



# Board of Commissioners

February 21, 2013

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## Meeting Material

Agenda

Question and Answer Follow-up from January 17th Meeting

Overview of Capital Planning and Referendum Process

Overview of Capital Needs: New Schools and Renovations

Determining Number of New Schools Facility Utilization and Capacity; Projections by Area

General Overview of Building Program Planning  
Assumptions and Discussion of Assumptions for New  
Schools



# Joint Meeting Board of Commissioners & Board of Education

**Thursday, February 21, 2013 – 8:00 a.m.**  
Greater Raleigh Chamber of Commerce  
South Salisbury Street, Raleigh NC 27601



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## MEETING CALLED TO ORDER

### MEETING OBJECTIVES:

- I. Understanding the Overall Process and Timetable
- II. Understanding the Scope of Need for the New Schools and Renovations
- III. Understanding the Variables and Assumptions Used to Determine the Number of New Schools

### ITEMS OF BUSINESS:

- I. Opening Remarks  
Joe Bryan, Chair - Wake County Board of Commissioners  
Keith Sutton, Chair - Wake County Board of Education  
Agenda (1)
- II. Question and Answer Follow-up from January 17<sup>th</sup> Meeting  
Joe Desormeaux, Assistant Superintendent for Facilities  
Laura Evans, Senior Director for Student Assignment  
PowerPoint (2): WCPSS Bond Discussion  
Attachment (3): Historical Capacity at 2012-2013 Capped Schools  
Attachment (4): Long Range School Campus Capacities Percent Crowding 2012-13; Elementary  
Attachment (5): Long Range School Campus Capacities Percent Crowding 2012-13; Middle

Attachment (6): Long Range School Campus Capacities Percent Crowding 2012-13; High

Attachment (7): Annual School Campus Capacities Percent Crowding 2012-13; Elementary

Attachment (8): Annual School Campus Capacities Percent Crowding 2012-13; Middle

Attachment (9): Annual School Campus Capacities Percent Crowding 2012-13; High

Attachment (10): ADM by Wake County Charter School Since 1997-1998 School Year

### **III. Overview of Capital Planning and Referendum Process**

**David Cooke, County Manager**

PowerPoint (11): Capital Planning and Referendum Process

### **IV. Overview of Capital Needs: New Schools and Renovations**

**Joe Desormeaux, Assistant Superintendent for Facilities**

Attachment (12): Unfunded Life Cycle Needs Dec. 2012, by Year w/ Costs

Attachment (13): Unfunded Life Cycle Needs Dec. 2012, by School

### **V. Determining Number of New Schools; Facility Utilization and Capacity; Projections by Area**

**Joe Desormeaux, Assistant Superintendent for Facilities**

**Laura Evans, Senior Director for Student Assignment**

**Christina Lighthall, Senior Director for Long Range Planning**

Attachment (14): WCPSS Facilities Utilization Report 2012-13

Attachment (15): Steps to Compute School Capacity, An Example

### **VI. General Overview of Building Program Planning Assumptions and Discussion of Assumptions for New Schools**

**Joe Desormeaux, Assistant Superintendent for Facilities**

Attachment (16): Overview of Capital Program Planning Assumptions

Attachment (17): Capital Program Planning Issues September, 21, 2005

Attachment (18): Planning Assumptions Addendum Spring 2006

Attachment (19): Capital Planning Bond Assumptions July 24, 2012

Attachment (20): Comparison of 2006 and 2012 Assumptions Documents

Attachment (21): Pre-K Three-Year Master Plan

Attachment (22): Pre-K Classroom Information

Attachment (23): Year-Round School Summary 2007-Present

Attachment (24): Space Standards - DPI vs CIP2006 vs Proposed Elem

Attachment (25): Space Standards - DPI vs CIP2006 vs Proposed Middle

Attachment (26): Space Standards - DPI vs CIP2006 vs Proposed High

### **VII. Wrap-up**



**WAKE COUNTY**  
PUBLIC SCHOOL SYSTEM



# Bond Discussion



# Topics

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- Question and Answer Follow-up
- Overview of Capital Planning and Referendum Process
- New Schools and Renovations
- Facility Utilization and Capacity
- Planning Assumptions for New Schools

# Open Items from Last Meeting

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- Capped Schools: past capacity, current cap, current enrollment (Slide 4)
- Growth compared to other urban systems (Slide 5)
- How successful are projections on where growth will be (Slides 6-10)
- Over crowded and under enrolled schools (Slides 11-13 and Atch 8)
- How many charter schools have failed (Slides 14-15)
- School by school capacity and enrollment (Atch 8)
- How successful matching area projections and obtaining land bank sites (Slide 42-44)

# Open Items

## Capped School History

School Name	Annual School Campus Capacity (ASCC)									2012-13 Cap	2012-13 20th Day	# Perm CRs	# Optimum Temp CRs	# Actual Temp CRs	Can more temporary classrooms be added, if not why?
	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13						
Briarcliff Elementary	494	506	623	520	582	545	571	605	605	625	617	35	1	4	No, site & core capacity restraints
Brooks Elementary	523	480	512	535	526	526	540	551	537	620	582	33	1	1	No, site & core capacity restraints
Cedar Fork Elementary		761	747	747	701	747	727	727	727	853	767	38	5	6	No, site & core capacity restraints
Conn Elementary	484	468	438	536	564	587	619	619	605	671	671	36	2	4	No, site & core capacity restraints
Davis Drive Elementary	899	911	922	920	897	897	920	876	876	920	978	39	0	13	No, site & core capacity restraints
Green Hope Elementary	807	796	782	1,058	1,088	977	842	847	833	912	877	38	8	9	No, site & core capacity restraints
Hunter Elementary	661	666	654	638	643	597	689	684	647	684	705	39	1	6	No, site & core capacity restraints
Lacy Elementary	558	621	678	667	646	718	644	710	724	795	807	40	2	2	No, site & core capacity restraints
Mills Park Elementary					862	1,078	888	888	888	896	962	51	2	0	Yes
Underwood Elementary	435	401	378	412	475	475	486	486	472	546	545	33	0	0	No, site & core capacity restraints
Wildwood Forest Elem	917	894	963	860	911	784	784	784	761	772	741	37	8	13	No, site & core capacity restraints
Wiley Elementary	362	339	339	385	403	403	406	406	392	470	470	30	0	0	No, site & core capacity restraints
Heritage Middle	1215	1222	1293	1,095	1,185	1,185	1,257	1,244	1,244	1480	1405	60	0	0	No, site & core capacity restraints

Green Hope and Mills Park capacity changed due to calendar; Wildwood Forest capacity changed due to temporary classrooms

# Open Items

## Growth Compared to NC Urban Schools

Comparison of 20th Day Growth in Urban Counties from 2004-2005 School Year to 2012-2013 School Year												
20th Day Enrollment Figures and Multi-Year Comparison												
School District	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2004-05 to 2012-13	2004-05 to 2007-08	2008-09 to 2012-13
Chapel Hill-Carrboro	10,719	10,936	11,107	11,427	11,632	11,585	11,675	11,878	12,124	1,405	708	492
Durham	30,691	31,454	31,659	32,452	32,296	32,028	32,122	32,654	32,474	1,783	1,761	178
Forsyth	48,256	49,599	50,708	51,350	51,810	51,838	52,347	52,612	53,162	4,906	3,094	1,352
Guilford	67,065	68,759	70,353	71,239	71,503	71,294	71,682	71,995	72,461	5,396	4,174	958
Johnston	26,147	27,596	29,107	30,327	31,381	31,831	32,320	32,729	33,384	7,237	4,180	2,003
Mecklenburg	118,463	123,706	128,907	132,170	133,944	133,584	135,562	137,913	141,102	22,639	13,707	7,158
Orange	6,670	6,739	6,860	6,971	7,031	7,080	7,182	7,340	7,381	711	301	350
Wake	114,068	120,504	128,072	134,002	137,706	139,599	143,289	146,687	149,508	35,440	19,934	11,802

Percent Growth in 20th Day Enrollment Figures												
School District	2004-05 to 2005-06	2005-06 to 2006-07	2006-07 to 2007-08	2007-08 to 2008-09	2008-09 to 2009-10	2009-10 to 2010-11	2010-11 to 2011-12	2011-12 to 2012-13	2004-05 to 2012-13	2004-05 to 2007-08	2008-09 to 2012-13	
Chapel Hill-Carrboro	2.0%	1.6%	2.9%	1.8%	-0.4%	0.8%	1.7%	2.1%	13.1%	6.6%	4.2%	
Durham	2.5%	0.7%	2.5%	-0.5%	-0.8%	0.3%	1.7%	-0.6%	5.8%	5.7%	0.6%	
Forsyth	2.8%	2.2%	1.3%	0.9%	0.1%	1.0%	0.5%	1.0%	10.2%	6.4%	2.6%	
Guilford	2.5%	2.3%	1.3%	0.4%	-0.3%	0.5%	0.4%	0.6%	8.0%	6.2%	1.3%	
Johnston	5.5%	5.5%	4.2%	3.5%	1.4%	1.5%	1.3%	2.0%	27.7%	16.0%	6.4%	
Mecklenburg	4.4%	4.2%	2.5%	1.3%	-0.3%	1.5%	1.7%	2.3%	19.1%	11.6%	5.3%	
Orange	1.0%	1.8%	1.6%	0.9%	0.7%	1.4%	2.2%	0.6%	10.7%	4.5%	5.0%	
Wake	5.6%	6.3%	4.6%	2.8%	1.4%	2.6%	2.4%	1.9%	31.1%	17.5%	8.6%	

20th Day figure is characterized as Membership Last Day for Month 1 which is equal to the figure Wake provides for 20th Day.  
 Assumption made that is true for other districts, as well.

Open Items

## Enrollment Projections

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“How successful have the Municipalities, County, WCPSS and OREd been with area projections?”

## Enrollment Projections

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Comparison of 2005 and 2008 projections to actual student residence, based on...

- Land Use data collected from Wake County municipal/county planners in 2005, 2008, and 2012.
- Actual student population data by residence (WCPSS geocoded database) in 2008 and 2012.

## Open Items

# 2005 Forecast for 2008-09 by Planning Region

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	<b>Forecast</b>	<b>Actual 2008-09</b>	<b>Difference</b>
Central	7.3%	7.8%	0.5
Far East	4.0%	3.2%	0.8
Near East	15.3%	13.8%	1.5
North	11.6%	12.9%	1.3
North-Central	7.9%	8.2%	0.3
North-West	7.1%	7.3%	0.2
South-East	9.5%	9.2%	0.3
South-West	14.9%	14.8%	0.1
West-North	8.4%	8.9%	0.5
West-South	13.9%	13.9%	0.0
<b>Total:</b>	<b>100%</b>	<b>100%</b>	

## Open Items

# 2008 Forecast for 2012-13 by Planning Region

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	<b>Forecast</b>	<b>Actual 2012-13</b>	<b>Difference</b>
Central	7.4%	7.3%	0.1
Far East	4.0%	3.0%	1.0
Near East	14.6%	13.9%	0.7
North	13.0%	12.9%	0.1
North-Central	7.6%	7.9%	0.3
North-West	7.0%	7.3%	0.3
South-East	8.9%	8.8%	0.1
South-West	15.0%	15.3%	0.3
West-North	9.1%	10.3%	1.2
West-South	13.5%	13.3%	0.2
<b>Total:</b>	<b>100%</b>	<b>100%</b>	

## Open Items

# Enrollment Projections

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- Large-scale developments in eastern regions anticipated in 2005 forecast did not materialize. The 2008 forecast scaled these back.
- Effects of economic downturn impacted build-outs for residential development throughout the county and particularly in eastern regions.
- Comparing the 2005-to-2008 and 2008-to-2012 forecast periods, accuracy of the forecast improved.

# Elementary Schools Overcrowded/Under Enrolled

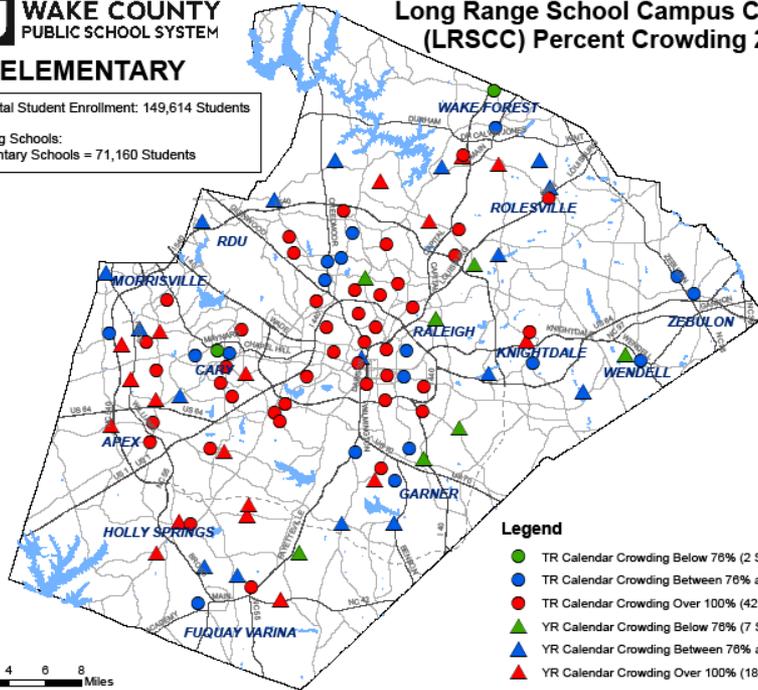


**WAKE COUNTY PUBLIC SCHOOL SYSTEM**

## ELEMENTARY

2012-13 Total Student Enrollment: 149,614 Students  
 169 Existing Schools:  
 105 Elementary Schools = 71,160 Students

**Long Range School Campus Capacities (LRSCC) Percent Crowding 2012-13**



**Legend**

- TR Calendar Crowding Below 76% (2 Schools)
- TR Calendar Crowding Between 76% and 99% (19 Schools)
- TR Calendar Crowding Over 100% (42 Schools)
- ▲ YR Calendar Crowding Below 76% (7 Schools)
- ▲ YR Calendar Crowding Between 76% and 99% (17 Schools)
- ▲ YR Calendar Crowding Over 100% (18 Schools)

0 1 2 4 6 8 Miles  
 Cartographer: Sarah Beth Gentry, RES/WCPSS

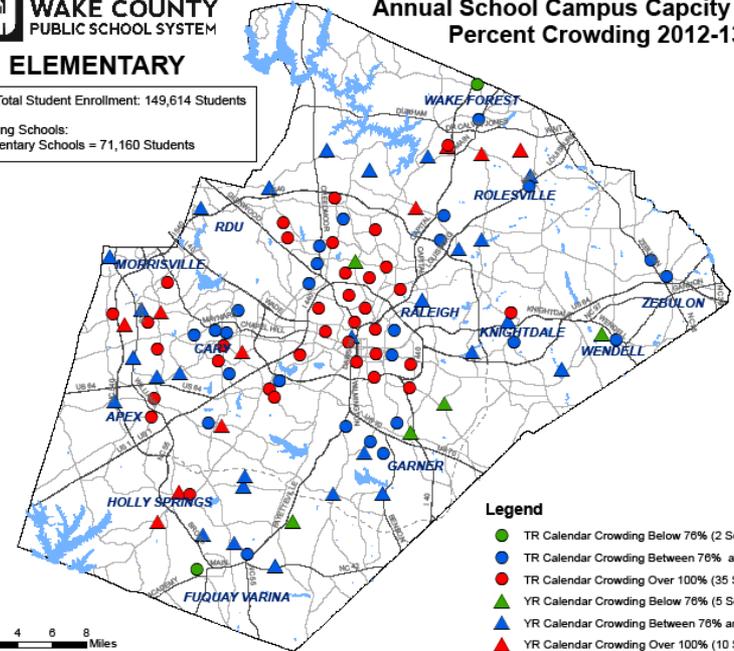


**WAKE COUNTY PUBLIC SCHOOL SYSTEM**

## ELEMENTARY

2012-13 Total Student Enrollment: 149,614 Students  
 169 Existing Schools:  
 105 Elementary Schools = 71,160 Students

**Annual School Campus Capacity (ASCC) Percent Crowding 2012-13**



**Legend**

- TR Calendar Crowding Below 76% (2 Schools)
- TR Calendar Crowding Between 76% and 99% (26 Schools)
- TR Calendar Crowding Over 100% (35 Schools)
- ▲ YR Calendar Crowding Below 76% (5 Schools)
- ▲ YR Calendar Crowding Between 76% and 99% (27 Schools)
- ▲ YR Calendar Crowding Over 100% (10 Schools)

0 1 2 4 6 8 Miles  
 Cartographer: Sarah Beth Gentry, RES/WCPSS

# Middle School Overcrowded/Under Enrolled



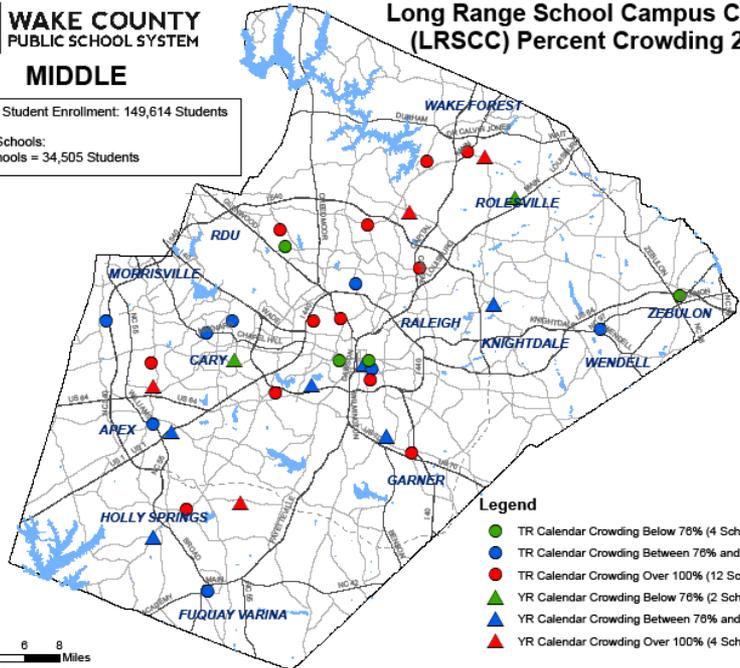
**WAKE COUNTY**  
PUBLIC SCHOOL SYSTEM

## MIDDLE

**Long Range School Campus Capacities (LRSCC) Percent Crowding 2012-13**

2012-13 Total Student Enrollment: 149,614 Students

169 Existing Schools:  
36 Middle Schools = 34,505 Students



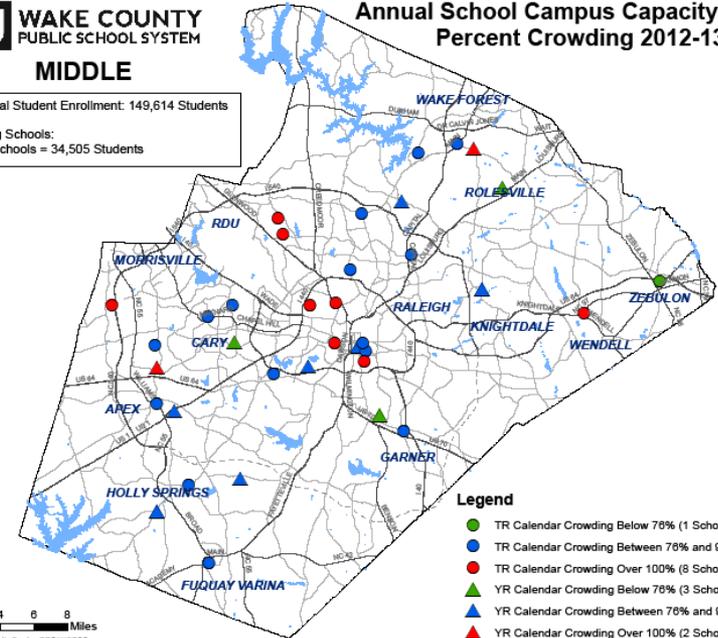
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## MIDDLE

**Annual School Campus Capacity (ASCC) Percent Crowding 2012-13**

2012-13 Total Student Enrollment: 149,614 Students

169 Existing Schools:  
36 Middle Schools = 34,505 Students



# High School Overcrowded/Under Enrolled



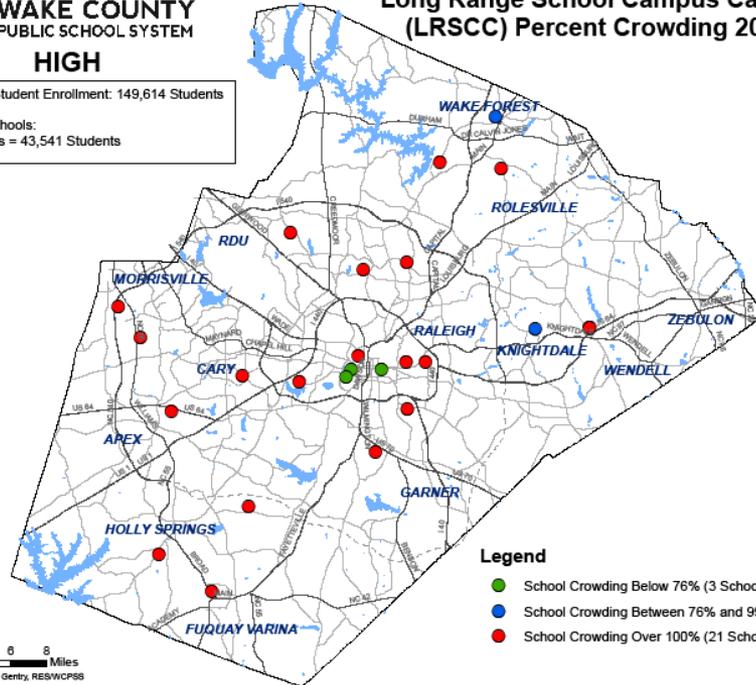
**WAKE COUNTY**  
PUBLIC SCHOOL SYSTEM

## HIGH

2012-13 Total Student Enrollment: 149,614 Students

169 Existing Schools:  
27 High Schools = 43,541 Students

**Long Range School Campus Capacities (LRSCC) Percent Crowding 2012-13**



**Legend**

- School Crowding Below 76% (3 Schools)
- School Crowding Between 76% and 99% (3 Schools)
- School Crowding Over 100% (21 Schools)



