capital Planning Issues document before it is presented to the full board on the 24th. Mr. Malone stated it was improper to do anything during the meeting as the issue was not on that day's agenda and the draft had already been approved during the May Facilities Committee meeting. After discussion, the committee urged the staff to prepare possible edits for the next Work Session on the 24th so they can be discussed by the full board.

Facilities Committee Meeting
August 7, 2012

1. Additional classroom space is needed to:
 - a. Accommodate parental choice for location, program and calendar;
 - b. Relieve current school crowding;
 - c. Accommodate projected student enrollment increases.
2. The demand for additional seats can be met by:
 - a. Building new schools;
 - b. Installing temporary classrooms;
 - c. Constructing building additions;
 - d. Adjusting school calendar;
 - e. Adjusting school grade configuration;
 - f. Adjusting the percentage of proximity seats at magnet schools;
 - g. Adapting existing buildings, such as the Thompson building, Governor Morehead School and proposed CTE facility;
 - h. The final Capital Improvement Plan will likely involve a combination of these solutions.
3. The presentation today will include:
 - a. An updated projection for enrollment growth;
 - b. An estimate of the number of excess or deficit seats in 2016-17;
 - c. An estimate of the number of new schools needed IF the seat shortfall were to be met only by building new schools and IF all of those new schools were to be opened on traditional calendar;
 - d. Capital planning is proceeding in step with student assignment planning; critical data on demand (over and under enrolled schools) will be factored as soon as it is available.
4. Existing schools must be quality places for students to learn; “quality” encompasses:
 - a. Health, safety and accessibility;
 - b. The physical condition of the building structure, systems and finishes;
 - c. Adequate spaces to support delivery of the curriculum;
 - d. Attractive, inviting appearance.
5. Today's presentation on existing schools will include:
 - a. Listing of projects for whole-school renovation or replacement;
 - b. Projects for renovation or replacement of buildings or parts of buildings on a campus;
 - c. Identification of needs to replace building systems or components;
 - d. Proposed projects at support and athletic facilities.

Projected Membership Comparisons

Dec 2011 Wake City Membership Projections

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Elementary	71,806	73,292	74,650	76,859	79,144	81,067	83,313	86,317	89,497
Middle	35,108	36,175	37,240	37,430	38,223	39,040	40,233	41,389	42,487
High	43,504	44,914	46,514	48,305	49,811	51,339	52,277	53,530	55,036
Special / Alternative									
Total	150,418	154,381	158,404	162,594	167,178	171,446	175,823	181,236	187,020
Yearly Increase:	3,731	3,963	4,023	4,190	4,584	4,268	4,377	5,413	5,784

EI Percentage Increase:

102.1% 101.9% 103.0% 103.0% 102.4% 102.8% 103.6% 103.7%

MI Percentage Increase:

103.0% 102.9% 100.5% 102.1% 102.1% 103.1% 102.9% 102.7%

Hi Percentage Increase:

103.2% 103.6% 103.9% 103.1% 103.1% 101.8% 102.4% 102.8%

Total Percentage Increase:

102.5% 102.6% 102.6% 102.8% 102.6% 102.6% 103.1% 103.2%

Preliminary 2016-17 Projected Membership vs Funded Long Range School Campus Capacities [LRSCC]

School	Membership 2016-17	LRSCC 2016-17 @95%	Short/ Surplus Seats	Percent Crowding	
ELEMENTARY					
1 CENTRAL	11,878	9,078	(2,800)	130.8%	
2 NORTH-WEST	11,306	9,166	(2,141)	123.4%	
3 NORTH-EAST	8,437	8,451	15	99.8%	
4 EASTERN	9,882	10,138	257	97.5%	
5 SOUTH-EAST	7,279	6,474	(806)	112.4%	
6 SOUTH-WEST	9,983	8,539	(1,445)	116.9%	
7 WEST-SOUTH	10,779	8,755	(2,024)	123.1%	
8 WEST-NORTH	9,599	7,710	(1,889)	124.5%	
ELEMENTARY	79,144	68,311	(10,833)	115.9%	
				# Schools Needed:	14
				Subject to ORED Sept Update	10,833/780 (Traditional)
MIDDLE					
1 CENTRAL	6,483	5,586	(89)	116.1%	
2 NORTH-WEST	4,737	4,129	(609)	114.7%	
3 NORTH-EAST	5,525	4,343	(1,181)	127.2%	
4 EASTERN	3,390	4,640	1,249	73.1%	
5 SOUTH-EAST	3,826	3,380	(446)	113.2%	
6 SOUTH-WEST	4,516	4,499	(17)	100.4%	
7 WEST-SOUTH	5,452	5,544	92	98.3%	
8 WEST-NORTH	4,294	3,431	(863)	125.1%	
MIDDLE	38,223	35,553	(2,670)	107.5%	
				# Schools Needed:	3
				Subject to ORED Sept Update	10,833/780 (Traditional)
					2,670/1,280 (Traditional)