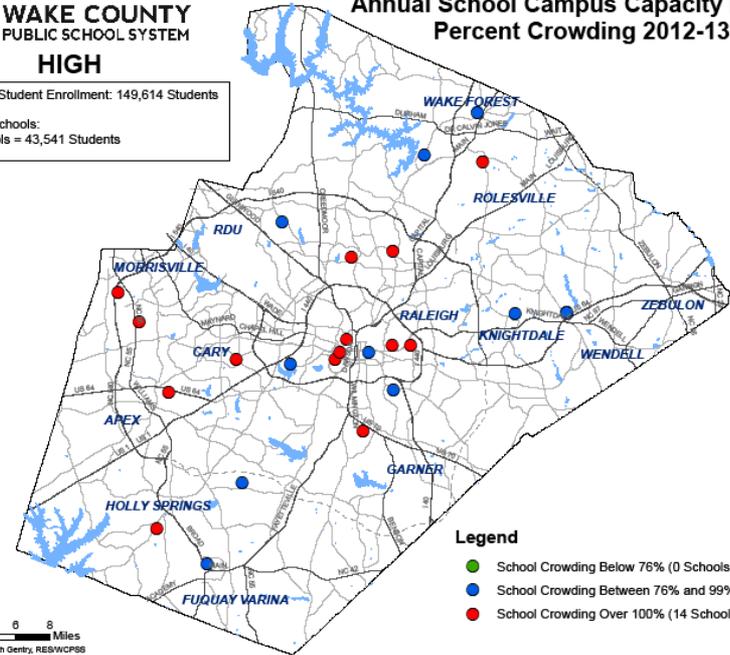
**WAKE COUNTY**  
PUBLIC SCHOOL SYSTEM

## HIGH

2012-13 Total Student Enrollment: 149,614 Students

169 Existing Schools:  
27 High Schools = 43,541 Students

**Annual School Campus Capacity (ASCC) Percent Crowding 2012-13**



**Legend**

- School Crowding Below 76% (0 Schools)
- School Crowding Between 76% and 99% (13 Schools)
- School Crowding Over 100% (14 Schools)



0 1 2 4 6 8 Miles  
Cartographer: Sarah Beth Gentry, REB/WCPSS



0 1 2 4 6 8 Miles  
Cartographer: Sarah Beth Gentry, REB/WCPSS

# Charter Schools

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- 17 Charter Schools in Wake County since 1997
- Bonner Academy, John Baker High, Sankore School and SPARC Academy are no longer in operation
- Eight charters have been in operation since 1999-2000 school year

# Membership Projection (Dec 2012):

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	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Elementary Membership	71,190	72,458	73,459	75,398	77,171	79,348	81,857	84,653	87,557
Middle Membership	34,631	35,572	36,399	36,360	36,992	37,666	38,968	39,836	40,715
High Membership	43,687	44,654	46,076	47,587	48,847	50,283	51,090	52,085	53,280
Total	<b>149,508</b>	152,684	155,934	159,345	<b>163,010</b>	167,297	171,915	176,574	181,552

**Total membership growth by 2016: 13,502**

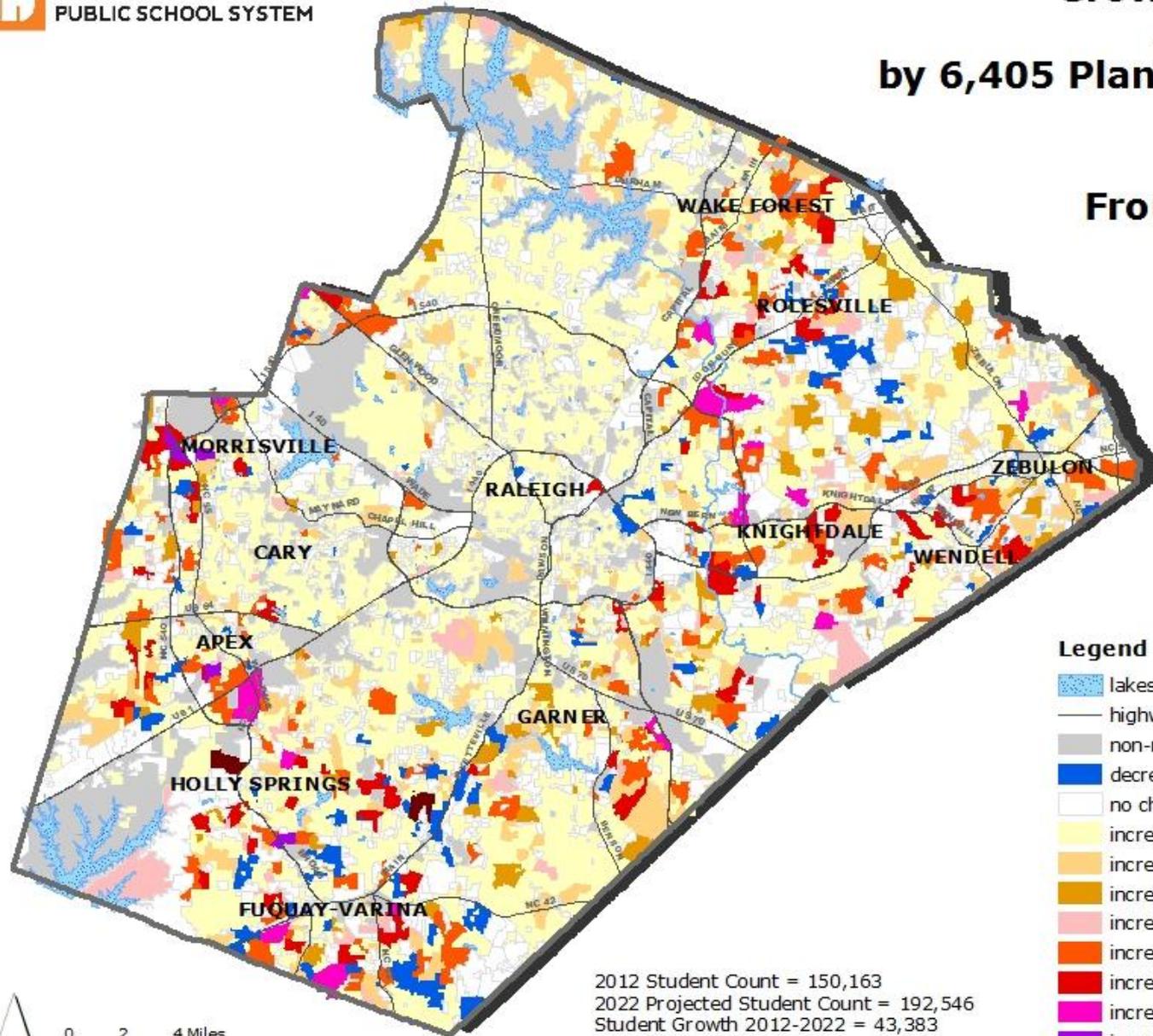
# New School Projection Based on Growth Only:

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	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Elementary Membership	0	1.6	2.9	5.4	7.7	10.5	13.7	17.3	21.0
Middle Membership	0	.7	1.4	1.4	1.8	2.4	3.4	4.1	4.8
High Membership	0	.4	1.1	1.7	2.3	20.9	3.3	3.7	4.2
Total	0	2.7	5.4	8.6	11.8	15.9	20.4	25.2	30.1

# Growth Distribution ALL STUDENTS by 6,405 Planning Units (PU) of Residence

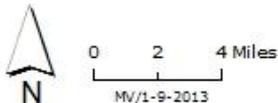
**From 2012 to 2022**



**Legend**

- lakes
- highways
- non-residential (696)
- decrease between 1 and 11 (105 PU)
- no change (2,176 PU)
- increase between 1 and 10 (2,750 PU)
- increase between 11 and 20 (267 PU)
- increase between 21 and 30 (89 PU)
- increase between 31 and 40 (72 PU)
- increase between 41 and 100 (160 PU)
- increase between 101 and 200 (68 PU)
- increase between 201 and 300 (16 PU)
- increase between 301 and 400 (4 PU)
- increase between 401 and 496 (2 PU)

2012 Student Count = 150,163  
 2022 Projected Student Count = 192,546  
 Student Growth 2012-2022 = 43,383



## Projects at Existing Schools:

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- Major Renovations or Replacement
  - Whole Campus or Partial Campus
- Life Cycle Replacements or Repairs
- Support and Athletic Facilities
- Overdue Major and Life Cycle
  - 1,118,902 SF over 40 years since a Major Reno
  - \$167 M in systems that have exceeded the life cycle

## Projects at Existing Schools:

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- Project priority considerations:
  - Building condition;
  - Health, safety, accessibility, and learning environment;
  - Support of today’s educational programming;
  - Welcoming facility to attract students;

# Projects at Existing Schools

## Major Renovations

### WHOLE CAMPUS

IIIA	IIIB	Bond (\$M)			New Permanent/ Existing Temp Seats	SF over 40 in 2015 (000s)	Approx. cost today (\$M)	% of campus over 40 in 2015	Schools	Comments	RANKINGS				TOTAL
		2000	2004	2006							Academic Program	Student Assignment	Campus Bldg Cond	Health & Safety	
										15%	15%	35%	35%		
3					187/92	31	24	43%	Green Elem	Preliminary Design(swing to Spring Forest)	2	2	2	5	3.1
2					293/115	42	22	58%	Vandora Springs Elem	Preliminary Design	7	10	1	1	3.3
	5				TBD/253	44	23	53%	Lincoln Heights Elem	No Preliminary Design	5	1	6	3	4.1
	2	1			0/0	0	14	0%	Wiley Elem	Preliminary Design	6	12	4	2	4.8
	5				63/23	40	24	53%	Brooks Elem	Preliminary Design(swing to SF after Green).	10	6	3	4	4.9
	3	1			496/552	135	67	52%	Garner High	Preliminary Design (use H8 for swing for 1 yr).	4	5	5	6	5.2
2		1			398/230	35	23	51%	Stough Elem	Preliminary Design (swing to SF after Brooks)	8	4	7	7	6.7
		1	1	1	359/312	0	46	0%	East Wake Middle	Preliminary Design	1	3	8	10	6.9
	5	1		1	26/208	22	31	15%	West Millbrook Middle	Preliminary Design	12	7	9	8	8.8
	9				584/840	108	49	44%	Apex High	Preliminary Design	3	11	10	12	9.8
					TBD/299	27	23	39%	North Ridge Elem	No Preliminary Design	9	9	12	9	10.1
	7			1	584/552	105	60	44%	Fuquay Varina High	Preliminary Design	11	8	11	11	10.6

#### NOTES

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

#### Instructions:

School Performance, Transformation, and Facilities will rank each school in priority order with "1" being the highest priority and "12" being the lowest priority. No two schools can have the same priority in one category. Once all schools have been ranked in each of the four categories, the chart will be summed using the weighting at the top of each category. The school with the lowest number is the highest priority, and highest score is the lowest priority. The ranking will be used to determine which schools have the highest priority for renovation in the next building program. The available funds for renovations in the next building program will determine how many of these high priority schools are included.

#### Categories

**Academic Program**  
**Student Assignment**  
**Bldg Condition**  
**Health & Safety**

Suitability of building to desired educational program  
 Capacity increase potential, Optimum use of facilities  
 Quality of roofing, plumbing, electrical, mechanical systems, code compliance  
 Indoor air quality (HVAC), lead paint, mold, building safety systems, pedestrian and vehicular safety

# Projects at Existing Schools

## Major Renovations

### PARTIAL CAMPUS

IIIA	IIIB	Bond (\$M)			New Permanent / Existing Temp Seats	SF over 40 in 2015 (000s)	Approx. cost today (\$M)	% of campus over 40 in 2015	Schools	Comments	RANKINGS				TOTAL
		2000	2004	2006							Academic Program	Student Assignment	Campus Bldg Cond	Health & Safety	
3		8		1	78/546	21	16	14%	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			3	0/92	50		63%	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			0/207	9	5	12%	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			0/46	0	13	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	0	3	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		0/288	19		6%	Broughton High	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			0/46	9		13%	Swift Creek Elem	Renovate Gym Bldg (1954). Upgrade kitchen & provide new equipment. Replace flooring Kindergarten Bldg. Address traffic issues & site circulation. Impervious surface issues.	14	8	8	6	8.2
	2			1	TBD/184	4	8	6%	Fuller 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.	12	2	10	8	8.4

#### 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.

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.

# Projects at Existing Schools

## Major Renovations

### PARTIAL CAMPUS

New Permanent /Existing Temp Seats									RANKINGS				TOTAL		
Bond (\$M)				SF over 2015 (000s)	Approx. cost today (\$M)	% of campus over 40 in 2015	Schools	Comments	Academic Program 15%	Student Assignment 15%	Campus Bldg Cond 35%	Health & Safety 35%			
4			28	10	26/0	71	30	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: playfields, basketball courts, vehicular & pedestrian circulation, and parking upgrades.	8	7	5	14	8.9
	2		30		64/432	59	24	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			3	0/138	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 parking.	6	6	11	11	9.5
	3	4			0/184	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			0/0	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				0/240	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	0/192	52		12%	Enloe 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.

# Life Cycle Replacement and Repairs

Sum of Estimated Cost	Estimate Next (Completion Year)											
Component	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
ADA					936,573	7,239,881	6,341,830		8,821,766			
Asbestos					69,365		686,397		1,102,916			
Asphalt Elem Track									2,099,227			
Asphalt Paving						3,734,611	785,029	782,493	729,414	2,030,714	2,783,107	1,500,187
Boiler	1,101,650	313,150	155,450	230,050	53,000	364,000	403,950	676,750	166,450	817,400	415,500	325,500
Brick Wall					154,000							
Carpet	912,984	1,550,656	292,280	762,904	1,584,128	2,334,608	1,140,704	772,608	372,288		727,232	
Chair Lift	54,000										135,000	108,000
Chiller							424,200	424,200		403,000	193,200	346,800
Cleaning - Exterior				62,215		74,243						
Controls										4,744,000		
Controls & Instrumentation	156,780		2,971,690		93,400							
Cooler/Freezer		78,000		54,000	54,000	90,000						
Cooling Tower	60,550	65,625			114,600		140,150		109,550	191,600	248,500	
Elevator	136,000		67,000	138,000		67,000	67,000			67,000	272,000	134,000
Exterior Doors	93,000		72,550	107,400	113,440		73,160			187,320		725,320
Exterior Walls									1,500,000			
Exterior Windows	426,991		702,613	402,670		535,770	107,730		334,010			387,260
FAR roof system							86,993	60,572		251,249	454,066	56,977
Fencing						205,060	105,644					
Fire Alarm System	465,000	345,000	419,250	320,000	1,155,000	1,719,142	640,000	412,000	324,000		646,500	
Hardwood Flooring	357,896	484,225	76,466	243,764		51,052	229,230	76,672	148,823	77,564		780,685
HVAC System	1,400,282	214,786	8,977,202	476,450	815,100	6,459,355	18,803,616	914,940	8,360,742	606,840	4,394,650	615,420
Lighting	382,042	782,890	190,702	440,197	85,619	1,841,618	607,365	506,522	743,811		129,762	183,111
MB roof system					63,540		1,944,934		502,774	1,610,179	2,606,335	2,083,471
Paint				82,000		112,000						
Paint - Exterior											142,490	
Paint - Interior	1,501,120	1,823,790	869,847	2,231,124	2,419,036	2,659,931	1,654,412	1,445,191	1,683,256		1,587,030	1,216,591
Playground	75,710		216,030	240,800		100,480		216,030	377,150	532,540	227,130	692,860
Plumbing Fixtures	65,000						217,800					
Sealant				66,474		183,574			167,515		151,839	
Security System			55,000	150,000	85,000	405,000	160,000	160,000	270,000	180,000	190,000	
SHINGLE							52,658					
SP roof system										127,396		
SSMR roof system							151,381			2,159,724	92,818	
Switchgear	3,578,350	3,019,660	432,890	185,370	1,778,990	2,730,750	840,790	1,458,550	2,262,550	432,890	395,900	2,198,280
Synthetic Surfacing			202,738			139,389			773,383	1,103,798	756,619	462,374
VCT	1,149,487	2,344,160	210,991	720,323	1,407,784	2,654,956	778,355	645,047	161,725	56,109		
<b>Grand Total</b>	<b>\$11,916,842</b>	<b>\$11,021,942</b>	<b>\$15,912,699</b>	<b>\$6,913,740</b>	<b>\$10,982,575</b>	<b>\$33,702,421</b>	<b>\$36,443,327</b>	<b>\$8,551,575</b>	<b>\$31,198,668</b>	<b>\$15,392,003</b>	<b>\$16,549,677</b>	<b>\$11,816,836</b>
<b>Cumulative Totals</b>	<b>\$11,916,842</b>	<b>\$22,938,784</b>	<b>\$38,851,483</b>	<b>\$45,765,224</b>	<b>\$56,747,798</b>	<b>\$90,450,219</b>	<b>\$126,893,546</b>	<b>\$135,445,121</b>	<b>\$166,643,789</b>	<b>\$182,035,792</b>	<b>\$198,585,469</b>	<b>\$210,402,305</b>



# Support and Athletic Facilities

<b>Four Regional Bus Transportation Centers</b>	<b>approx \$8M each</b>
Deferred from Last Bond; currently have two sites acquired Additional Maintenance Capacity Needed/Efficiency Gains	
<b>Athens Stadium Upgrades</b>	<b>\$500K- \$4.4M</b>
ADA issues/Program shortfalls	
<b>Elementary School Tracks (53 schools need track upgrades)</b>	<b>\$2M</b>
Schools that do not have a track or the track lacks suitable surface	
<b>Convert 3 High Schools with Limited Outdoor Program to Artificial Turf</b>	<b>\$2-3M</b>
Allows more PE, athletic and non-athletic programs on same field	
<b>Energy Savings Initiatives</b>	<b>\$5-15M</b>
Alternative to Performance Contracting	
<b>Rock Quarry Industrial Complex Upgrades and Repairs (22 yrs Old)</b>	<b>&gt;\$5M</b>
HVAC, Roof, Bus maintenance and Purchasing warehouse capacity increase	
<b>Regional Athletic Stadium or Complex</b>	<b>\$10-30M</b>
<b>Basketball/Volleyball</b>	
<b>Baseball/Softball</b>	
<b>Football/Soccer/Lacrosse</b>	
<b>Tennis/Track and Field</b>	
<b>Band Performances/Competition</b>	
<b><u>Cary HS /Apex HS/Garner HS/Fuquay HS/Athens HS Stadium (Major Renovations)</u></b>	
Add missing programs to tight school sites and reduce cost of major renovations	
<b><u>West Apex HS/H7/H8/H13/+2</u></b>	
Reduce cost of new HS construction	
<b><u>Regional Bus Transportation Center</u></b>	
Reduce cost of Transportation Center construction	
<b><u>Joint Use and Maintenance with Municipality</u></b>	
Reduce cost of Regional Complex construction and maintenance	

# Total Capital Improvement Plan

---

- New Schools
- Major Renovations
- Life Cycle Repairs
- Support and Athletic Facilities
- Environmental and Accessibility
- Furniture and Educational Equipment
- Technology Infrastructure and Equipment
- Public Improvements (roads, utilities, etc)
- Temporary Classrooms
- Program Management
- Facility Assessments
- Land Acquisition
- Start Up Designs
- **WHAT HAS PRIORITY?**

# Facility Utilization Report

## Factors That Impact Capacity

---

- Long-Range School Campus (LRSCC)
  - Is the capacity that can be supported by the building (based on models) plus the optimum number of mobiles per campus
- Changes
  - Grade Levels
  - Program Offerings (Common Core, Special Needs, Magnet, etc.)
  - Student/Teacher Ratios
  - Number of Permanent Classrooms
  - Calendar: Traditional vs. Year-Round
  - New School Startup
  - Renovations: Swing Space vs. Phased

# Facility Utilization Report

## Factors That Impact Capacity

---

- Annual School Campus Capacity (ASCC)
  - Is the capacity that can be supported by the building (based on models) plus all the mobile units available for instructional purposes and adjustments for actual programs assigned to a school
- Changes
  - Special Education MOE Allotments (Adaptive Curriculum/Regional Programs, Resource, OCS, etc.)
  - General Education MOE Allotments (Title 1, Intervention, LEP, AG, etc.)
  - Early Learning Allotments (Pre-K)
  - Push-In/Pull-Out Programs; Programs sharing the same space; Inclusion
  - Conversion of Allotments
  - Number of Temporary Classrooms

# Calculation Assumptions

---

- **Student/Classroom Ratios**

- Are based on required system-wide numbers of students per classroom
  - NCGS115C-301(c) - (i) governs class sizes and maximum teaching loads for kindergarten through third grade.
  - Fourth through twelfth grade allotments are based on prior guidelines for maximum student achievement.

<u>Grade Level</u>	<u>Ratio</u>
Kindergarten	21
Grades 1-3	21
Grades 4-5	26
Middle	26
High	24

# Calculation Assumptions (continued)

---

- **Annual School Campus Capacity (ASCC)**
  - Adjustments for the actual programs assigned to a school would be a reflection of the following changes:
    - The 2013 Early Learning (Pre-K) 3-year master plan
    - The 2013 Special Education (regional programs) 3-year master plan
    - Current Resource and General Education allotments (LEP, Intervention, AG, etc.) when a school is at full capacity
    - Anticipated Resource and General Education allotments when a school is not at full capacity

# Calculation Assumptions (continued)

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- **Optimum Number of Instructional Temporary Units**
  - Has been defined as the number of units that meet the following criteria:
    - can be physically accommodated on the site;
    - are permissible by the authorities having jurisdiction and by zoning, etc.;
    - can be supported by no more than one toilet trailer unit;
    - can be supported by dining room facilities with no more than 3 seatings based on Department of Public Instruction Guidelines
    - can be accommodated within 300 feet of the closest building access point;
    - can be supported by specialized educational program spaces like Career Technical Education, science, gym, etc.; and,
    - can be supported by vehicle traffic patterns.

# Example of Two Schools

Column:		A	B	C = A+ (B*SF)	D	E (D*SF)	F	G = (C+E+F)	
Program Model	School Name	Optimum Facilities Utilization				2012-13 Annual Adjustments			
		Number of Perm. Learning Spaces	School Building Capacity [SBC]	Optimum Temp. Classrms	Long-Range School Campus Capacity	+ / - Existing Temp Classrms	+ / - Existing Temp Classrms Capacity	+ / - Program Adjust-ment	Annual School Campus Capacity [ASCC]
Large	Elementary School	51	800	2	846	(2)	(46)	88	888
Large	Elementary School	51	800	2	846	0	0	(75)	771

# Steps to Compute School Capacity (continued)

A Low Needs Example		A High Needs Example	
Model - Actual = Program Adjustment		Model - Actual = Program Adjustment	
Pre-K	$1 - 1 = 0$	Pre-K	$1 - 1 = 0$
Self-Contained	$4 - 1 = 3$	Self-Contained	$4 - 2 = 2$
Resource	$4 - 3 = 1$	Resource	$4 - 5 = -1$
General Ed.	$4 - 3 = 1$	General Ed.	$4 - 7.5 = -3.5$
Pre-K	$0 \times 23 = 0$	Pre-K	$0 \times 23 = 0$
Self-Cont.	$3 \times (23-9) = 42$	Self-Cont.	$2 \times (23-9) = 28$
Resource	$1 \times 23 = 23$	Resource	$-1 \times 23 = -23$
General Ed.	$1 \times 23 = \underline{23}$	General Ed.	$-3.5 \times 23 = \underline{-80}$
<b>Total</b>	<b>88</b>	<b>Total</b>	<b>-75</b>

# Example of Two Schools

Column:		A	B	C = A+ (B*SF)	D	E (D*SF)	F	G = (C+E+F)	
Program Model	School Name	Optimum Facilities Utilization				2012-13 Annual Adjustments			
		Number of Perm. Learning Spaces	School Building Capacity [SBC]	Optimum Temp. Classrms	Long-Range School Campus Capacity	+ / - Existing Temp Classrms	+ / - Existing Temp Classrms Capacity	+ / - Program Adjust-ment	Annual School Campus Capacity [ASCC]
Large	Elementary School	51	800	2	846	(2)	(46)	88	888
Large	Elementary School	51	800	2	846	0	0	(75)	771

# Assumptions for new schools...

---

- The seat shortfall is reduced by the number of vacant seats in the entire system
- Assume 95% and 97.5% utilization for flexibility;
- Assume all optimum number of temporary classrooms in use;
- Assume new schools are traditional calendar;
- Rate of economic recovery impacts rate of enrollment growth.
- Students can “Grandfather” at Current School
- Schools Open with Partial Enrollment

# How Long to Build a School?

---

- If we own the land
- If we reuse an existing design
  - Elementary School -- 30 Months
  - Middle School -- 38 Months
  - High School -- 46 Months
- Remember schools open in July and August

# New School Projection:

---

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Elementary Membership	7	9	10	12	15	18	21	25	29
Middle Membership	1	2	2	2	3	4	5	5	6
High Membership	3	3	3	3	3	3	4	4	5
Total	11	14	15	17	21	25	30	34	40

# New School Projections

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<b># of New Schools 2015-2020</b>	<b>Growth Only</b>	<b>95% /97.5% LRSCC</b>	<b># Years to Open</b>	<b>Growth Average / Year</b>	<b>LRSCC Average/ Year</b>
Elementary	21	29	5	4.2	5.8
Middle	5	6	3	1.7	2.0
High	4	5	3	1.3	1.7
Total	30	40		7.2	9.5

# New School Projections

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<b>Open</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
ES	2	4	4	5	5	6	26
MS	-	1	1	2	1	1	6
HS	-	2	1	-	1	1	5
<b>Total</b>	<b>2</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>37</b>

# New School Projections

---

Open	2015	2016	2017	2018	2019	2020	Total
ES	2	4	4	5	5	6	26
MS	-	1	1	2	1	1	6
HS	-	2	1	-	1	1	5
Total	2	7	6	7	7	8	37

Bid \$	2014	2015	2016	2017	2018	2019
ES	44	88	88	110	110	132
MS	41	41	82	41	41	?
HS	134	67	0	67	67	?
Total	\$219M	\$196M	\$170M	\$218M	\$218M	\$?M

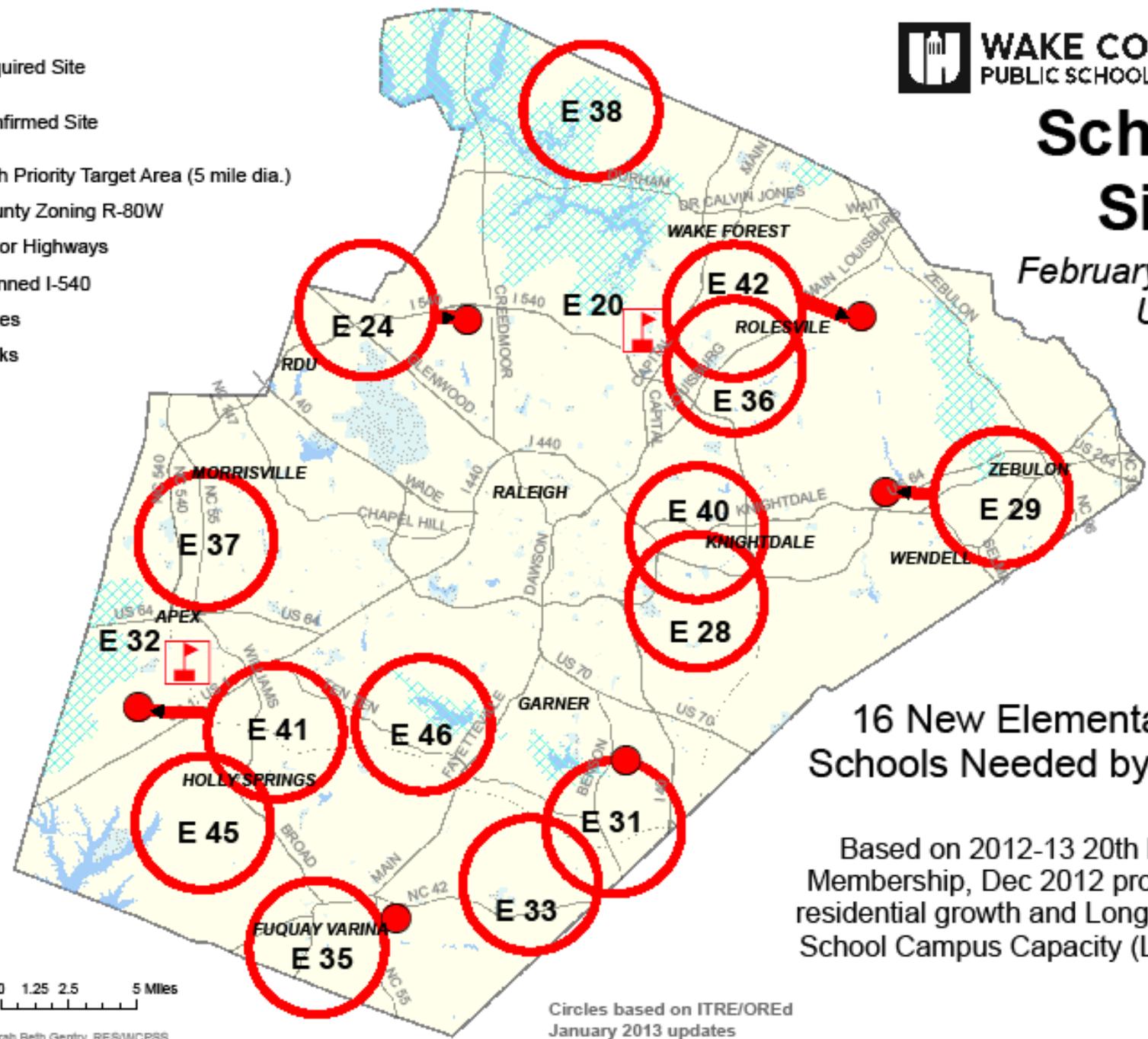
### Legend

-  Acquired Site
-  Confirmed Site
-  High Priority Target Area (5 mile dia.)
-  County Zoning R-80W
-  Major Highways
-  Planned I-540
-  Lakes
-  Parks



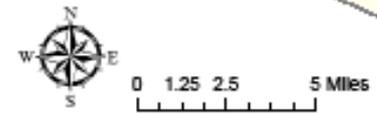
# School Sites

February 2013  
Update



**16 New Elementary Schools Needed by 2016**

Based on 2012-13 20th Day Membership, Dec 2012 projected residential growth and Long Range School Campus Capacity (LRSCC)



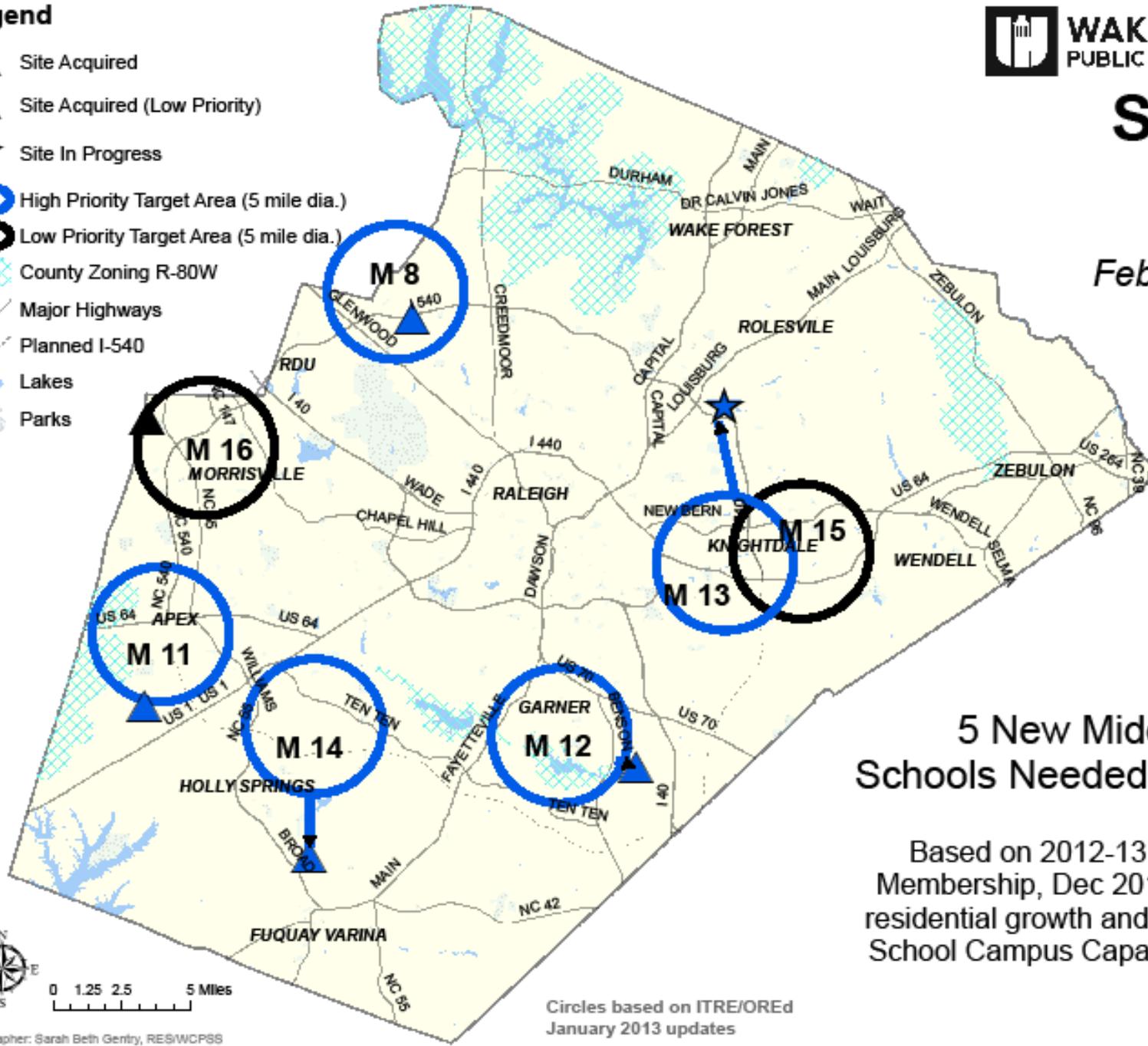
Circles based on ITRE/ORED January 2013 updates

# School Sites

February 2013  
Update

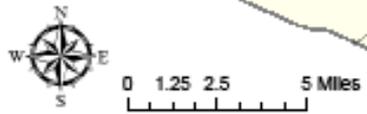
## Legend

-  Site Acquired
-  Site Acquired (Low Priority)
-  Site In Progress
-  High Priority Target Area (5 mile dia.)
-  Low Priority Target Area (5 mile dia.)
-  County Zoning R-80W
-  Major Highways
-  Planned I-540
-  Lakes
-  Parks



### 5 New Middle Schools Needed by 2016

Based on 2012-13 20th Day Membership, Dec 2012 projected residential growth and Long Range School Campus Capacity (LRSCC)



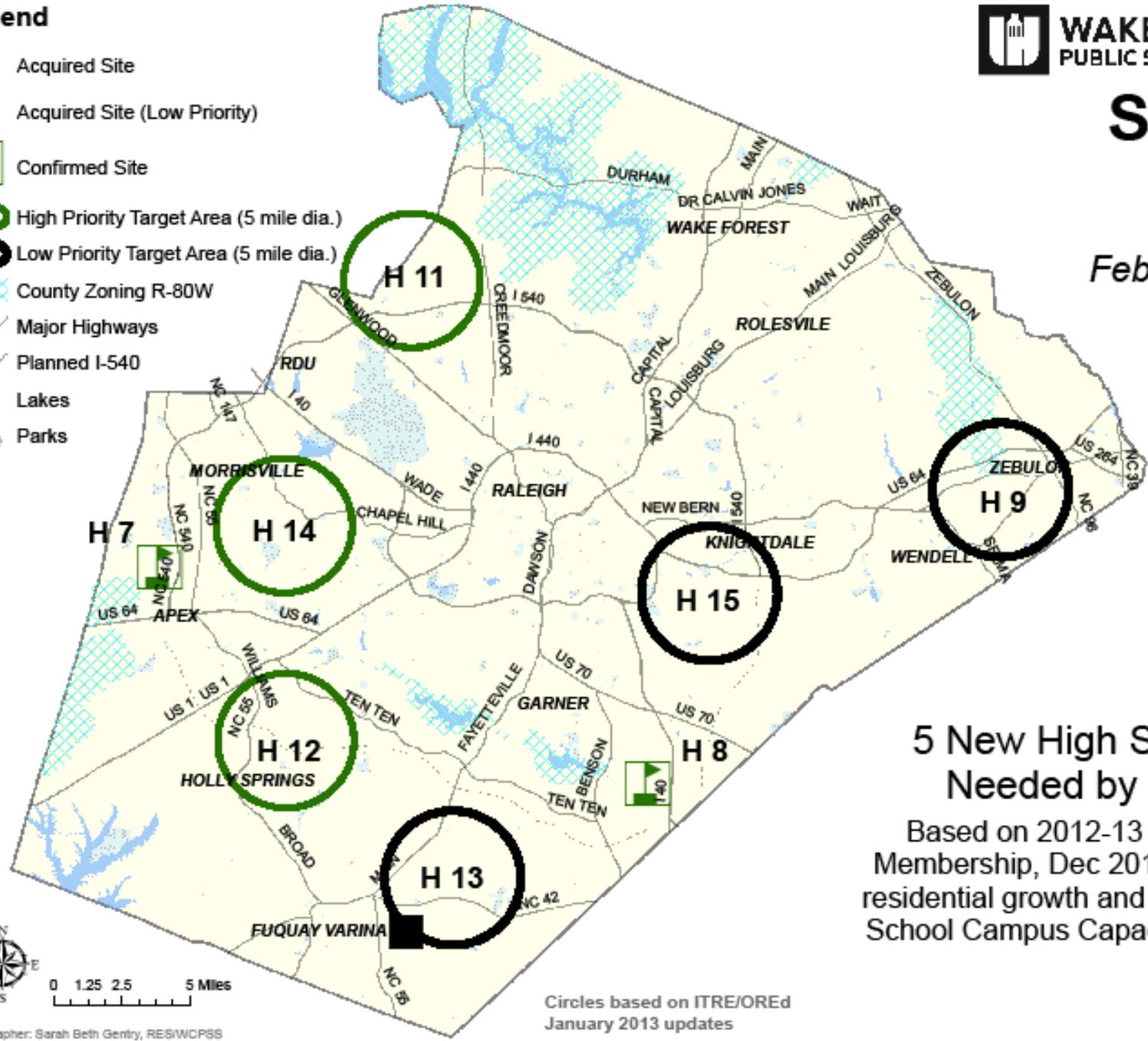
Circles based on ITRE/OREd  
January 2013 updates

# School Sites

February 2013  
Update

## Legend

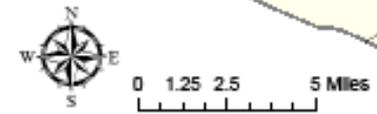
-  Acquired Site
-  Acquired Site (Low Priority)
-  Confirmed Site
-  High Priority Target Area (5 mile dia.)
-  Low Priority Target Area (5 mile dia.)
-  County Zoning R-80W
-  Major Highways
-  Planned I-540
-  Lakes
-  Parks



### 5 New High Schools Needed by 2016

Based on 2012-13 20th Day  
Membership, Dec 2012 projected  
residential growth and Long Range  
School Campus Capacity (LRSCC)

Circles based on ITRE/OREd  
January 2013 updates



# Planning Assumptions

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- Purpose: set basic assumptions that would be used to determine scope and cost of a bond
- CIP 2006 Planning Assumptions
  - Joint staffs developed preliminary assumptions
  - BOE approved a list of 21 assumptions
  - 18 month joint discussion between BOE and BOC
  - Approved September 2005 by both boards
  - Amended in May 2006 by BOE in order to reduce bond below \$1 B
- Joint staffs have updated the assumptions
- BOE reviewed and approved changes to assumptions July 2012 in preparation for joint discussion with BOC

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2. Education Program
3. Pre-Kindergarten, Ages 3-4
4. Kindergarten Program
5. Technology

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6. School Campus Capacity
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9. Student Enrollment Projections

## **Land and Building**

10. Energy and Environmental Guidelines
11. Renovation of Existing Facilities
12. New School Size & Space Standards
13. School Site Size & Property Acquisition
14. Support Facilities
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## **Fiscal**

16. Program Price Bases
17. Funding

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# Program

---

## 1. School Grade Configurations:

- Current grade configurations of Pre-K-5, 6-8, and 9-12 will be retained.
- Other grade configurations may be considered based upon educational suitability, space needs and costs analysis.

# Program (continued)

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## 2. Education Program:

- a. Disability law requires the provision of special education and related/special needs services
  - Student/teacher ratio changed from 9 to 8
    - Elementary: 2 Adaptive Curriculum classrooms with the 1:8 ratio and 6 Special Education Services classrooms for pull out
    - Middle: 4 Adaptive Curriculum classrooms with 1:8 ratio and 9 Special Education Services classrooms for pull out
    - High: 2 Adaptive Curriculum classrooms with 1:8 ratio, 3 Occupational Course of Study with 1:12 ratio, and 10 Special Education Services classrooms with 1:12 ratio

# Program (Continued)

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- b. Classrooms Dedicated to Serving General Education Support:
  - Pull Out instruction for Academically Gifted (AG), Intervention, English as a Second Language (ESL), Title I
    - Classrooms: Elementary – 4, Middle – 3, High - 2
  - If the classrooms are not used for these programs, the rooms may convert to space to accommodate students in general classrooms.

## 3. Pre-Kindergarten, Ages 3 through 4:

- Elementary schools will include two classrooms and an outdoor learning environment for students at risk or with disabilities ages 3 through 4.
- If the classrooms are not used for these programs, the room(s) converts to space to accommodate students in grades K-5 and capacity increases.

## 4. Kindergarten Program:

- Full-day kindergarten will continue to be offered

# School Capacity & Membership

---

## 6. Utilization

- based on class size averages and the optimum number of temporary classrooms supported by each school's program and site;
- 95% for elementary and middle schools;
- 97.5% for high schools;
- offers the opportunity to align overcrowded schools with under-utilized ones and eventually bring all schools' utilization in line with their core facilities and site constraints.

# School Capacity & Membership (continued)

---

## – Class Size Ratios:

Grade Level	Class Size Requirements (Grade Span Average)
K-3	21
4-8	26
9-12	24
Special Needs – Self-Contained	8 (Range of 4 to 12)
Pre-K	10 (Range of 4 to 18)

# School Capacity & Membership (continued)

---

## 7. Temporary Classrooms:

- CIP 2006 assumptions called for no more than 8%
- Not implemented when scope of CIP reduced
- Optimum % for ES is 12.5% and less than 5% for MS and HS resulting in system target of 8.5%
- Current % for ES - 17.7%, MS - 13.2%, HS – 18.4%

# School Capacity & Membership (continued)

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## 8. Year-Round Calendar Schools

- Changed from all new schools to only determined by assignment needs
- Full utilization of 4 tracks – 24% to 33% capacity gain
- Elementary
  - 35 - Multi-track
  - 5 - Single track
- Middle School
  - 10 - Multi-track

# Land and Building

---

## 12. New School Size and Space Standards

- School infrastructure, cafeteria, media center, and other core spaces will be designed to accommodate the number of students in permanent buildings, plus additional seats in potential temporary classrooms.
- Alternate and non-traditional sizes of schools and sites will be considered based on availability of property.

# Land and Building (continued)

## Comparison to DPI Standards

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	High End of Range	Middle of Range	Low End of Range	Same	Capacity Driven	Larger than DPI	Smaller than DPI	WCPSS Net SF Diff
ES	6	8.5	4.5	2	16	9	10	-951
MS	3	2	11	4	14	19	12	-3,685
HS	9	7	13	2	28	11	23	-1,329

# Land and Building (continued)

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## 13. School Site Size and Property Acquisition

- No change from last CIP. Will utilize Department of Public Instruction (DPI) guidelines, plus two acres for temporary classrooms and/or additional municipal requirements such as extra queuing.