School	Member-ship 2016-17	LRSSC 2016-17 @97.5%	Short/ Surplus Seats	Percent Crowding
HIGH				
1 CENTRAL	8,365	7,119	(1,246)	117.5%
2 NORTH-WEST	8,053	6,548	(1,505)	123.0%
3 NORTH-EAST	7,199	5,559	(1,640)	129.5%
4 EASTERN	3,553	5,505	1,952	64.5%
5 SOUTH-EAST	4,720	3,613	(1,107)	130.6%
6 SOUTH-WEST	6,995	5,567	(1,428)	125.6%
7 WEST-SOUTH	5,644	5,790	146	97.5%
8 WEST-NORTH	5,282	3,750	(1,532)	140.9%
HIGH	49,811	43,451	(6,360)	114.6%
# Schools Needed:				
6,360/2,240				

SPECIAL / ALTERNATIVE	TBD	384	N/A	N/A
				1 Special/Alternative 6th-12th

System-wide	167,178	147,315	(19,863)	113.5%	24
Elementary	79,144	68,311	(10,833)	115.9%	14
Middle	38,223	35,553	(2,670)	107.5%	# Schools Needed: 3
High	49,811	43,451	(6,360)	114.6%	5+1
Special / Alternative	TBD	384	N/A	N/A	1

The numbers of schools needed are based on new traditional calendar schools

Subject to ORED Sept Update
Schools
Needed:
6,360/2,240

Assumes that preliminary 2012-13 projected enrollment in all regions increases at a system-wide average rate per year.