Grades	Developable Acreage (DPI formula)	Applied to WCPSS Standard School Sizes (without temporary classrooms)	WCPSS Net Usable Acres
K-6	$10 + (1/100 \text{ ADM})$	$10 + (796/100 \text{ ADM}) = 17.96$	20
5-8	$15 + (1/100 \text{ ADM})$	$15 + (1,304/100 \text{ ADM}) = 28.04$	30
9-12	$30 + (1/100 \text{ ADM}) + 10 \text{ acres for parking \& stadium}$	$30 + (2,223/100 \text{ ADM}) + 10 = 62.23$	64

# Joint Use Agreements

<b>Wake County Board of Education Real Estate Revenue and Joint Use Agreement Cost Savings</b>		
<b>Joint Use Agreements:</b>		
Joint Use Agreements are currently in place that effect 63 school sites.		
Current JUA Partners include Wake County, Apex, Cary, Fuquay-Varina, Garner, Holly Springs, Knightdale, Morrisville, Raleigh, Rolesville, Wake Forest, Wendell, Zebulon, Miracle League of the Triangle, Boys & Girls Clubs, and NCSU.		
<b>System Wide JUA Site Projected Maintenance Cost Savings *</b>		
<b>Element</b>	<b>Quantity</b>	<b>Cost Savings</b>
Outdoor Courts	46	\$24,000
Multi-Purpose Fields	46	\$110,400
Baseball Fields	18	\$39,600
Softball Fields	33	\$115,201
Open Space	n/a	\$378,029
Parking Areas	n/a	\$8,000
Irrigation	n/a	\$30,600
Misc. Maintenance Areas (BMPs, Restrooms, lights, drive access, etc.)	n/a	\$39,500
	<b>Total:</b>	<b>\$745,330</b>
<b>Notes:</b>		
<i>* Value of WCPSS maintenance costs ordinarily expended for program elements that are saved by the JUA partners' assumption of maintenance responsibilities.</i>		

# Next Month

---

- Open Items
- Existing Schools
- Other Capital Needs

Schools Which Reached Cap as of 1/17/13

School Year	School Building Capacity (# Seats)	# Optimum Temp Classrooms	Long-range School Campus Capacity (# Seats)	Program Adjustments (# Seats)	# Actual Temp Classrooms	# Permanent Classrooms	Annual School Campus Capacity (# Seats)	20th Day Membership	20th Day Membership/ ASCC	School Building Capacity (# Seats)	# Optimum Temp Classrooms	Long-range School Campus Capacity (# Seats)	Program Adjustments (# Seats)	# Actual Temp Classrooms	# Permanent Classrooms	Annual School Campus Capacity (# Seats)	20th Day Membership	20th Day Membership/ ASCC
<b>Brooks Elementary (Magnet) Cap: 620</b>										<b>Lacy Elementary (Small) Cap: 795 (Major Renovation Completed for 2009-10)</b>								
2003-04	520	0	534	14	0	33	534	462	86.5%	493	3	520	(42)	3	32	520	515	99.0%
2004-05	500	0	523	23	0	33	523	531	101.5%	471	3	558	18	3	32	558	565	101.3%
2005-06	454	0	480	26	0	33	480	589	122.7%	471	3	552	12	6	32	621	672	108.2%
2006-07	454	0	489	35	1	33	512	523	102.1%	471	3	563	23	8	32	678	697	102.8%
2007-08	454	0	512	58	1	33	535	610	114.0%	471	3	552	12	8	32	667	723	108.4%
2008-09	477	1	477	26	1	33	526	507	96.4%	471	4	655	(9)	8	32	646	808	125.1%
2009-10	477	1	477	26	1	33	526	553	105.1%	655	4	655	63	0	40	718	831	115.7%
2010-11	477	1	500	40	1	33	540	576	106.7%	655	2	701	(11)	0	40	644	850	132.0%
2011-12	477	1	500	51	1	33	551	601	109.1%	655	2	701	9	2	40	710	866	122.0%
2012-13	477	1	500	37	1	33	537	582	108.4%	655	2	701	23	2	40	724	807	111.5%
<b>Conn Elementary (Magnet) Cap: 671</b>										<b>Mills Park Elementary Cap: 896 (Large YR2008-2010; Large Traditional 2010-2011 to date)</b>								
2003-04	427	0	378	(49)	2	36	418	468	112.0%	-	-	-	-	-	-	-	-	-
2004-05	427	0	438	11	2	36	484	462	95.5%	-	-	-	-	-	-	-	-	-
2005-06	427	0	428	1	2	36	468	484	103.4%	-	-	-	-	-	-	-	-	-
2006-07	427	0	398	(29)	2	36	438	549	125.3%	-	-	-	-	-	-	-	-	-
2007-08	536	0	490	(46)	2	36	536	629	117.4%	-	-	-	-	-	-	-	-	-
2008-09	536	6	536	(64)	4	36	564	598	106.0%	862	0	1,078	0	0	51	862	654	75.9%
2009-10	536	4	536	(41)	4	36	587	588	100.2%	1,078	0	1,078	0	0	51	1,078	781	72.4%
2010-11	536	2	582	(9)	4	36	619	579	93.5%	800	6	938	88	0	51	888	947	106.6%
2011-12	536	2	582	(9)	4	36	619	622	100.5%	800	6	938	88	0	51	888	993	111.8%
2012-13	536	2	582	(23)	4	36	605	671	110.9%	800	6	938	88	0	51	888	962	108.3%
<b>Davis Drive Elementary (Small) Cap: 920</b>										<b>Underwood Elementary (Magnet) Cap: 546</b>								
2003-04	631	5	783	37	11	39	921	945	102.6%	441	0	441	0	0	33	441	315	71.4%
2004-05	609	0	646	37	11	39	899	928	103.2%	426	0	435	9	0	33	435	409	94.0%
2005-06	609	0	658	49	11	39	911	988	108.5%	426	0	401	(25)	0	33	401	521	129.9%
2006-07	609	0	623	14	13	39	922	971	105.3%	426	0	378	(48)	0	33	378	483	127.8%
2007-08	632	0	621	(11)	13	39	920	1,035	112.5%	458	0	412	(46)	0	33	412	531	128.9%
2008-09	632	0	632	(34)	13	39	897	975	108.7%	458	0	458	17	0	33	475	487	102.5%
2009-10	632	0	632	(34)	13	39	897	945	105.4%	458	0	458	17	0	33	475	524	110.3%
2010-11	632	0	632	(11)	13	39	920	951	103.4%	435	0	435	51	0	33	486	469	96.5%
2011-12	632	0	632	(55)	13	39	876	847	96.7%	435	0	435	51	0	33	486	502	103.3%
2012-13	632	0	632	(55)	13	39	876	978	111.6%	435	0	435	37	0	33	472	545	115.5%
<b>Hunter Elementary (Magnet) Cap: 684</b>										<b>Wiley Elementary (Magnet) Cap: 470</b>								
2003-04	520	2	626	60	3	39	649	608	93.7%	359	0	336	(23)	0	30	336	385	114.6%
2004-05	500	3	615	46	5	39	661	649	98.2%	339	0	362	23	0	30	362	384	106.1%
2005-06	500	3	620	51	5	39	666	743	111.6%	339	0	339	0	0	30	339	387	114.2%
2006-07	500	3	608	39	5	39	654	779	119.1%	339	0	339	0	0	30	339	399	117.7%
2007-08	546	1	546	(23)	5	39	638	829	129.9%	339	0	385	46	0	30	385	386	100.3%
2008-09	546	1	546	(41)	6	39	643	817	127.1%	403	0	403	0	0	30	403	440	109.2%
2009-10	546	1	546	(87)	6	39	597	828	138.7%	403	0	403	0	0	30	403	454	112.7%
2010-11	546	1	569	5	6	39	689	725	105.2%	417	0	417	(11)	0	30	406	465	114.5%
2011-12	546	1	569	0	6	39	684	698	102.0%	417	0	417	(11)	0	30	406	462	113.8%
2012-13	546	1	569	(37)	6	39	647	705	109.0%	417	0	417	(25)	0	30	392	470	119.9%

Notes: Temporary Classroom Capacity is 23 and applied to the number of temporary classrooms to arrive at the capacity figures. Dashes indicate that school was not yet in operation.

Schools Which Had Not Reached Cap as of 1/17/13

School Building Capacity (# Seats)	# Optimum Temp Classrooms	Long-range School Campus Capacity (# Seats)	Program Adjustments (# Seats)	# Actual Temp Classrooms	# Permanent Classrooms	Annual School Campus Capacity (# Seats)	20th Day Membership	20th Day Membership/ASCC	School Building Capacity (# Seats)	# Optimum Temp Classrooms	Long-range School Campus Capacity (# Seats)	Program Adjustments (# Seats)	# Actual Temp Classrooms	# Permanent Classrooms	Annual School Campus Capacity (# Seats)	20th Day Membership	20th Day Membership/ASCC
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Briarcliff Elementary (Small) Cap: 625									
2003-04	562	0	447	(115)	0	35	447	522	116.8%
2004-05	540	0	494	(46)	0	35	494	453	91.7%
2005-06	540	0	506	(34)	0	35	506	449	88.7%
2006-07	540	0	623	83	0	35	623	517	83.0%
2007-08	540	0	520	(20)	0	35	520	585	112.5%
2008-09	540	1	540	(50)	4	35	582	560	96.2%
2009-10	540	1	563	(87)	4	35	545	538	98.7%
2010-11	540	1	563	(61)	4	35	571	562	98.4%
2011-12	540	1	563	(27)	4	35	605	586	96.9%
2012-13	540	1	563	(27)	4	35	605	617	102.0%

Wildwood Forest Elementary (Small) Cap: 772									
608	4	709	9	9	36	824	849	103.0%	
586	6	756	32	13	36	917	912	99.5%	
563	6	733	32	13	36	894	912	102.0%	
563	6	733	32	16	36	963	852	88.5%	
563	6	630	(71)	16	36	860	1,025	119.2%	
563	8	724	(20)	16	36	911	935	102.6%	
609	8	793	(32)	9	38	784	740	94.4%	
609	8	793	(55)	10	38	784	736	93.9%	
586	8	770	(101)	13	37	784	863	110.1%	
586	8	770	(124)	13	37	761	741	97.4%	

Cedar Fork Elementary (Small) Cap: 853									
2003-04	-	-	-	-	-	-	-	-	-
2004-05	-	-	-	-	-	-	-	-	-
2005-06	563	0	623	60	6	36	761	434	57.0%
2006-07	563	0	609	46	6	36	747	594	79.5%
2007-08	563	0	609	46	6	36	747	749	100.3%
2008-09	563	5	563	0	6	36	701	820	117.0%
2009-10	609	5	609	0	6	38	747	845	113.1%
2010-11	609	5	724	(20)	6	38	727	871	119.8%
2011-12	609	5	724	(20)	6	38	727	845	116.2%
2012-13	609	5	724	(20)	6	38	727	767	105.5%

Heritage Middle (Small YR) Cap: 1480									
-	-	-	-	-	-	-	-	-	-
1,215	0	1,215	0	0	60	1,215	716	58.9%	
1,293	0	1,222	(71)	0	60	1,222	1,123	91.9%	
1,293	0	1,293	0	0	60	1,293	1,231	95.2%	
1,293	0	1,095	(198)	0	60	1,095	1,219	111.3%	
1,293	0	1,293	(108)	0	60	1,185	1,288	108.7%	
1,293	0	1,293	(108)	0	60	1,185	1,257	106.1%	
1,293	0	1,293	(36)	0	60	1,257	1,392	110.7%	
1,293	0	1,293	(49)	0	60	1,244	1,495	120.2%	
1,293	0	1,293	(49)	0	60	1,244	1,405	112.9%	

Green Hope Elementary Cap: 912 (Small 2003-2007; Large YR 2007-2009; Small YR 2009-2010; Small to Date)									
2003-04	631	3	737	37	3	38	737	893	121.2%
2004-05	609	0	669	60	6	38	807	743	92.1%
2005-06	609	0	658	49	6	38	796	879	110.4%
2006-07	609	0	644	35	6	38	782	837	107.0%
2007-08	779	0	851	72	9	38	1,058	877	82.9%
2008-09	779	8	609	102	9	38	1,088	807	74.2%
2009-10	728	8	609	42	9	38	977	863	88.3%
2010-11	609	8	793	26	9	38	842	839	99.6%
2011-12	609	8	793	31	9	38	847	879	103.8%
2012-13	609	8	793	17	9	38	833	877	105.3%

Notes:

Temporary Classroom Capacity is 23 and applied to the number of temporary classrooms to arrive at the capacity figures.

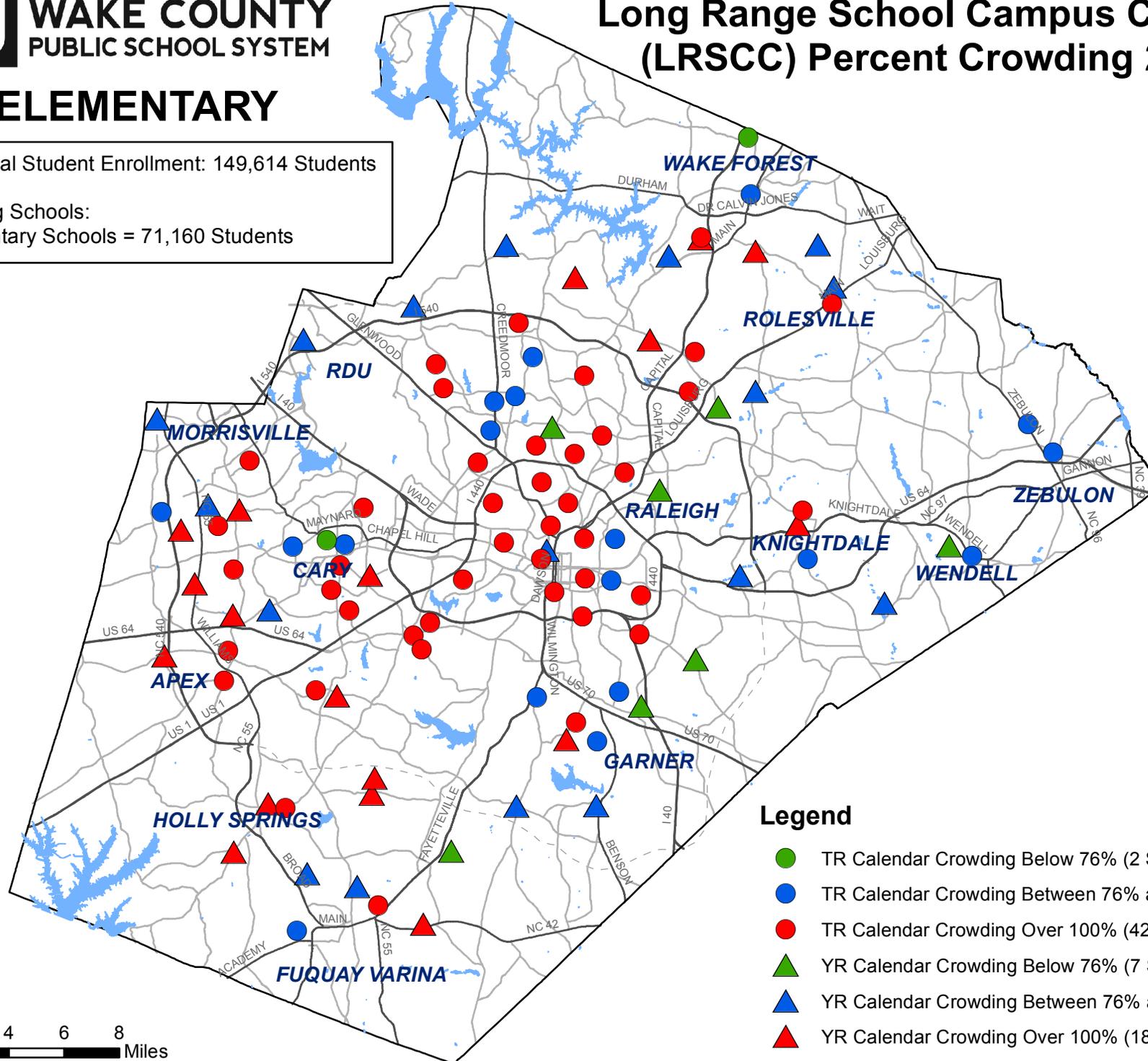
Dashes indicate that school was not yet in operation.



**ELEMENTARY**

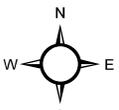
2012-13 Total Student Enrollment: 149,614 Students

169 Existing Schools:  
105 Elementary Schools = 71,160 Students



**Legend**

- TR Calendar Crowding Below 76% (2 Schools)
- TR Calendar Crowding Between 76% and 99% (19 Schools)
- TR Calendar Crowding Over 100% (42 Schools)
- ▲ YR Calendar Crowding Below 76% (7 Schools)
- ▲ YR Calendar Crowding Between 76% and 99% (17 Schools)
- ▲ YR Calendar Crowding Over 100% (18 Schools)



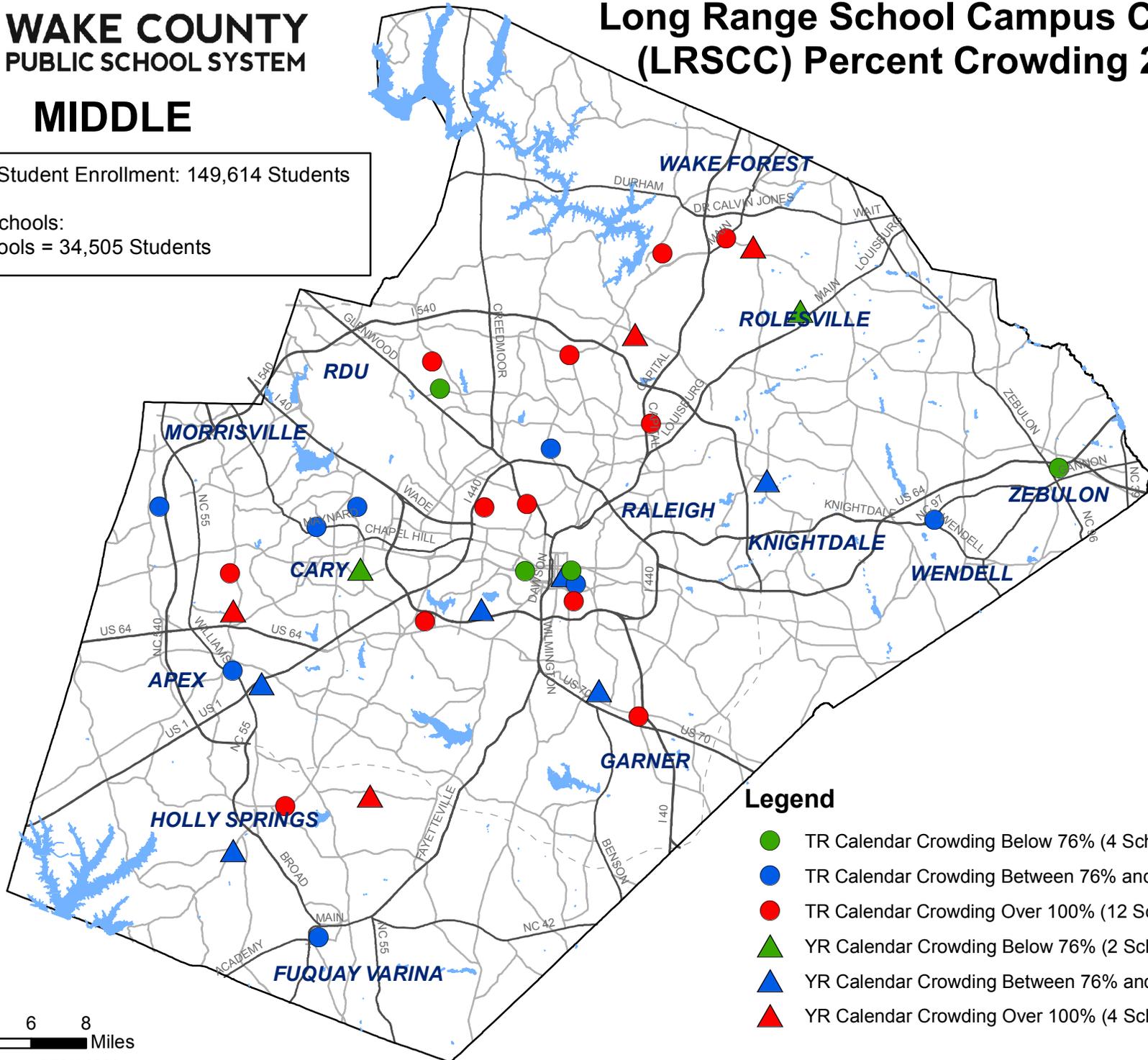
0 1 2 4 6 8 Miles



**MIDDLE**

2012-13 Total Student Enrollment: 149,614 Students

169 Existing Schools:  
36 Middle Schools = 34,505 Students



**Legend**

- TR Calendar Crowding Below 76% (4 Schools)
- TR Calendar Crowding Between 76% and 99% (8 Schools)
- TR Calendar Crowding Over 100% (12 Schools)
- ▲ YR Calendar Crowding Below 76% (2 Schools)
- ▲ YR Calendar Crowding Between 76% and 99% (6 Schools)
- ▲ YR Calendar Crowding Over 100% (4 Schools)





**WAKE COUNTY**  
PUBLIC SCHOOL SYSTEM

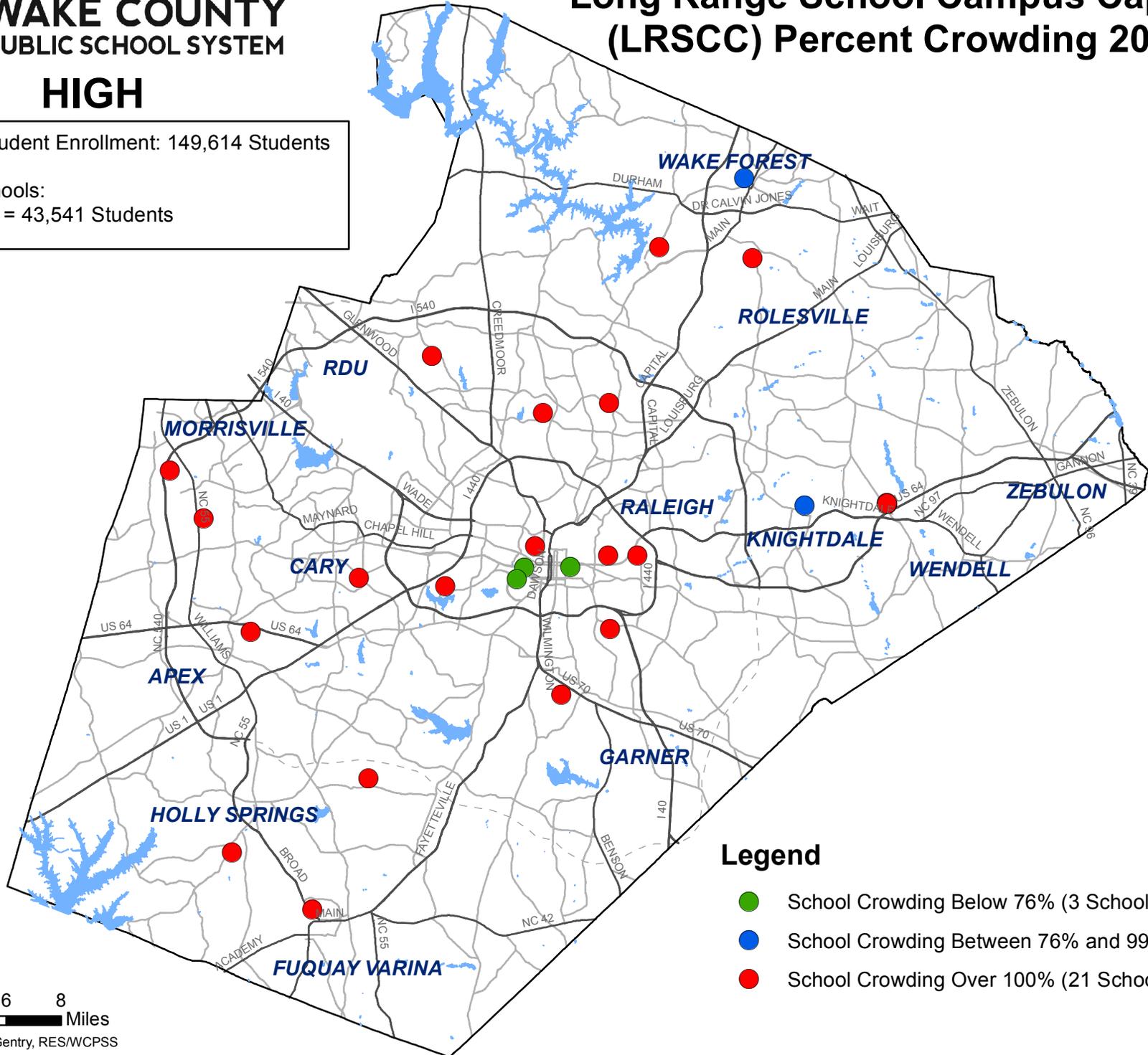
# Long Range School Campus Capacities (LRSCC) Percent Crowding 2012-13

## HIGH

2012-13 Total Student Enrollment: 149,614 Students

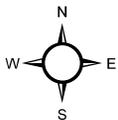
169 Existing Schools:

27 High Schools = 43,541 Students



### Legend

- School Crowding Below 76% (3 Schools)
- School Crowding Between 76% and 99% (3 Schools)
- School Crowding Over 100% (21 Schools)



0 1 2 4 6 8 Miles

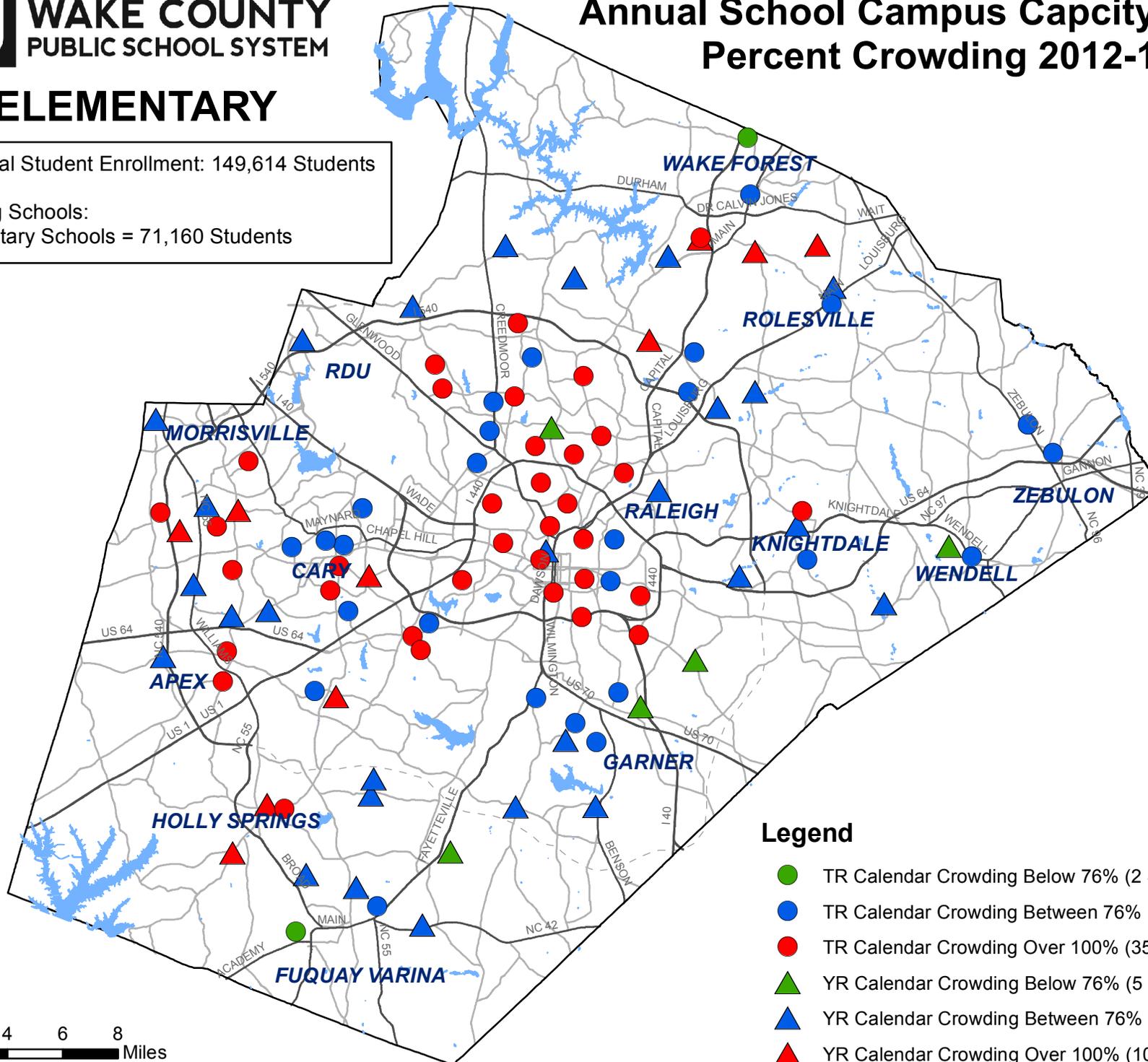
Cartographer: Sarah Beth Gentry, RES/WCPSS



## ELEMENTARY

2012-13 Total Student Enrollment: 149,614 Students

169 Existing Schools:  
105 Elementary Schools = 71,160 Students



### Legend

- TR Calendar Crowding Below 76% (2 Schools)
- TR Calendar Crowding Between 76% and 99% (26 Schools)
- TR Calendar Crowding Over 100% (35 Schools)
- ▲ YR Calendar Crowding Below 76% (5 Schools)
- ▲ YR Calendar Crowding Between 76% and 99% (27 Schools)
- ▲ YR Calendar Crowding Over 100% (10 Schools)



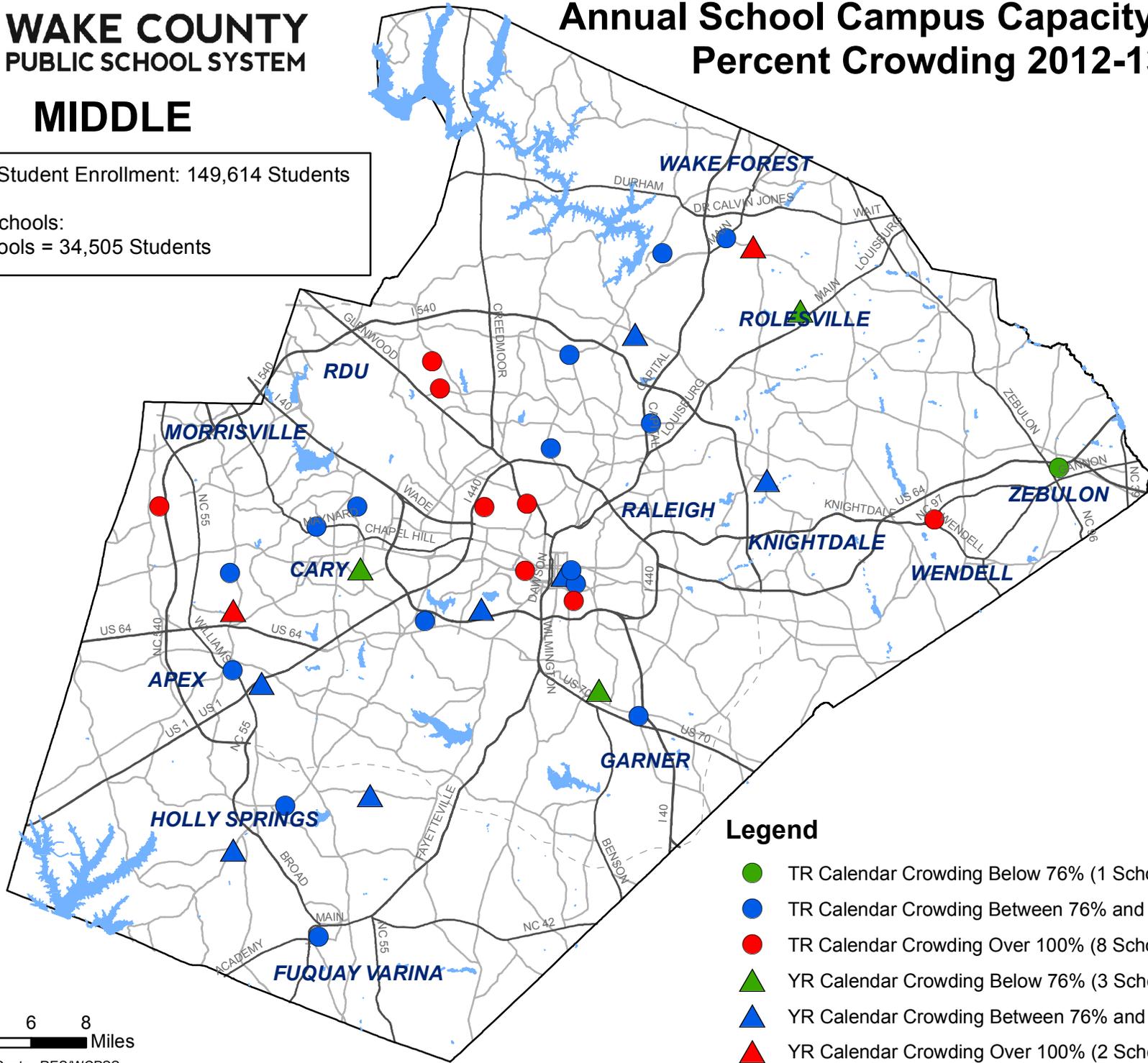
0 1 2 4 6 8 Miles



## MIDDLE

2012-13 Total Student Enrollment: 149,614 Students

169 Existing Schools:  
36 Middle Schools = 34,505 Students



### Legend

- TR Calendar Crowding Below 76% (1 School)
- TR Calendar Crowding Between 76% and 99% (15 Schools)
- TR Calendar Crowding Over 100% (8 Schools)
- ▲ YR Calendar Crowding Below 76% (3 Schools)
- ▲ YR Calendar Crowding Between 76% and 99% (7 Schools)
- ▲ YR Calendar Crowding Over 100% (2 Schools)



0 1 2 4 6 8 Miles



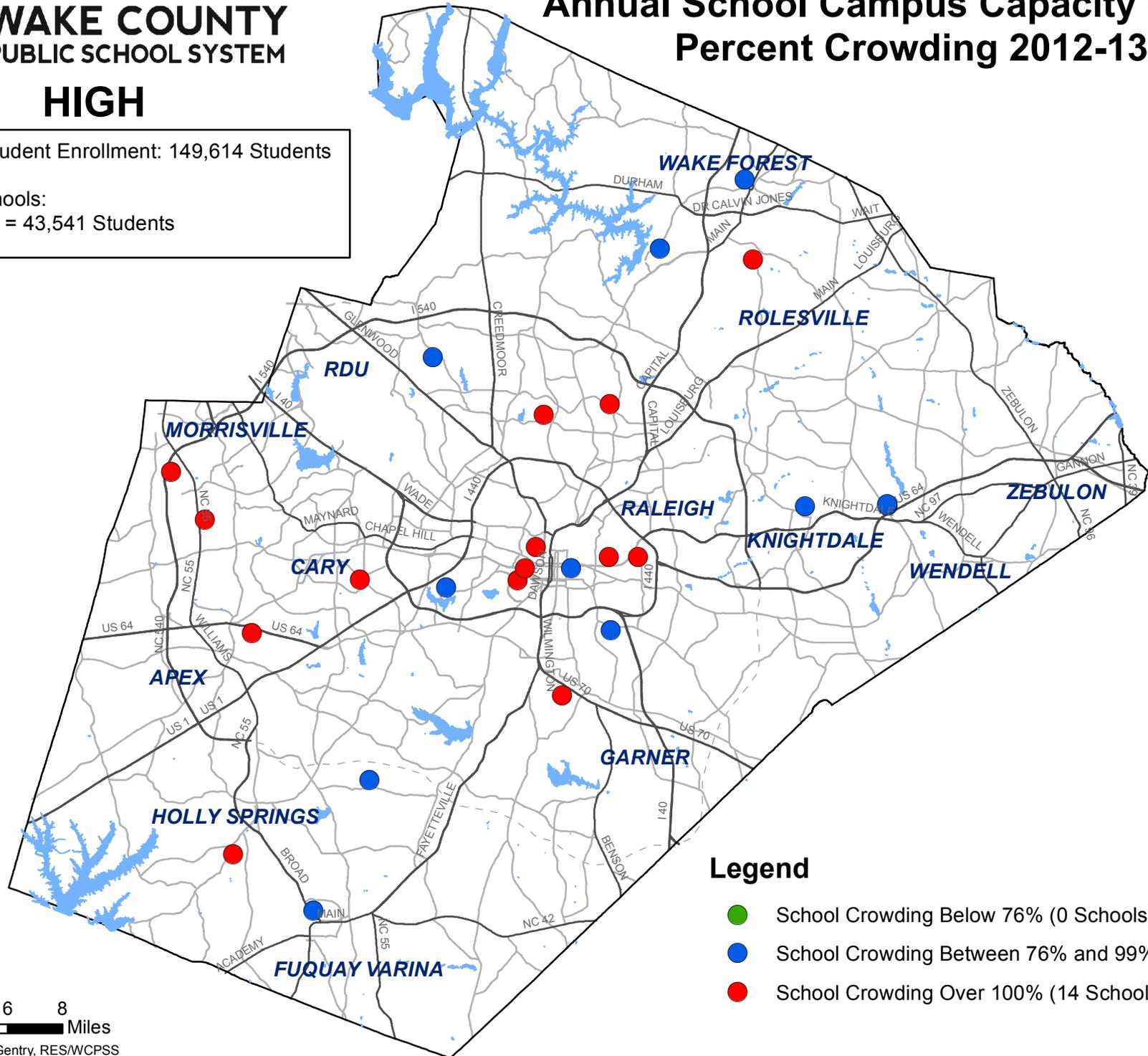
**WAKE COUNTY  
PUBLIC SCHOOL SYSTEM**

# HIGH

## Annual School Campus Capacity (ASCC) Percent Crowding 2012-13

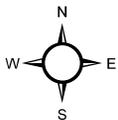
2012-13 Total Student Enrollment: 149,614 Students

169 Existing Schools:  
27 High Schools = 43,541 Students



### Legend

- School Crowding Below 76% (0 Schools)
- School Crowding Between 76% and 99% (13 Schools)
- School Crowding Over 100% (14 Schools)



0 1 2 4 6 8 Miles

Cartographer: Sarah Beth Gentry, RES/WCPSS

**ADM by Wake County Charter School Since 1997-1998 School Year**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Wake County Charter School	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bonner Academy	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exploris Middle School	53	110	168	165	167	169	181	181	180	180	188	193	193	194	204
John Baker HS	24	28	34	39	42	34	42	51	62	31	0	0	0	0	0
Magellan Charter	292	324	319	324	321	325	330	328	333	334	397	398	400	400	401
Sterling Montessori	124	178	250	323	385	424	458	491	549	489	513	520	544	564	582
Franklin Academy	0	160	308	352	407	668	785	869	975	1068	1138	1209	1246	1266	1612
East Wake Academy	0	451	432	308	417	409	491	618	705	777	846	939	1028	1074	1095
Sankore School	0	83	50	42	0	0	0	0	0	0	0	0	0	0	0
SPARC Academy	0	194	240	221	250	246	179	201	223	138	134	0	0	0	0
Raleigh Charter High School (Interconnections)	0	0	172	278	418	454	475	496	504	518	528	526	540	554	557
Torchlight Academy (Northeast Raleigh Charter Academy)	0	0	71	74	91	68	125	143	190	280	322	361	385	435	406
PreEminent Charter School	0	0	0	37	155	402	503	553	594	531	548	554	559	561	541
Quest Academy	0	0	100	91	110	118	130	126	132	134	134	133	134	144	144
Southern Wake Academy (was Community Partners Charter High)	0	0	0	77	122	122	120	111	95	86	96	89	99	77	97
Hope Elementary School	0	0	0	0	75	90	95	106	93	109	108	104	109	105	103
Casa Esperanza	0	0	0	0	0	0	78	191	233	278	304	339	357	389	408
Endeavor Charter School	0	0	0	0	0	0	0	0	0	0	0	378	432	450	474



# Capital Planning and Referendum Process



Presentation to Wake County Board of Education and Board of  
Commissioners  
February 21, 2013

David Cooke, County Manager

# Overview

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- ▶ **Goal: A Successful Bond Referendum for Schools in the Fall of 2013**
  
- ▶ **Process:**
  - ▶ Determining the Capital Plan and Bond Referendum Amount (February – June 2013)
  - ▶ The Referendum Timetable (July – October 2013)
    - ▶ Legal Process
    - ▶ Public/Information/Advocacy Process

# Determining the Capital Plan and Bond Referendum Amount

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- ▶ What is the Capital Plan? What are the Needs?
- ▶ How Many New Schools? How much for Renovations?  
How much for Technology and Other Needs?
- ▶ What are the Priorities? What are the Policy Choices?
- ▶ How much will it Cost? What is the Impact on Taxpayers?  
What are the Options?
- ▶ What is the Final Recommended Capital Plan?
- ▶ What is the Number for the Bond Referendum?

# School Capital Plans

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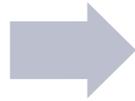
## ▶ Three Major Categories

1. New Schools
2. Renovations
3. Other
  1. Land Banking
  2. Technology
  3. Transportation Centers
  4. Program Management
  5. Facility Assessments
  6. Contingency....

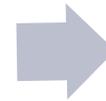
# Capital Planning Process (January – June)

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Determine  
Number of New  
Schools Needed



Determine Number  
of Renovations and  
Major Systems  
Replacements



Determine  
Other Line Items

- Enrollment Growth
- Other Factors
  - YR Calendar
  - Reducing Current Inventory of Mobiles and Modulars
  - Changing Assumptions on Utilization

- Major Renovations as a Result of Major Systems Replacements
- Other Factors
  - Program Equity

- Technology
  - Land
  - Educational Equipment /Furniture Replacement /Environmental and ADA
  - Program Management
  - Other
-

# Previous Plans

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	<u>2000</u>	<u>2003</u>	<u>2006</u>
NEW SCHOOLS	\$ 239.0 43%	\$ 264.8 47%	\$ 600.8 55%
<i># New Schools</i>	<i>14</i>	<i>11</i>	<i>17</i>
RENOVATIONS	\$ 284.1 52%	\$ 251.6 45%	\$ 325.1 30%
OTHER	\$ 26.9 5%	\$ 47.6 8%	\$ 157.1 15%
	\$ 550.0 100%	\$ 564.0 100%	\$ 1,083.0 100%
G.O. Bonds	\$ 500.0	\$ 450.0	\$ 970.0

# Determining the Capital Plan and Bond Referendum Amount

---

- ▶ **February**
  - ▶ New Schools
    - ▶ Understanding Variables, Assumptions and Policy Choices
- ▶ **March**
  - ▶ Renovations
    - ▶ Understanding Variables, Assumptions and Policy Choices
  - ▶ Other Capital Needs
- ▶ **April**
  - ▶ County's Capital Financing Model
    - ▶ Understanding Variables, Assumptions and Policy Choices
  - ▶ Financial Impacts and Evaluation of Scenarios
  - ▶ Discuss Priorities and Identify Scenarios for Capital Plan / Referendum

# Determining the Capital Plan and Bond Referendum Amount

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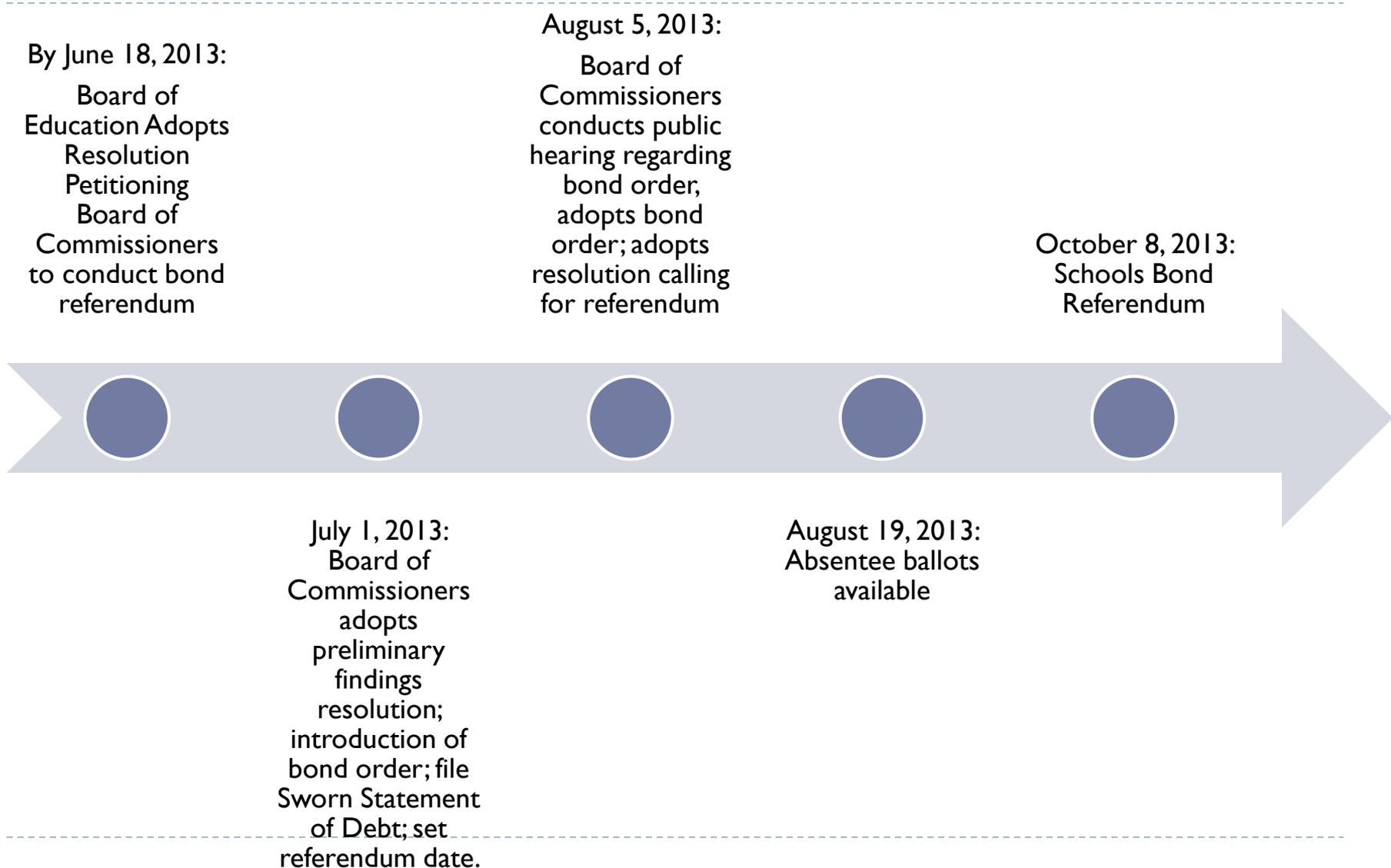
## ▶ May

- ▶ Review Financial Scenarios
- ▶ Discuss/Prioritize Capital Plan Elements
- ▶ Finalize Elements of the Capital Plan

## ▶ June

- ▶ Review Financial Impacts of “Final Elements of the Capital Plan”
- ▶ Consensus on Capital Plan and Bond Referendum Amount

# Referendum Timeline



# Getting to Referendum: Public Information and Advocacy (July – October 2013)

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- ▶ **Public Information**
  
- ▶ **Advocacy**
  - ▶ “Friends of Wake County” – Citizen’s Volunteer Group Dedicated to Passage of the School Bond Referendum

# Getting to Referendum: Friends of Wake County

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- ▶ **2000 Bond Referendum (Schools, Open Space, Jail)**
    - ▶ Friends of Wake County Co-Chairs
      - ▶ Jim Talton
      - ▶ Barbara Goodman
  - ▶ **2003 Bond Referendum (Schools, Libraries)**
    - ▶ Friends of Wake County Co-Chairs
      - ▶ Horace Johnson
      - ▶ Ann Goodnight
  - ▶ **2006 Bond Referendum (Schools)**
    - ▶ Friends of Wake County Co-Chairs
      - ▶ Ann Goodnight
      - ▶ Dr. Bill Atkinson
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# Questions?