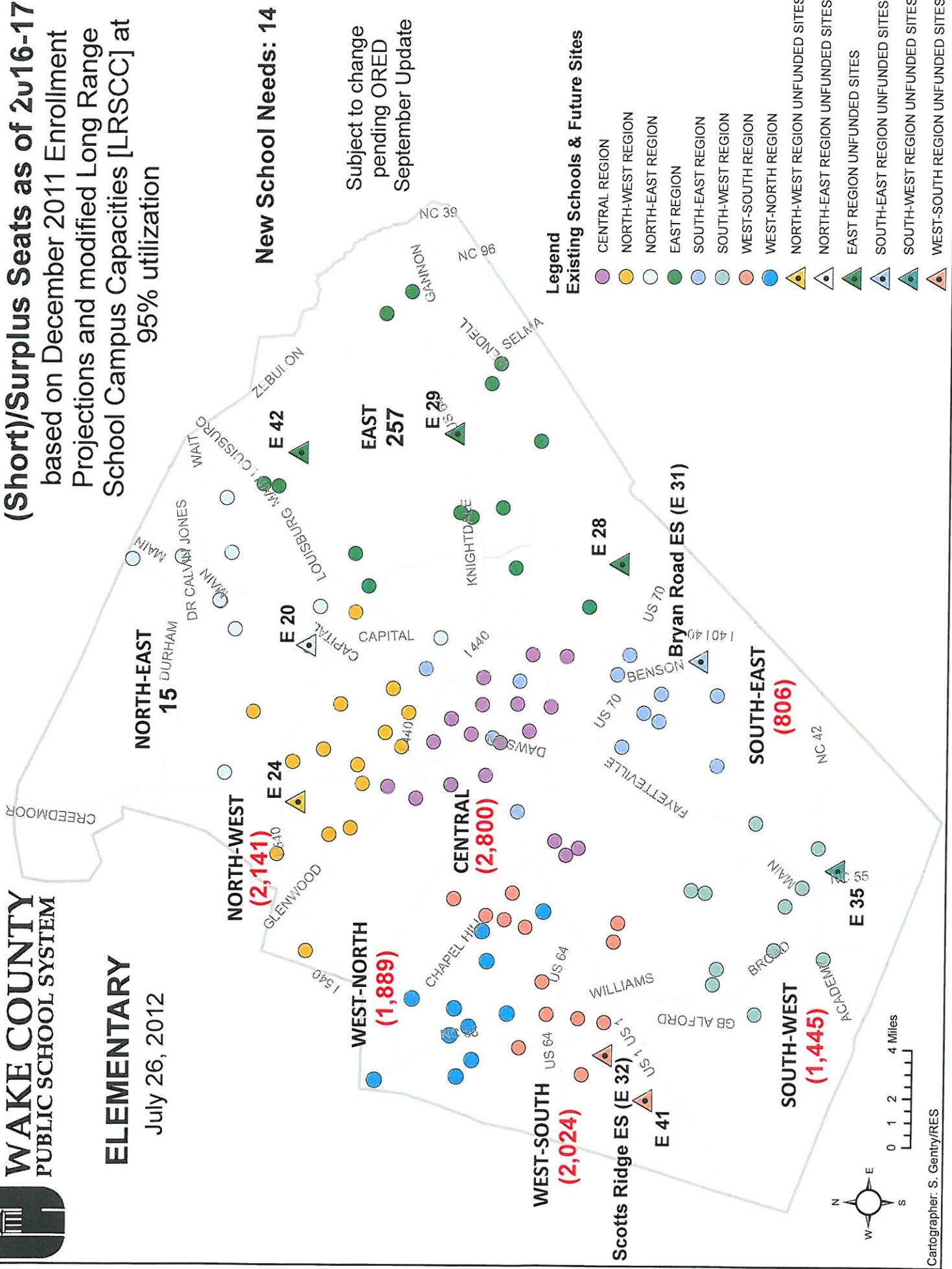


(Short)/Surplus Seats as of 2u16-17

based on December 2011 Enrollment Projections and modified Long Range School Campus Capacities [LRSSCC] at 95% utilization