**Unfunded Life Cycle Needs December 2012, by Year With Costs**

Sum of Estimated Cost Component	Estimate Next (Completion Year)																
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Grand Total
ADA					936,573	7,239,881	6,341,830		8,821,766								23,340,050
Asbestos					69,365		686,397		1,102,916								1,858,678
Asphalt Elem Track									2,099,227								2,099,227
Asphalt Paving						3,734,611	785,029	782,493	729,414	2,030,714	2,783,107	1,500,187	751,194	1,134,757	578,654	1,196,791	16,006,951
Boiler	1,101,650	313,150	155,450	230,050	53,000	364,000	403,950	676,750	166,450	817,400	415,500	325,500	716,300	673,050	1,059,650	369,800	7,841,650
Brick Wall					154,000												154,000
Carpet	912,984	1,550,656	292,280	762,904	1,584,128	2,334,608	1,140,704	772,608	372,288		727,232		598,592	426,048	216,832	732,928	12,424,792
Chair Lift	54,000										135,000	108,000		108,000	81,000		486,000
Chiller							424,200	424,200		403,000	193,200	346,800	363,400	706,700	2,171,400	121,200	5,154,100
Cleaning - Exterior				62,215		74,243											136,458
Controls										4,744,000							4,744,000
Controls & Instrumentation	156,780		2,971,690		93,400												3,221,870
Cooler/Freezer		78,000		54,000	54,000	90,000											276,000
Cooling Tower	60,550	65,625			114,600		140,150		109,550	191,600	248,500				56,875	244,275	1,231,725
Elevator	136,000		67,000	138,000		67,000	67,000			67,000	272,000	134,000	134,000	268,000	67,000	69,000	1,486,000
Exterior Doors	93,000		72,550	107,400	113,440		73,160		187,320			725,320			52,100		1,424,290
Exterior Walls									1,500,000								1,500,000
Exterior Windows	426,991		702,613	402,670		535,770	107,730		334,010			387,260					2,897,044
FAR roof system							86,993	60,572		251,249	454,066	56,977	169,236	294,665	219,561	128,910	1,722,228
Fencing						205,060	105,644										310,703
Fire Alarm System	465,000	345,000	419,250	320,000	1,155,000	1,719,142	640,000	412,000	324,000		646,500			246,500	400,000	446,500	7,538,892
Hardwood Flooring	357,896	484,225	76,466	243,764		51,052	229,230	76,672	148,823	77,564		780,685					2,526,376
HVAC System	1,400,282	214,786	8,977,202	476,450	815,100	6,459,355	18,803,616	914,940	8,360,742	606,840	4,394,650	615,420	3,879,616	1,157,000	149,500	142,740	57,368,239
Lighting	382,042	782,890	190,702	440,197	85,619	1,841,618	607,365	506,522	743,811		129,762	183,111	121,782	266,871	705,259	219,709	7,207,261
MB roof system					63,540		1,944,934		502,774	1,610,179	2,606,335	2,083,471	4,675,200	653,489	2,966,188	1,694,048	18,800,157
Paint				82,000		112,000											194,000
Paint - Exterior											142,490						142,490
Paint - Interior	1,501,120	1,823,790	869,847	2,231,124	2,419,036	2,659,931	1,654,412	1,445,191	1,683,256		1,587,030	1,216,591	1,059,993	839,692	1,732,347	1,270,728	23,994,089
Playground	75,710		216,030	240,800		100,480		216,030	377,150	532,540	227,130	692,860	156,190	648,090	160,960	75,710	3,719,680
Plumbing Fixtures	65,000						217,800										282,800
Sealant				66,474		183,574			167,515		151,839			86,798	130,711	52,968	839,878
Security System			55,000	150,000	85,000	405,000	160,000	160,000	270,000	180,000	190,000		50,000	225,000	70,000	452,500	2,452,500
SHINGLE							52,658										119,285
SP roof system										127,396							127,396
SSMR roof system							151,381			2,159,724	92,818			576,980	1,145,089	90,156	4,216,148
Switchgear	3,578,350	3,019,660	432,890	185,370	1,778,990	2,730,750	840,790	1,458,550	2,262,550	432,890	395,900	2,198,280	222,360	1,601,580	1,381,150	2,596,150	25,116,210
Synthetic Surfacing			202,738			139,389			773,383	1,103,798	756,619	462,374	387,476				3,825,777
VCT	1,149,487	2,344,160	210,991	720,323	1,407,784	2,654,956	778,355	645,047	161,725	56,109				204,148	263,235		10,596,318
Grand Total	\$11,916,842	\$11,021,942	\$15,912,699	\$6,913,740	\$10,982,575	\$33,702,421	\$36,443,327	\$8,551,575	\$31,198,668	\$15,392,003	\$16,549,677	\$11,816,836	\$13,285,339	\$10,117,368	\$13,607,511	\$9,970,740	\$257,383,263
Cumulative Totals	\$11,916,842	\$22,938,784	\$38,851,483	\$45,765,224	\$56,747,798	\$90,450,219	\$126,893,546	\$135,445,121	\$166,643,789	\$182,035,792	\$198,585,469	\$210,402,305	\$223,687,644	\$233,805,012	\$247,412,523	\$257,383,263	









**2012-2013**

**Facilities  
Utilization**

**(School Capacities, Programs,  
& Membership Impact)**

**Policy 7245**

**BASED UPON OCTOBER 4, 2012  
20<sup>TH</sup> DAY MEMBERSHIP**

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### **All CIP 2006 Capacity Models (“small”, magnet, etc)**

Can be found on the web at:

<http://www.wcpss.net/about-us/our-facilities/facility-utilization/school-capacity.html>

then scroll down to “School capacity models”

## Executive Summary

Wake County Public School System experienced student enrollment growth from the 20<sup>th</sup> day of the 2011-12 school year to the 20<sup>th</sup> day of the 2012-13 school year totaling 2,821 students, compared to the preceding year's increase of 3,398. The 20<sup>th</sup> day enrollment was 149,508 students. WCPSS opened Richland Creek Elementary, Rolesville Year-round Middle, and two 6-12 Leadership Academies (Wake Young Men's/Women's), while converting Hilburn Drive Elementary to a K-8 Academy.

The "Facilities Utilization" report is created by the Office of Long Range Planning. This annual report to the Board of Education includes the system's school membership, school capacities, utilization of temporary classrooms (single mobile units, modular units, Structural Insulated Panels (SIPS) buildings, and leased facilities), and the impact of programs on capacity. Long range capacity models that describe the planned use of classrooms in each school, including accommodations for students with special needs and magnet programs can be found on the website at <http://www.wcpss.net/about-us/our-facilities/facility-utilization/school-capacity.html>; then scroll down to "School capacity models"

Utilization of a school is defined as the student membership divided by the school's capacity. Capacity of each school comes from the planning model used for that school's program with adjustments to the model that arise from the actual classroom count, the need for spaces to serve special needs programs, and the use of temporary classrooms on the campus.

**ELEMENTARY:** There are 64 elementary schools operating on a traditional or modified calendar; 35 multi-track and 5 single-track year-round elementary schools; and a PreK-8 school.

**Optimum** – The optimal, long-range, utilization is 100.9% with 382 temporary classrooms compared to 96.5% with 408 temporary classroom units in 2011-12.

**Annual** – The 2012-13 actual utilization is 95.8% compared to 92.4% last year. There are 579 temporary classrooms on elementary school campuses compared to 607 last year resulting in an average of 5.7 per campus.

**MIDDLE:** There are 23 middle schools operating on a traditional or modified calendar; 10 multi-track year-round middle schools; a Pre-K-8 school (see elementary) and 2 6-12 schools.

**Optimum** – The optimal, long-range, utilization is 96.6% with 65 temporary classrooms compared to 99.0% with 60 temporary classroom units in 2011-12.

**Annual** – The 2012-13 actual utilization is 90.0% compared to 90.3% last year. There are 207 temporary classrooms on middle school campuses compared to 189 last year resulting in an average of 5.8 per campus.

**HIGH:** There are 26 high schools operating on a traditional or modified calendar; and 2 6-12 schools (see middle),

**Optimum** – The optimal, long-range, utilization is 113.5% with 68 temporary classrooms compared to 111.1% with 68 temporary classroom units in 2011-12.

**Annual** – The 2012-13 actual utilization is 98.4% compared to 96.6% last year. There are 349 temporary classrooms on high school campuses compared to 309 last year resulting in an average of 12.5 per campus.

**SPECIAL:** There are 4 schools operating on a traditional calendar.

**Optimum** – The optimal, long-range, utilization is 100.2% with 1 temporary classroom compared to 100.0% with 4 temporary classroom units in 2011-12.

**Annual** – The 2012-13 actual utilization is 100.2% compared to 107.8% last year.

**MULTI-SCHOOL LEVEL:** There are one K-8 school and two 6-12 schools operating on a traditional calendar. There are 8 temporary classrooms on Hilburn Dr.'s PreK-8 campus and both "Early Start" 6-12 Leadership Academies are undergoing renovations.

Data on optimal utilizations versus actual annual utilization can be found in the spreadsheet titled "2012-2013 FACILITIES UTILIZATION" beginning on page 9.

## Calculation Assumptions

The following assumptions are used for calculating school capacity throughout the utilization report.

### 1. Utilization Factor:

Long range capital planning is based on a target of 95% elementary and middle schools seats and a target of 97.5% high school seats being filled. However, for purposes of this report, 100% is used for all seats.

2. **Student/Classroom Ratios** are based on required system-wide numbers of students per classroom. NCGS115C-301© - (i) governs class sizes and maximum teaching loads for kindergarten through third grade. Fourth through twelfth grade allotments are based on prior guidelines for maximum student achievement. Year-round factors reflect four teachers sharing three classrooms whenever possible and balances the number of students across grade levels, using the same long range allotment ratios as traditional calendar schools.

	<u>Ratio</u>
Kindergarten	21
Grades 1-3	21
Grades 4-5	26
Middle	26
High	24*

\* Reflects average usage to accommodate advance classes, electives and schedule inefficiencies.

K-5 uses an average of 23.

3. **Temporary (Modular) Campuses:** There are two modular temporary classroom campuses in use. The Spring Forest Road modular campus is accommodating the Wake Leadership Academy for Young Men during their renovations. The DuBois modular campus is being used by the “Early Start” Richland Creek Elementary until construction is completed in 2014.
4. **Board of Education Policy 7245** defines School Building Capacity [SBC], Annual School Campus Capacity [ASCC], and Long-Range School Campus Capacity [LRSCC] as follows:
- **School Building Capacity [SBC]** is calculated based on the assigned model with no adjustments shown for actual program offerings (“bricks and mortar”).

- **Annual School Campus Capacity [ASCC]** is calculated for each school by adding the School Building Capacity to the capacity of the mobile units available for instructional purposes. Adjustments for the actual programs assigned to a school would be a reflection of the following:
  - The 2013 Early Learning (Pre-K) 3-year master plan
  - The 2013 Special Education (regional programs) 3-year master plan
  - Current Resource and General Education allotments (LEP, Intervention, AG, etc.) when a school is at full capacity
  - Anticipated Resource and General Education allotments when a school is not at full capacity
  
- **Long-Range School Campus Capacity [LRSCC]** is the capacity that can be supported by the building (based on models) plus the optimum number of mobiles per campus.

**5. Optimum Number of Instructional Temporary Units** has been defined as the number of units that meet the following criteria:

- can be physically accommodated on the site;
- are permissible by the authorities having jurisdiction and by zoning, etc.;
- can be supported by no more than one toilet trailer unit;
- can be supported by dining room facilities with no more than 3 seatings based on Department of Public Instruction Guidelines;
- can be accommodated within 300 feet of the closest building access point; and,
- can be supported by specialized educational program spaces like Career Technical Education, science, gym, etc.
- can be supported by vehicle traffic patterns.

## Steps to Compute School Capacity

Columns reference the data from pages 10 - 15	Brassfield Example	Zebulon Example
<b>Column A:</b> To compute the School Building Capacity [SBC] (Col. A), select a school and determine its program model (1 <sup>st</sup> column) and the number of actual classrooms.	Brassfield Elementary with 35 classrooms uses the Small Year-Round Model	Zebulon Elementary with 40 classrooms uses the Gifted/Talented (Large) Model
Subtract the number of classrooms in the model from the number of actual classrooms and multiply the result by that school level's seating factor (Elem: 23; Mid.: 26, High: 24) to get the Capacity Model Adjustment.	$(35 - 40) \times 23 = -115$	$(41 - 41) \times 23 = 0$
Add the Capacity Model Adjustment to the model's standard capacity to get the actual School Building Capacity [SBC].	$-115 + 774 = 659$	$0 + 592 = 592$
<b>Column B:</b> The Optimum Temporary Classrooms [Col. B] is determined by a number of factors: site, zoning, dining room capacity, etc. The criteria can be found on page 6 of this report.	Brassfield = 0 Optimum Temporary Classrooms	Zebulon = 4 Optimum Temporary Classrooms
<b>Column C:</b> To calculate the Long Range School Campus Capacity [LRSCC] (Col. C), add School Building Capacity (Col. A) to the number of Optimum Temporary Classrooms (Col. B) multiplied by the classroom factor for that school level.	$659 + (0 \times 23) = 659$	$592 + (4 \times 23) = 684$
<b>Column D:</b> Subtract the Optimum Temporary Classrooms (Col. B) from the Total Temporary Classrooms for the current year (Col. L) to get +/- Existing Temporary Classrooms (Col. D).	Brassfield: $5 - 0 = 5$	Zebulon: $4 - 4 = 0$
<b>Column E:</b> Multiply +/- Existing Temporary Classrooms (Col. D) by the seating factor for that school level to determine +/- Existing Temporary Classroom Capacity (Col. E).	$5 \times 23 = 115$	$0 \times 23 = 0$
<b>Column F:</b> To calculate the Program Adjustment (Col. F), subtract the number of actual school program needs from the number of program needs classrooms in the school's capacity model to get the Program Adjustment for each program. Adjustments will also reflect schools undergoing renovations and core capacity limitations. This reflects inclusion/push-in programs.	Model – School = Program Adjustment Pre-K: $1 - 0 = 1$ Self-Contained: $3 - 1 = 2$ Resource: $2 - 4.5 = -2.5$ General Ed: $3 - 3 = 0$	Model – School = Program Adjustment Pre-K: $1 - 2 = -1$ Self Contained: $3 - 0 = 3$ Resource: $2 - 2 = -0$ General Ed: $3 - 6 = -3$
Multiply the Program Adjustment for each program by the classroom seating factor and total to get the Program Classroom Adjustment (Col. F) for the school. For Self-Contained classrooms, subtract 9 from the seating factor before multiplying by the deviation. A positive total means there are fewer programs at the school than the standard model; a negative number means there are more program-related classrooms than the standard model.	Pre-K: $1 \times 23 = 23$ Self Contained $2 \times (23-9) = 28$ Resource: $-2.5 \times 23 = -57.5$ General Ed: $0 \times 23 = 0$ Total $-6$	Pre-K: $-1 \times 23 = -23$ Self-Contained: $3 \times (23-9) = 42$ Resource: $0 \times 23 = 0$ General Ed: $-3 \times 23 = -69$ Total $-50$
<b>Column G:</b> To calculate the Annual School Campus Capacity [ASCC] (Col. G), add the Long-Range School Campus Capacity [LRSCC] (Col. C) to the +/- Program Adjustment (Col. F) and add the +/- Existing Temporary Classroom Capacity (Col. E).	$659 + 115 + (-6) = 768$	$684 + 0 + (-50) = 634$
<b>Column H:</b> 20 <sup>th</sup> Day Membership on October 4, 2012 as approved by NC Department of Public Instruction.	750	531
<b>Column I:</b> To calculate Long-Range School Campus Capacity percentage (Col. I), divide the school membership (Col. H) by LRSCC (Col. C) plus Program Adjustment (Col. F).	$750 / (659 + (-6)) = 114.9\%$	$531 / (684 + (-50)) = 83.8\%$
<b>Column J:</b> To calculate Annual School Campus Capacity % (Col. J), divide school membership (Col. H) by ASCC (Col. G).	$750 / 768 = 97.7\%$	$531 / 634 = 83.8\%$
<b>Column K:</b> To calculate Percentage of Capacity in Temporary Classrooms (Col. K), take the addition of Optimum Temporary Classrooms and Existing Temporary Classrooms (Col. B + Col. D) multiplied by the school level seating factor and divide by Annual School Campus Capacity (Col. G).	$(5 \times 23) / 768 = 15.0\%$	$(4 \times 23.0) / 634 = 14.5\%$

## 2011-12 FACILITIES UTILIZATION

School Level	Optimum Facilities Utilization				Annual Facilities Utilization			Member-ship		School Crowding		
	Number of Schools	School Building Capacity (SBC)	Optimum Temporary Classrooms	Long-Range School Capacity (LRSCC)	Total Temporary Classrooms	Program Adjustment	Annual School Campus Capacity (ASCC)	20th-Day Actual Membership	LRSCC Percent Crowding (Inc. Program Adjustment)	ASCC Percent Crowding	Percent in Temporary Classrooms	
<b>Elementary Schools</b>	104	65,801	408	75,185	607	(2,606)	76,351	70,526	96.5%	92.4%	17.1%	
<b>Middle Schools</b>	32	32,691	60	34,303	189	(346)	37,233	33,604	99.0%	90.3%	13.2%	
<b>High Schools</b>	25	36,882	68	38,514	309	(598)	43,619	42,143	111.1%	96.6%	17.0%	
<b>Special Schools</b>	4	374	4	414	1	0	384	414	100.0%	107.8%	2.6%	
<b>Total</b>	165	135,748	540	148,416	1,106	(3,550)	157,587	146,687	101.3%	92.7%	16.4%	

## 2012-13 FACILITIES UTILIZATION

School Level	Optimum Facilities Utilization				Annual Facilities Utilization			Member-ship 20th-Day Actual Membership	School Crowding		
	Number of Schools	School Building Capacity (SBC)	Optimum Temporary Classrooms	Long- Range School Capacity (LRSCC)	Total Temporary Classrooms	Program Adjustment	Annual School Campus Capacity (ASCC)		LRSCC Percent Crowding (Inc. Program Adjustment)	ASCC Percent Crowding	Percent in Temporary Classrooms
<b>Elementary Schools</b>	104	66,252	378	74,900	579	(4,457)	74,256	71,160	101.0%	95.8%	17.7%
<b>Middle Schools</b>	33	34,926	65	36,616	207	(899)	38,352	34,505	96.6%	90.0%	13.2%
<b>High Schools</b>	25	37,190	68	38,822	349	(585)	44,171	43,435	113.6%	98.3%	18.4%
<b>Special Schools</b>	4	397	1	407	1	0	407	408	100.2%	100.2%	2.5%
<b>Total</b>	169	138,765	512	150,745	1,136	(5,941)	157,186	149,508	103.2%	95.1%	16.9%
<b>Multi-Grade Schools</b>	3	Data included in school level totals									