ELEMENTARY

July 26, 2012

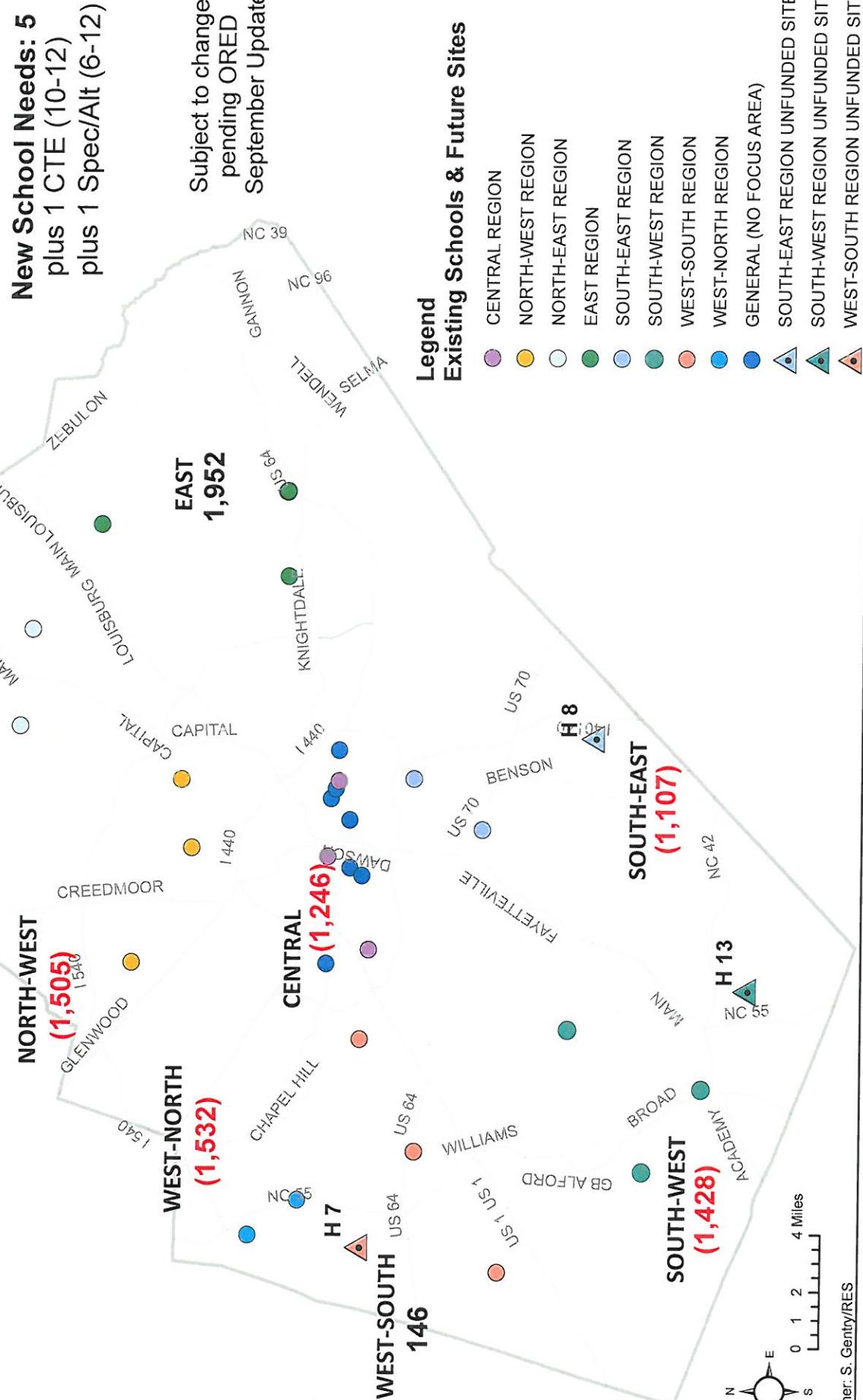




(Short)/Surplus Seats as of 2016-17

based on December 2011 Enrollment
Projections and modified Long Range
School Campus Capacities [LRSSC] at
97.5% utilization

HIGH
July 26, 2012



Existing Schools

Major Renovations (Pages 2-4)	<ul style="list-style-type: none">• Two prioritized lists<ul style="list-style-type: none">◦ Whole Campus◦ Partial Campus• Includes Structural, Mechanical, Environmental, Electrical, Plumbing, Codes, and Educational Program• Target 40 year old square footage<ul style="list-style-type: none">◦ 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)	<ul style="list-style-type: none">• 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)	<ul style="list-style-type: none">• 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

WHOLE CAMPUS

		RANKINGS						
		Academic Program			Student Assignment		Campus Bldg Cond	Health & Safety
		15%			15%		35%	35%
II/A	II/B	2000	2004	2006	Schools	Comments		TOTAL
3			187	31	Green Elem	Preliminary Design(swing to Spring Forest)	2	2
2			293	42	Vandora Springs Elem	Preliminary Design	7	10
5		TBD	44		Lincoln Heights Elem	No Preliminary Design	5	1
2	1		0	0	Willey Elem	Preliminary Design	6	12
5			63	40	Brooks Elem	Preliminary Design(swing to SF after Green).	10	6
3			496	135	Garner High	Preliminary Design (use H8 for swing for 1 yr).	4	5
2	1		398	35	Stough Elem	Preliminary Design (swing to SF after Brooks)	8	4
			359	0	East Wake Middle	Preliminary Design	1	3
5			26	22	West Millbrook Middle	Preliminary Design	12	7
9			584	108	Apex High	Preliminary Design	3	11
			TBD	27	North Ridge Elem	No Preliminary Design	9	9
7			584	105	Fuquay Varina High	Preliminary Design	11	8
							11	11
							10	10.6

NOTES

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

PARTIAL CAMPUS

III A	III B	Bond (\$M)	Potential SF over New Permanent Seats (000s)				Comments	RANKINGS			TOTAL	
			2000	2004	2006	Schools		Academic Program	Student Assignment	Campus Bldg Cond		
3	8			78	21	East Garner Middle	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	Conn Elem	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.	2	4	7	1	3.7
1	2			0	9	Rolesville Elem	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			0	0	Wendell Elem	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	Washington Elem	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	6	0	19	Broughton High	Renovate CNS Bldg (1957), including loading dock. Renovate Science Wing ('99).	7	10	3	12	7.8
						Swift Creek Elem	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.	14	8	8	6	8.2
2			TBD	4		Fuller Elem	Renovate Gym Bldg (1954). Upgrade Kitchen & provide new equipment. Replace flooring Kindergarten Bldg. Address traffic issues & site circulation. Impervious surface issues.	12	2	10	8	8.4
4			TBD	37		York Elem	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.	10	1	13	7	8.7