Program Model	School Name	Optimum Facilities Utilization				2012-13 Annual Adjustments				School Crowding			
		Number of Perm. Learning Spaces	School Building Capacity [SBC]	Optimum Temp. Classrms	Long-Range School Campus Capacity [LRSCC]	+/- Existing Temp Classrms Capacity	+/- Existing Temp Classrms Capacity	+/- Program Adjustment	Annual School Campus Capacity [ASCC]	20th Day Actual Membership	LRSCC Percent Crowding (inc. Prog. Adjustment)	ASCC Percent Crowding	Percent of Capacity in Temporary Classrooms
YR - Small	Green	33	613	4	705	0	0	(61)	644	484	75.2%	14.3%	4
Small	Green Hope	38	609	8	793	1	23	17	833	877	108.3%	24.8%	9
YR - Large	Harris Creek	48	1,009	0	1,009	4	92	(87)	1,014	899	97.5%	9.1%	4
YR - Large	Herbert Akins	51	1,078	2	1,124	(2)	(46)	(14)	1,064	845	76.1%	0.0%	0
YR - Small	Heritage	37	705	4	797	3	69	(32)	834	877	114.6%	19.3%	7
Single Tk Sm	Highcroft Drive	38	609	4	701	5	115	14	830	833	116.5%	24.9%	9
YR - Small	Hodge Road	36	682	5	797	0	0	(147)	650	607	93.4%	17.7%	5
YR - Large	Holly Grove	46	963	0	963	3	69	26	1,058	1,081	109.3%	6.5%	3
Small	Holly Ridge	36	563	4	655	4	92	14	761	832	124.4%	24.2%	8
YR - Small	Holly Springs	36	682	7	843	9	207	(41)	1,009	1,014	126.4%	36.5%	16
GT Large	Hunter	39	546	1	569	5	115	(37)	647	705	132.5%	21.3%	6
Small	Jeffreys Grove	32	471	2	517	1	23	28	568	482	88.4%	12.1%	3
YR - Small	Jones Dairy	36	682	10	912	(5)	(69)	(78)	765	815	97.7%	15.0%	5
Spanish IB PYP	Joyner	34	516	1	539	7	161	(56)	644	705	146.0%	28.6%	8
Small	Kingswood	28	379	0	379	0	0	3	382	367	96.1%	0.0%	0
Small	Knightdale	40	655	7	816	1	23	(135)	704	675	99.1%	26.1%	8
Small	Lacy	40	655	2	701	0	0	23	724	807	111.5%	6.4%	2
Single Tk Lg	Lake Myra	51	800	2	846	(2)	(46)	(87)	713	584	76.9%	0.0%	0
YR - Large	Laurel Park	46	963	1	986	(1)	(23)	25	988	945	93.5%	0.0%	0
Small	Lead Mine	35	540	3	609	(2)	(46)	0	563	509	83.6%	4.1%	1
Small	Leesville Road	35	540	5	655	12	276	(32)	899	916	147.0%	43.5%	17
Small	Lincoln Heights	37	586	6	724	5	115	(126)	713	504	84.3%	35.5%	11
YR - Small	Lockhart	37	705	4	797	9	207	(164)	840	679	107.3%	35.6%	13
Small	Lynn Road	40	655	5	770	(5)	(115)	(126)	529	557	86.5%	0.0%	0
YR - Small	Middle Creek	37	705	6	843	10	230	(101)	972	846	114.0%	37.9%	16
IB Large	Millbrook	46	662	2	708	1	23	(23)	708	768	112.1%	108.5%	3
Large	Mills Park	51	800	2	846	(2)	(46)	88	888	962	103.0%	0.0%	0
YR - Small	Morrisville	35	659	5	774	0	0	14	788	815	103.4%	14.6%	5
YR - Small	N Forest Pines	40	774	0	774	0	0	14	788	815	103.4%	0.0%	0
Small	North Ridge	34	517	13	816	0	0	(96)	720	813	112.9%	41.5%	13
Small	Northwoods	34	517	10	747	(7)	(161)	(46)	540	524	74.8%	12.8%	3
YR - Small	Oak Grove	35	659	5	774	0	0	(32)	742	782	105.4%	15.5%	5
Small	Olds	18	149	0	149	0	0	111	260	356	136.9%	0.0%	0
YR - Small	Olive Chapel	36	682	7	843	7	161	(20)	984	969	117.7%	32.7%	14
Partnrship	Partnership	21	342	0	342	0	0	0	342	312	91.2%	0.0%	0
Small	Penny Road	35	540	3	609	6	138	0	747	680	111.7%	27.7%	9
YR - Small	Pleasant Union	35	659	0	659	0	0	19	678	606	89.4%	0.0%	0
Montessori	Poe	29	369	0	369	0	0	41	410	368	89.8%	0.0%	0

Program Model	School Name	Optimum Facilities Utilization				2012-13 Annual Adjustments				School Crowding				
		Number of Perm. Learning Spaces	School Building Capacity [SBC]	Optimum Temp. Classrooms	Long-Range School Campus Capacity [LRSCC]	+/- Existing Temp Classrooms	+/- Existing Temp Capacity	+/- Program Adjustment	Annual School Campus Capacity [ASCC]	20th Day Actual Membership	LRSCC Percent Crowding (inc. Prog. Adjustment)	ASCC Percent Crowding	Percent of Capacity in Temporary Classrooms	Total Temp Classrooms
GT Small	Powell	34	458	0	458	0	0	(4)	454	446	98.2%	98.2%	0.0%	0
Single Tk Sm	Rand Road	35	540	6	678	2	46	(46)	678	540	85.4%	79.6%	27.1%	8
Small	Reedy Creek	38	609	7	770	2	46	(92)	724	683	100.7%	94.3%	28.6%	9
Modular	Richland Creek 1	46	708	0	708	16	220	(708)	220	100	14.1%	45.5%	100.0%	16
YR - Large	River Bend	51	1,078	2	1,124	(2)	(46)	(121)	957	741	73.9%	77.4%	0.0%	0
Small	Rolesville	34	517	4	609	5	115	0	724	665	109.2%	91.9%	28.6%	9
Small	Root	33	494	0	494	0	0	14	508	513	101.0%	101.0%	0.0%	0
YR - Small	Salem	37	705	6	843	8	184	(64)	963	924	118.6%	96.0%	33.4%	14
YR - Small	Sanford Creek	40	774	0	774	0	0	(46)	728	719	98.8%	98.8%	0.0%	0
IB large	Smith	51	777	1	800	(1)	(23)	(87)	690	624	87.5%	90.4%	0.0%	0
Small	Stough	29	402	6	540	4	92	(46)	586	574	116.2%	98.0%	39.2%	10
Small	Swift Creek	31	448	2	494	0	0	37	531	566	106.6%	106.6%	8.7%	2
YR - Large	Sycamore Creek	51	1,078	0	1,078	0	0	49	1,127	1,073	95.2%	95.2%	0.0%	0
Single Tk Sm	Timber Drive	36	563	6	701	3	69	(101)	669	629	104.8%	94.0%	30.9%	9
YR - Small	Turner Creek	39	751	4	843	4	92	(66)	869	807	103.9%	92.9%	21.2%	8
GT Small	Underwood	33	435	0	435	0	0	37	472	545	115.5%	115.5%	0.0%	0
YR - Small	Vance	28	498	6	636	0	0	(73)	563	480	85.3%	85.3%	24.5%	6
Small	Vandora Springs	34	517	4	609	1	23	(43)	589	562	99.3%	95.4%	19.5%	5
Small	Wake Forest	40	655	0	655	0	0	(32)	623	575	92.3%	92.3%	0.0%	0
YR - Small	Wakefield	36	682	7	843	4	92	(55)	880	684	86.8%	77.7%	28.8%	11
Large	Wakelon	46	685	2	731	(2)	(46)	(87)	598	530	82.3%	88.6%	0.0%	0
Large	Walnut Creek	51	800	2	846	0	0	(75)	771	804	104.3%	104.3%	6.0%	2
GT Large	Washington	40	569	0	569	0	0	(34)	535	601	112.3%	112.3%	0.0%	0
Small	Weatherstone	36	563	8	747	5	115	(9)	853	673	91.2%	78.9%	35.1%	13
Creative Arts	Wendell	35	469	2	515	0	0	(9)	506	478	94.5%	94.5%	9.1%	2
YR - Small	West Lake	35	659	4	751	9	207	(32)	926	889	123.6%	96.0%	32.3%	13
YR - Large	Wilburn	51	1,078	3	1,147	(3)	(69)	(156)	922	741	74.8%	80.4%	0.0%	0
Small	Wildwood Forest	37	586	8	770	5	115	(124)	761	741	114.7%	97.4%	39.3%	13
Intn'l Studies	Wiley	30	417	0	417	0	0	(25)	392	470	119.9%	119.9%	0.0%	0
YR - Small	Willow Springs	32	590	8	774	8	184	5	963	916	117.6%	95.1%	38.2%	16
Small	Yates Mill	37	586	0	586	0	0	(78)	508	544	107.1%	107.1%	0.0%	0
Small	York	33	494	4	586	0	0	(32)	554	502	90.6%	90.6%	16.6%	4
GT Large	Zebulon	41	592	4	684	0	0	(50)	634	531	83.8%	83.8%	14.5%	4
Academy	Hilburn Drive (K-5)	26	424	2	424	0	0	0	424	443	104.5%	104.5%	10.8%	2
	<b>Subtotal Elementary Schools</b>	<b>3,955</b>	<b>66,252</b>	<b>378</b>	<b>74,900</b>	<b>201</b>	<b>4,521</b>	<b>(4,457)</b>	<b>74,256</b>	<b>71,160</b>	<b>101.0%</b>	<b>95.8%</b>	<b>17.7%</b>	<b>579</b>

1 Richland Creek SBC and LRSCC reflect capacity after new construction; Program Adjustment not included in total; ASCC capacity reflects modular campus

Note: The "Percent of Capacity in Temporary Classrooms" increased even though the "Total Temporary Classrooms" decreased due to Wilburn no longer located in a "swing space" modular campus.

Program Model	School Name	Optimum Facilities Utilization				2012-13 Annual Adjustments				School Crowding			
		Number of Perm. Learning Spaces	School Building Capacity [SBC]	Optimum Temp. Classrms	Long-Range School Campus Capacity [LRSCC]	+/- Existing Temp Classrms Capacity	+/- Existing Temp Classrms Capacity	+/- Program Adjustment	Annual School Campus Capacity [ASCC]	20th Day Actual Membership	LRSCC Percent Crowding (inc. Prog. Adjustment)	ASCC Percent Crowding	Percent of Capacity in Temporary Classrooms

Program Model	School Name	Optimum Facilities Utilization				2012-13 Annual Adjustments				School Crowding			
		Number of Perm. Learning Spaces	School Building Capacity [SBC]	Optimum Temp. Classrms	Long-Range School Campus Capacity [LRSCC]	+/- Existing Temp Classrms Capacity	+/- Existing Temp Classrms Capacity	+/- Program Adjustment	Annual School Campus Capacity [ASCC]	20th Day Actual Membership	LRSCC Percent Crowding (inc. Prog. Adjustment)	ASCC Percent Crowding	Percent of Capacity in Temporary Classrooms

Program Model	School Name	Optimum Facilities Utilization				2012-13 Annual Adjustments				School Crowding			
		Number of Perm. Learning Spaces	School Building Capacity [SBC]	Optimum Temp. Classrms	Long-Range School Campus Capacity [LRSCC]	+/- Existing Temp Classrms Capacity	+/- Existing Temp Classrms Capacity	+/- Program Adjustment	Annual School Campus Capacity [ASCC]	20th Day Actual Membership	LRSCC Percent Crowding (inc. Prog. Adjustment)	ASCC Percent Crowding	Percent of Capacity in Temporary Classrooms

### Middle Schools

Small	Apex	63	1,059	0	1,059	0	0	68	1,127	1,094	97.1%	97.1%	0.0%	0
GT/AG Basics	Carnage	60	955	1	981	156	25	25	1,162	1,281	127.3%	110.2%	15.7%	7
Small	Carroll	54	825	0	825	0	43	43	868	808	93.1%	93.1%	0.0%	0
University &	Centennial Campus	42	624	0	624	0	0	0	624	562	90.1%	90.1%	0.0%	0
Small	Daniels	64	1,085	0	1,085	156	(70)	(70)	1,171	1,197	117.9%	102.2%	13.3%	6
Small	Davis Drive	56	877	1	903	260	(10)	(10)	1,153	1,132	126.8%	98.2%	24.8%	11
Small	Dillard Drive	62	1,033	0	1,033	156	(30)	(30)	1,159	1,078	107.5%	93.0%	13.5%	6
YR - Small	Durant Road	62	1,345	1	1,371	208	(108)	(108)	1,471	1,329	105.2%	90.3%	15.9%	9
YR - Small	East Cary	60	1,293	0	1,293	0	(92)	(92)	1,201	727	60.5%	60.5%	0.0%	0
IB	East Garner	57	825	5	955	416	(40)	(40)	1,331	1,248	136.4%	93.8%	41.0%	21
IB & Creative A	East Millbrook	63	929	0	929	468	(114)	(114)	1,283	1,085	133.1%	84.6%	36.5%	18
YR - Small	East Wake	55	1,163	10	1,423	52	(183)	(183)	1,292	981	79.1%	75.9%	24.1%	12
Small	Fuquay-Varina	57	903	0	903	0	0	0	903	872	96.6%	96.6%	0.0%	0
YR - Small	Heritage	60	1,293	0	1,293	0	(49)	(49)	1,244	1,405	112.9%	112.9%	0.0%	0
YR - Large	Holly Grove	82	1,623	0	1,623	0	16	16	1,639	1,256	76.6%	76.6%	0.0%	0
Small	Holly Ridge	57	903	3	981	286	(1)	(1)	1,266	1,101	112.3%	87.0%	28.8%	14
Small	Leesville Road	53	799	0	799	416	(53)	(53)	1,162	1,166	156.3%	100.3%	35.8%	16
GT/AG Basics	Ligon	64	1,059	3	1,137	0	51	51	1,188	1,157	97.4%	97.4%	6.6%	3
YR - Small	Lufkin Road	57	1,215	0	1,215	0	(45)	(45)	1,170	931	79.6%	79.6%	0.0%	0
GT	Martin	64	981	3	1,059	0	(43)	(43)	1,016	1,016	100.0%	100.0%	7.7%	3
Large	Mills Park	82	1,311	4	1,415	(104)	76	76	1,387	1,418	95.1%	102.2%	0.0%	0
Museums	Moore Square Museums	37	651	0	651	0	(96)	(96)	555	514	92.6%	92.6%	0.0%	0
YR - Small	North Garner	64	1,397	0	1,397	130	(105)	(105)	1,422	1,030	79.7%	72.4%	9.1%	5
Small	Reedy Creek	57	903	0	903	0	25	25	928	904	97.4%	97.4%	0.0%	0
YR - Large	Rolesville 1	82	1,623	0	1,623	0	(541)	(541)	1,082	521	32.1%	48.2%	0.0%	0
YR - Small	Salem	57	1,215	0	1,215	52	(53)	(53)	1,214	1,217	104.7%	100.2%	4.3%	2
Small	Wake Forest-Rolesville	57	903	6	1,111	182	(43)	(43)	1,250	1,092	102.2%	87.4%	27.0%	13
Small	Wakefield	57	903	4	1,007	234	25	25	1,266	1,251	121.2%	98.8%	26.7%	13
Small	Wendell	60	981	5	1,111	(130)	(53)	(53)	928	965	91.2%	104.0%	0.0%	0
Small	West Cary	56	877	6	1,033	0	42	42	1,075	937	87.2%	87.2%	14.5%	6
YR - Small	West Lake	56	1,189	0	1,189	312	(49)	(49)	1,452	1,338	117.4%	92.1%	21.5%	12
Small	West Millbrook	59	955	0	955	208	(62)	(62)	1,101	966	108.2%	87.7%	18.9%	8
GT	Zebulon	58	825	3	903	26	29	29	958	623	66.8%	65.0%	10.9%	4

Program Model	School Name	Optimum Facilities Utilization		
		Number of Perm. Learning Spaces	School Building Capacity [SBC]	Long-Range School Campus Capacity [LRSCC]
	Hilburn Drive (6-8) <sup>2</sup>	8	104	312
	Wake Young Men's Leadership (6-8) <sup>3</sup>	6	150	150
	Wake Young Women's Leadership (6-8) <sup>3</sup>	6	150	150
	<b>Subtotal Middle Schools</b>	<b>1,994</b>	<b>34,926</b>	<b>36,616</b>

<sup>1</sup> Rolesville's ASCC reflects 33% less capacity as a new school

<sup>2</sup> Hilburn Dr Academy's ASCC reflects 66% less capacity as a new school (6th grade only)

<sup>3</sup> The Wake Leadership Academies' ASCC reflects 33% less capacity as a new school (6-7th grades only) Note: These new schools' Program Adjustments not included in total

### High Schools

Small	Apex	82	1,639	1	1,663
Small	Athens Drive	86	1,735	15	2,095
Small	Broughton	89	1,799	0	1,799
Large	Cary	111	2,223	0	2,223
Arts, Ed & Gbl	EW Sch. Arts, Ed & GI St	20	416	0	416
Engineer Sys	EW Sch. of Engineering Systems	20	453	0	453
Health Science	EW Sch. of Health Science	21	334	0	334
Integ Tech	EW Sch. of Integrated Tech	21	448	0	448
GT/IB	Enloe <sup>1</sup>	118	2,409	0	2,409
Small	Fuquay-Varina	82	1,639	5	1,759
IB	Garner <sup>2</sup>	91	1,847	1	1,871
Small	Green Hope	82	1,639	4	1,735
Small	Heritage	83	1,663	0	1,663
Small	Holly Springs	83	1,663	3	1,735
Small	Knightdale	83	1,663	6	1,807
Large	Leesville Road	112	2,243	0	2,243
Small	Middle Creek	82	1,639	11	1,903
IB	Millbrook	105	2,183	0	2,183
Small	Panther Creek	83	1,663	6	1,807
Small	Sanderson	86	1,735	8	1,927
Ctr for Ldrship	SE Raleigh	85	1,566	0	1,566
Wake Early	Wake Early College of Hlth & Sci	11	251	0	251
Large	Wake Forest-Rolesville	104	2,051	0	2,051
Wake STEM	Wake NCSU STEM Early College <sup>3</sup>	8	250	0	250
Small	Wakefield <sup>4</sup>	82	1,639	8	1,831

Program Model	School Name	2012-13 Annual Adjustments			
		+/- Existing Temp Classrooms Capacity	+/- Existing Temp Classrooms Capacity	+/- Program Adjustment	Annual School Campus Capacity [ASCC]
	Hilburn Drive (6-8) <sup>2</sup>	(4)	(104)	(104)	104
	Wake Young Men's Leadership (6-8) <sup>3</sup>	12	100	(150)	100
	Wake Young Women's Leadership (6-8) <sup>3</sup>	0	0	(50)	100
	<b>Subtotal Middle Schools</b>	<b>142</b>	<b>3,480</b>	<b>(899)</b>	<b>38,352</b>

Program Model	School Name	20th Day Actual Membership	School Crowding		
			LRSCC Percent Crowding (inc. Prog. Adjustment)	ASCC Percent Crowding	Percent of Capacity in Temporary Classrooms
	Hilburn Drive (6-8) <sup>2</sup>	105	50.5%	101.0%	42.9%
	Wake Young Men's Leadership (6-8) <sup>3</sup>	98	65.3%	98.0%	100.0%
	Wake Young Women's Leadership (6-8) <sup>3</sup>	100	66.7%	100.0%	0.0%
	<b>Subtotal Middle Schools</b>	<b>34,505</b>	<b>96.6%</b>	<b>90.0%</b>	<b>13.2%</b>

Small	Apex	2,587	155.6%	104.4%	33.9%
Small	Athens Drive	1,989	99.0%	90.4%	25.1%
Small	Broughton	2,167	120.5%	103.8%	13.8%
Large	Cary	2,383	108.7%	104.1%	4.2%
Arts, Ed & Gbl	EW Sch. Arts, Ed & GI St	387	103.5%	91.7%	11.4%
Engineer Sys	EW Sch. of Engineering Systems	373	101.1%	94.9%	6.1%
Health Science	EW Sch. of Health Science	382	123.2%	94.1%	23.6%
Integ Tech	EW Sch. of Integrated Tech	326	83.4%	83.4%	0.0%
GT/IB	Enloe <sup>1</sup>	2,673	108.8%	100.9%	7.2%
Small	Fuquay-Varina	1,917	112.3%	89.6%	25.8%
IB	Garner <sup>2</sup>	2,400	135.4%	104.3%	24.0%
Small	Green Hope	2,219	124.0%	105.6%	19.4%
Small	Heritage	1,827	111.5%	111.5%	0.0%
Small	Holly Springs	2,232	126.0%	107.2%	18.4%
Small	Knightdale	1,712	96.6%	85.0%	19.1%
Large	Leesville Road	2,317	106.1%	93.7%	11.7%
Small	Middle Creek	1,984	106.7%	89.4%	28.1%
IB	Millbrook	2,580	119.5%	99.6%	16.7%
Small	Panther Creek	2,341	127.9%	105.7%	23.8%
Small	Sanderson	2,089	108.4%	105.8%	12.2%
Ctr for Ldrship	SE Raleigh	1,575	106.6%	86.8%	18.5%
Wake Early	Wake Early College of Hlth & Sci	267	106.4%	106.4%	0.0%
Large	Wake Forest-Rolesville	1,977	93.5%	93.5%	0.0%
Wake STEM	Wake NCSU STEM Early College <sup>3</sup>	110	44.0%	100.9%	0.0%
Small	Wakefield <sup>4</sup>	2,529	143.2%	93.1%	45.0%

Program Model	School Name	Optimum Facilities Utilization			2012-13 Annual Adjustments			School Crowding					
		Number of Perm. Learning Spaces	School Building Capacity [SBC]	Optimum Temp. Classrooms	Long-Range School Campus Capacity [LRSCC]	+/- Existing Temp Classrooms Capacity	+/- Program Adjustment	Annual School Campus Capacity [ASCC]	20th Day Actual Membership	LRSCC Percent Crowding (inc. Prog. Adjustment)	ASCC Percent Crowding	Percent of Capacity in Temporary Classrooms	Total Temp Classrooms
	Wake Young Men's Leadership (9-12) <sup>5</sup>	8	200	0	200	50	(200)	50	42	21.0%	84.0%	100.0%	12
	Wake Young Women's Leadership (9-12) <sup>5</sup>	7	200	0	200	0	(150)	50	50	25.0%	100.0%	0.0%	0
	<b>Subtotal High Schools</b>	<b>1,845</b>	<b>37,190</b>	<b>68</b>	<b>38,822</b>	<b>6,425</b>	<b>(585)</b>	<b>44,171</b>	<b>43,435</b>	<b>113.6%</b>	<b>98.3%</b>	<b>18.4%</b>	<b>349</b>

<sup>1</sup> Enloe - 8 temporary classrooms are located in the East Bldg.