PARTIAL CAMPUS

III A	III B	Bond (\$M)	Potential SF over New Permanent Seats				Comments	RANKINGS				
			2000	2004	2006	Cary High		Academic Program	Student Assignment	Campus Bldg Cond	Health & Safety	
4			28	10	26	71	Complete Phase III of the Master Plan. Demo Bldg B (1969/1975/1989) & Bldg D (1969). New construction to include: CNS, CRs, CTE, faculty support areas. Minor renovations to media ctr. Renovate PE/Athletics support spaces. Site upgrades to include: playfields, basketball courts, vehicular & pedestrian circulation, and parking upgrades.	8	7	5	14	8.9
						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
	2	30	64	59		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
				0	16	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
	3	4		0	5	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
	1	14		0	29	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
					0	52	Renovate remaining portions of Main Bldg (West Bldg - 1965) not accomplished in 2007 major CI project. Site upgrades.	13	14	16	13	14.2
						Enloe High						

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.

Component	Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Grand Total
ADA						\$955,304	\$7,384,679	\$6,486,331		\$8,998,201				\$23,846,516
Asbestos						\$70,698	\$39,665	\$67,680		\$1,116,479				\$1,908,421
Asphalt Elm Track										\$2,099,227				\$2,099,227
Asphalt Paving						\$39,679	\$3,711,589	\$539,799	\$666,226	\$615,113	\$1,386,672	\$2,744,642	\$1,468,923	\$11,374,640
Boiler	\$1,303,305	\$319,413	\$195,534	\$225,063	\$117,963	\$509,786	\$412,029	\$782,085	\$154,377	\$871,182	\$499,035	\$332,010	\$5,721,792	
Carpet	\$922,300	\$1,532,970	\$313,038	\$667,056	\$1,384,368	\$1,960,962	\$691,935			\$219,276				\$7,671,906
CCTV														\$35,700
Chair Lift		\$85,680												
Chiller														\$416,160
Cleaning - Exterior														
Communication System	\$25,500	\$20,400				\$63,460		\$75,728						\$1,604,766
Controls & Instrumentation	\$217,684		\$3,182,980				\$95,268							\$139,188
Cooling Tower	\$61,761	\$66,938				\$47,226	\$40,520	\$115,235	\$123,165	\$158,987	\$125,766	\$253,470		\$45,800
Elevator	\$138,720		\$68,340	\$136,680			\$68,340							\$3,495,342
Exterior - Windows														\$993,047
Exterior Doors	\$93,000													\$962,880
Exterior Walls														\$90,566
Exterior Windows														\$659,500
FAR roof system	\$380,927		\$716,665	\$410,723			\$538,834		\$108,885					\$1,530,000
Fascia														\$2,157,034
Fencing														
Fire Alarm System	\$474,300	\$602,797	\$550,035	\$326,400	\$1,300,500	\$1,753,525	\$209,242	\$106,762		\$28,678				\$28,678
Hardwood Flooring	\$229,529	\$336,220	\$78,045	\$248,567	\$43,906	\$48,969	\$229,500	\$420,240						\$364,231
HVAC System	\$1,428,288		\$8,580,131	\$485,979	\$831,402	\$6,532,528	\$19,129,815	\$33,239	\$47,756	\$150,580	\$88,287			\$6,803,776
Interior Doors														\$772,608
MATV														\$2,265,750
MB roof system														\$30,600
Paint														\$28,560
Paint - Exterior	\$30,600													\$197,980
Paint - Interior														
Plumbing Fixtures														
Sealant	\$6,415,300													\$112,039
Security System	\$41,580													
SHINGLE														
SSMR roof system														
Stone Wall														
Switchgear	\$2,782,866	\$166,984												
Synthetic Surfacing														
VCT	\$1,400,496	\$2,658,229												
Wall Panels														
Grand Total	\$11,357,283	\$7,563,234	\$15,176,369	\$6,109,678	\$10,264,659	\$29,065,373	\$33,387,108	\$6,453,926		\$25,396,904	\$8,333,107	\$11,631,207		\$8,053,950
Cumulative Yearly Total	\$11,357,283	\$18,910,523	\$34,086,392	\$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 / Fuguey HS / Athens HS Stadium (Major Renovations)</u>	
Add missing programs to tight school sites and reduce cost of major renovations	
<u>West Apex HS/H7/H8/H13/+2</u>	
Reduce cost of new HS construction	
<u>Regional Bus Transportation Center</u>	
Reduce cost of Trans Ctr construction	
<u>Joint Use and Maintenance with Municipality</u>	
Reduce cost of Regional Complex construction and maintenance	