<sup>2</sup> Garner's capacity does not include 17 temporary classrooms due to core facility limitations

<sup>3</sup> Wake NCSU STEM Early College's SBC and LRSCC reflect capacity after new construction; Program Adjustments not included in total

<sup>4</sup> Wakefield's SBC and LRSCC does not include the temporary 9th Grade Ctr.

<sup>5</sup> The Wake Leadership Academies' ASCC reflects 75% less capacity as a new school (9th grade only)

### Special Schools

Longview	26	102	0	102	0	0	0	102	80	78.4%	78.4%	0.0%	0
MEPhillips	22	200	0	200	0	0	0	200	207	103.5%	103.5%	0.0%	0
Mt Ver/ Bridges	25	95	1	105	0	0	0	105	81	77.1%	77.1%	9.5%	1
River Oaks	14	0	0	0	0	0	0	0	40	N/A	N/A	N/A	0
<b>Subtotal Special Schools</b>	<b>87</b>	<b>397</b>	<b>1</b>	<b>407</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>407</b>	<b>408</b>	<b>100.2%</b>	<b>100.2%</b>	<b>2.5%</b>	<b>1</b>

<b>Totals</b>	<b>7,881</b>	<b>138,765</b>	<b>512</b>	<b>150,745</b>	<b>632</b>	<b>14,426</b>	<b>(5,941)</b>	<b>157,186</b>	<b>149,508</b>	<b>103.2%</b>	<b>95.1%</b>	<b>16.9%</b>	<b>1,136</b>
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General Note: Program Adjustments reflect anticipated General Education programs and a 3-year master plan for Pre-Kindergarten and Special Education Regional programs.

### Multi-Grade Schools (reflected in each grade level)

K-8 Academy	34	528	12	736	(4)	(104)	(104)	528	548	86.7%	103.8%	N/A	8
6-12 Academy	14	350	0	350	24	150	(350)	150	140	40.0%	93.3%	100.0%	24
6-12 Academy	13	350	0	350	0	0	(200)	150	150	42.9%	100.0%	0.0%	0

**ANNUAL GROWTH IN MEMBERSHIP AND FACILITIES**  
**Temporary Classroom Installations as of November 1, 2012**

Year	20th Day Student Membership	Total No. of Schools Opened	No. of Temporary Classrooms		Average No. Temporary Classrooms Per Campus	% of Permanent Seats in Annual School Campus Capacity [ASCC]
			Total	Swing Space		
1990/91	64,243	81	462		5.7	
1991/92	66,915	83	439		5.3	
1992/93	70,052	90	431		4.8	
1993/94	73,192	91	497		5.5	
1994/95	76,731	97	574		5.9	
1995/96	81,203	100	561		5.6	
1996/97	85,539	104	550		5.3	
1997/98	89,548	108	543		5.0	75.5
1998/99	92,038	111	524		4.7	82.9
1999/2000	95,018	112	526		4.7	84.4
2000/2001	97,853	117	517		4.4	89.1
2001/2002	101,397	118	558		4.7	87.7
2002/2003	104,373	121	584		4.8	86.6
2003/2004	108,970	122	649		5.3	84.7
2004/2005	114,092	133	709		5.3	85.5
2005/2006	120,507	137	1007		7.4	79.4
2006/2007	128,072	145	1118	121	7.7	80.5
2007/2008	134,002	153	1,099	103	7.2	81.1
2008/2009	137,706	156	1,171	56	7.5	81.1
2009/2010	139,599	159	1,071	16	6.7	83.2
2010/2011	143,289	163	1,161	40	7.1	83.1
2011/2012	146,687	165	1,106	40	6.7	83.6
2012/2013	149,508 <sup>1</sup>	169	1,136	0	6.7	83.1

<sup>1</sup> Source: October 4, 2012 20<sup>th</sup> day membership

## Steps to Compute School Capacity

Columns reference the data from pages 10 & 12 in Utilization Report	A Low Needs Example	A High Needs Example
<b>Column A:</b> To compute the School Building Capacity [SBC] (Col. A), select a school and determine its program model (1 <sup>st</sup> column) and the number of actual classrooms.	An elementary A with 51 classrooms uses the Large Standard Capacity Model	An elementary B with 51 classrooms uses the Large Standard Capacity Model
Subtract the number of classrooms in the model from the number of actual classrooms and multiply the result by that school level's seating factor (Elem: 23; Mid.: 26, High: 24) to get the Capacity Model Adjustment.	$(51 - 51) \times 23 = 0$	$(51 - 51) \times 23 = 0$
Add the Capacity Model Adjustment to the model's standard capacity to get the actual School Building Capacity [SBC].	$0 + 800 = 800$	$0 + 800 = 800$
<b>Column B:</b> The Optimum Temporary Classrooms [Col. B] is determined by a number of factors: site, zoning, dining room capacity, etc. The criteria can be found on page 6 of this report.	elementary A = 2 Optimum Temporary Classrooms	elementary B = 2 Optimum Temporary Classrooms
<b>Column C:</b> To calculate the Long Range School Campus Capacity [LRSCC] (Col. C), add School Building Capacity (Col. A) to the number of Optimum Temporary Classrooms (Col. B) multiplied by the classroom factor for that school level.	$800 + (2 \times 23) = 846$	$800 + (2 \times 23) = 846$
<b>Column D:</b> Subtract the Optimum Temporary Classrooms (Col. B) from the Total Temporary Classrooms for the current year (Col. L) to get +/- Existing Temporary Classrooms (Col. D).	elementary A : $0 - 2 = -2$	elementary B : $2 - 2 = 0$
<b>Column E:</b> Multiply +/- Existing Temporary Classrooms (Col. D) by the seating factor for that school level to determine +/- Existing Temporary Classroom Capacity (Col. E).	$-2 \times 23 = -46$	$0 \times 23 = 0$
<b>Column F:</b> To calculate the Program Adjustment (Col. F), subtract the number of actual school program needs from the number of program needs classrooms in the school's capacity model to get the Program Adjustment for each program. Adjustments will also reflect schools undergoing renovations and core capacity limitations. This reflects inclusion/push-in	Model – School= Program Adjustment Pre-K: $1 - 1 = 0$ Self-Contained: $4 - 1 = 3$ Resource: $4 - 3 = 1$ General Ed: $4 - 3 = 1$	Model – School = Program Adjustment Pre-K: $1 - 1 = 0$ Self Contained: $4 - 2 = 2$ Resource: $4 - 5 = -1$ General Ed: $4 - 7.5 = -3.5$
Multiply the Program Adjustment for each program by the classroom seating factor and total to get the Program Classroom Adjustment (Col. F) for the school. For Self-Contained classrooms, subtract 9 from the seating factor before multiplying by the deviation. A positive total means there are fewer programs at the school than the standard model; a negative number means there are more program-related classrooms than the standard model.	Pre-K: $0 \times 23 = 0$ Self Contained $3 \times (23-9) = 42$ Resource: $1 \times 23 = 23$ General Ed: $1 \times 23 = 23$ <b>Total 88</b>	Pre-K: $0 \times 23 = 0$ Self Contained $2 \times (23-9) = 28$ Resource: $-1 \times 23 = -23$ General Ed: $-3.5 \times 23 = -80$ <b>Total -75</b>
<b>Column G:</b> To calculate the Annual School Campus Capacity [ASCC] (Col. G), add the Long-Range School Campus Capacity [LRSCC] (Col. C) to the +/- Program Adjustment (Col. F) and add the +/- Existing Temporary Classroom Capacity (Col. E).	$846 + 88 - 46 = 888$	$846 - 75 + 0 = 771$
<b>Column H:</b> 20 <sup>th</sup> Day Membership on September 22, 2010 as approved by NC Department of Public Instruction.	962	804
<b>Column I:</b> To calculate Long-Range School Campus Capacity percentage (Col. I), divide the school membership (Col. H) by LRSCC (Col. C) plus Program Adjustment (Col. F).	$962 / (846+88) = 103.0\%$	$804 / (846+(-75)) = 104.3\%$
<b>Column J:</b> To calculate Annual School Campus Capacity % (Col. J), divide school membership (Col. H) by ASCC (Col. G).	$962 / 888 = 108.3\%$	$804 / 771 = 104.3\%$
<b>Column K:</b> To calculate Percentage of Capacity in Temporary Classrooms (Col. K), take the addition of Optimum Temporary Classrooms and Existing Temporary Classrooms (Col. B + Col D) multiplied by the school level seating factor and divide by Annual School Campus Capacity (Col. G).	$((-2) \times 23) = 0 / 888 = 0.0\%$	$((-2) \times 23.0) = 46 / 771 = 6.0\%$

## Overview of Capital Program Planning Assumptions

The Planning Assumptions for CIP 2006 were developed and discussed over a series of meetings between the Wake County Board of Commissioners and Board of Education over an 18-month period. Both boards received information from staffs on the assumptions and discussed specific assumptions which serve as the basis upon which the scope and cost of a building program are developed.

The Planning Assumptions were approved in September 2005 by both boards. An addendum to the assumptions was prepared in May 2006 to reflect deviations from specific assumptions as the size and scope of CIP 2006 was finalized. The 21 assumptions were categorized in the following categories.

- |   |                                       |
|---|---------------------------------------|
| 1. High Performance Guidelines  | 11. School Capacity Models            |
| 2. Program Magnet Schools   | 12. New School Size & Space Standards |
| 3. Non-traditional School Facilities -<br>Public/Private Partnerships | 13. School Site Size                  |
| 4. School Grade Configurations  | 14. Property Acquisition              |
| 5. Class Size Ratio   | 15. Support Facilities                |
| 6. Renovation of Existing Schools                                     | 16. Technology                        |
| 7. Student Accommodations   | 17. Year Round Calendar Schools       |
| 8. Education Program  | 18. Student Enrollment Projection     |
| 9. Pre-Kindergarten, Ages 3-4   | 19. Timeframe                         |
| 10. Kindergarten Program  | 20. Program Price Bases               |
|   | 21. Funding                           |

In preparation for a next capital building program, the WCPSS staff updated the document. County and WCPSS staffs met in the Fall of 2011 and Winter of 2012 to discuss any revisions in the assumptions, items where joint staffs did not come to agreement, and whether further analysis or discussion was needed as related to specific assumptions.

Largely, the topics in the document were not changed substantially, but in some cases re-ordered or renamed. The list of the assumptions is as follows:

### **Program**

1. School Grade Configurations
2. Education Program
3. Pre-Kindergarten, Ages 3-4
4. Kindergarten Program
5. Technology

### **School Capacity & Membership**

6. School Campus Capacity
7. Temporary Classrooms
8. Year-Round Calendar Schools
9. Student Enrollment Projections

### **Land and Building**

10. Energy and Environmental Guidelines
11. Renovation of Existing Facilities
12. New School Size & Space Standards
13. School Site Size & Property Acquisition
14. Support Facilities
15. Security

### **Fiscal**

16. Program Price Bases
17. Funding

The Board of Education held several Facilities Committee meetings at which the members worked through the document to understand changes and implications, with the opportunity to request follow-up information. In July 2012 the full Board of Education approved the updated Planning Assumptions. These revised assumptions have not been discussed by the Board of Commissioners nor have they been approved. The guidelines will again be the framework around which the scope and cost of a referendum will be developed. The early joint meetings will offer the opportunity for the boards to review the document, affirm agreement and discuss areas where there is a difference in opinion on the details of the assumptions.

# Capital Program Planning Issues

September 21, 2005

The Board of Education  
&  
The Board of County Commissioners  
Joint Board Meeting

# Capital Program Planning Issues

## September 13, 2005

### Purpose

The purpose of this document is to outline the planning principles underlying the goals of the Wake County Public School System (WCPSS) long-range capital building program. A committee comprised of WCPSS and Wake County Staff jointly developed the Capital Program Planning issues. This committee collaborated to develop a coordinated strategy for addressing issues related to Wake County's growth and facility needs.

These planning principles will be used to identify and quantify the investment anticipated over the next two decades to construct new schools to accommodate the growing student enrollment, and to ensure that existing schools are safe, quality places for students to learn. The resulting project list will be prioritized and accomplished through multiple building programs. The next bond program, which will be presented to voters in fall 2006, will be based upon a comprehensive capital improvement plan that addresses construction of new schools, renovation of existing schools, and changes to school calendars.

Capital construction program planning will support the attainment of Goal 2008, which states: *“WCPSS is committed to academic excellence. By 2008, 95% of students in grades 3 through 12 will be at or above grade level as measured by the State of North Carolina End-of-Grade or Course tests, and all students groups will demonstrate high growth”.*

The impact on the health of existing schools will be taken into consideration with any decision regarding capital projects or school calendars. Characteristics of healthy schools include: high academic achievement by all students; strong parental support and commitment; strong community support and commitment; highly trained and effective staff; attractive and appropriate learning facilities; a safe, orderly, and inviting learning climate; strong and effective leadership; and a diverse student body.

Project priorities should:

- 1) ensure the health and safety of children and staff;
- 2) ensure adequacy of facilities for effective learning;
- 3) reduce school overcrowding; and
- 4) complete phased renovations.

## **Overview**

The following is an overview of the assumptions needed to address the next phase of the Capital Building program. The joint staff committee established broad assumptions targeting the following key issues.

1. High Performance Guidelines
2. Program Magnet Schools
3. Non-traditional School Facilities - Public/Private Partnerships
4. School Grade Configurations
5. Class Size Ratio
6. Renovation of Existing Schools
7. Student Accommodations
8. Education Program
9. Pre-Kindergarten, Ages 3-4
10. Kindergarten Program
11. School Capacity Models
12. New School Size & Space Standards
13. School Site Size
14. Property Acquisition
15. Support Facilities
16. Technology
17. Year Round Calendar Schools
18. Student Enrollment Projection
19. Timeframe
20. Program Price Bases
21. Funding

# Planning Assumptions

1. High Performance Guidelines:

WCPSS and Wake County support design principles that minimize life-cycle costs and energy costs, and do not have significant adverse effects on the environment. In design and construction, WCPSS will use jointly developed guidelines by Wake County and Wake County Public Schools for basic building materials (developed in January 2003) and energy efficient systems (developed June 2004). A cost benefit analysis of the proposed initiatives will be performed before implementation.

2. Program Magnet Schools:

Program magnet offerings will have no significant impact on the school building capacities.

3. Non-traditional school facilities – Public/Private Partnerships:

- a. Mobile and modular classroom structures will continue to be used to accommodate student enrollment;
- b. Complete modular school campuses will continue to be utilized as temporary start up schools and as swing space during building renovations;
- c. Consideration will be given, on a case-by-case basis, to acquisition of existing buildings that would be suitable for conversion to schools; some traditional program elements might be compromised if such a facility were used.
- a. Opportunities for public/private partnerships will be considered, if advantageous to the educational program and if such partnerships are evaluated as cost effective.

4. School Grade Configurations:

- a. Current grade configurations of K-5, 6-8 and 9-12 will be retained;
- b. Other grade configurations may be considered, based upon educational suitability, space needs, and cost analysis.

5. Class Size Ratio:

School models will be based upon maximum allowable system-wide class size ratios for numbers of students per classroom. NCGS 115C-301(c) – 115C-301(i) governs class sizes and maximum teaching loads.

\* Reflects average usage

Grade Level	Class Size Requirements (Grade Span Average)
K-3	21
4-8	26
9-12	24 * (State Maximum = 29)
Special Needs - Self-Contained	9 * (Range of 4 to 16)
Pre-K	10 *

## 6. Renovation of Existing Schools:

- a. The target of eliminating the backlog of deferred major renovation projects and deferred life cycle replacement projects will be attained by 2012 (5 years from the start of the next building program).
- b. Existing school requirements will be included in one of the following categories:
  1. Life Cycle Replacements – individual systems to be replaced before failure;
  2. Major Renovations – complete renewal of structural, mechanical, electrical, plumbing, codes and program; renovation cycle is 40 years;
  3. Deferred major renovation and life cycle replacement projects -- buildings that are past the 40 year major renovation cycle, or systems that exceed industry recognized life;
- c. Major renovation projects will be based on renovating 1/40<sup>th</sup> of the total system-wide square footage each year;
- d. Major renovation projects (both deferred and cyclical) will be listed as separate line items on the prioritized project list; life cycle replacement projects will be summarized as a line item, with detail projects listed on back-up documentation. Project status will be reported in the annual “School Building Program Report to Stakeholders.”
- e. The school models, amenities and finishes (walls, floors, etc.) in renovated schools will be of same standard as new schools;
- f. Spaces in existing schools will be considered adequate if the size is not less than 75% of the approved space standards;
- g. Renovation costs exceeding 75% of new construction will trigger a life-cycle cost analysis of renovation vs. replacement;
- h. WCPSS will assess by 2010 the total system-wide square footage. After 2010, WCPSS will assess 1/7 of the total system-wide square footage each year. WCPSS and Wake County will enter into an inter-local agreement for the purpose of developing facility and maintenance standards for all classifications of buildings and develop benchmark comparisons for annual budgets for facilities maintenance.
- i. Whole-building major renovation projects will be prioritized using the facility condition index (FCI) with an emphasis on Indoor Air Quality (IAQ), health and safety, and infrastructure preservation. Life-cycle replacements will be prioritized using the priority matrix that focuses on health, safety and immediate needs.
- j. Existing sites will be reviewed to determine ability to add seats.
- k. Major renovation projects will include funding for replacement of furniture, equipment, and technology if required.

## 7. Student Accommodations:

- a. The goal is for no more than 8% of students to be in mobile/modular units, including modular schools; this does not include units provided as swing-space for renovation projects. This target will be attained by 2012 (5 years from the start of the next building program).

- b. Long range capital planning will be based on a target of 95% utilization of permanent elementary and middle school seats, 97.5% utilization of permanent high school seats, and 100% of mobile and modular spaces. This allows for a 2 ½ % to 5% student management factor for flexibility in student assignment and classroom utilization, in recognition of the facts that: a) any given school's enrollment may increase during the school year; and b) it is not reasonable to achieve a one-to-one ratio (100% utilization) of students to available seats in a school, at a grade level, or in a classroom. Utilization targets will be reached by 2015.

## 8. Educational Program:

Children with specific needs will continue to be served in accordance with federal and state requirements. School models will include spaces to accommodate these requirements. Specific statutory references are listed below:

### a. Students with Disabilities:

Disability law requires the provision of special education and related/special needs services to students with disabilities, ages 3 through 21. It is inclusive of the Individuals with Disabilities Education Act, (IDEA), Section 504 of the Rehabilitation Act, Americans with Disability Act, (ADA), and the NC Procedures Governing Programs and Services for Children with Disabilities.

- Elementary (std): 3 Self-contained classrooms @ 9 students average; 2 Resource Classrooms (pull out)
- Middle: 5 Separate Services classrooms @ 9 students average; 5 Resource Classrooms (pull out)
- High: 2 Separate Services classrooms @ 9 students average; 7 Resource Classrooms @ 12 students average; 3 Occupational Course of Study @ 12 students average.

### b. General Education Support:

General Education classrooms serve the general population that is identified with special needs. These students are housed in regular classrooms and "pulled out" for special services.

- 1.) Academically Gifted, (AG): - G.S.115C-150.7 requires local school districts "...to demonstrate it "is providing appropriate services to meet the diversity of identified academically or intellectually gifted students".
- 2.) Accelerated Learning Program (ALP): - State Board Policy 16 NCAC 6D.0505 requires local school districts to provide "...focused intervention to all students who do not meet statewide student accountability standards."
- 3.) English as a Second Language, (ESL): Title VI of the Civil Rights Act of 1964 and subsequent federal and state legislation and case law require local school districts to serve limited English proficient (LEP) students. LEP students are given special instruction in English.
- 4.) Title 1: Title 1 of the Elementary and Secondary Education Act of 1965 requires local school districts "... to ensure that all children have a fair, equal, and significant opportunity to obtain a high quality of education and reach, at a minimum, proficiency on challenging state academic standards and state academic assessments."  
Elementary (std): 3 General Education classrooms (pull out)  
Middle: 2 General Education classrooms (pull out)  
High: 2 General Education classrooms (pull out)

- c. Some parts of the county may have a higher proportion of special needs children and programs than others. Additional classroom spaces may be considered for some schools in order for special needs students to remain in close proximity to their residence – a requirement of federal law.

9. Pre-kindergarten, Ages 3 & 4:

All new elementary schools will include one classroom and outdoor play space for special needs students, ages 3 to 4. This is in accordance with the Individuals with Disabilities Education Act (IDEA) Part B, the federal law that states that children with disabilities age 3 – 21 “have the right to free and appropriate education.” Capacity for this space is reported separately from the K-12 calculations.

10. Kindergarten Program:

Full-day kindergarten will continue to be offered.

11. School Capacity Models:

New schools will be planned in accordance with the latest annual capacity report. The next building program’s designs and construction will be based on the October 2005 Capacity Report’s models, definitions, and assumptions.

12. New School Size and Space Standards:

- a. School infrastructure, cafeteria, media center and other core spaces will be designed to accommodate the number of students in permanent buildings, plus optimum number of mobile/modular units, as defined in capacity models;
- b. The current capacity models for WCPSS are based upon research on school size, and support the personalization of teaching and learning, rigorous instructional program and community expectations.

School model sizes are:

Model	DPI Capacity Guidelines	Building Capacity: Traditional Calendar	Capacity with 4 or 6 mobile Classrooms (a&b)	Building Capacity: Year-Round Conversion (c)	Space Standards (Square Feet)Space Std. (d)
Elementary (std.)	400	655	747	843	86,880
Elementary (lg.)	700	800	892	1,124	102,970
Middle	600-800	981	1,137	1,293	159,752
High	800-1200	1,663	1,807	Note (e)	261,744

- (a) “4 or 6” mobiles: 4 for elementary; 6 for secondary;
- (b) Includes Special Needs teaching spaces; Elementary standard: 8; elementary large: 12; middle: 12; high: 14;
- (c) Elementary (std.): 2 single & 2 double loaded tracks with 3 mobiles; Elementary (lg.): All 4 double loaded tracks with 3 mobiles; Middle: All single loaded tracks with 1 mobile.
- (d) Actual prototypes may vary depending on code requirements. Elementary square footage reflects a 1 story design.
- (e) A multi-track schedule for high school is not recommended from an educational program and cost analysis perspective. A year-round capacity of 2,491 requires redesign to construct 10 “special” teaching spaces (art, band, CTE, etc.) and use of 10 mobile classrooms. Conversion of an existing high school would require renovations of approximately 20 classrooms to create 10 “special” teaching spaces and use of 20 mobile classrooms.

13. School Site Size:

- a. The size of new school sites is based upon the educational program needs, the environmental/regulatory requirements of the jurisdictions in which they are located and configuration/topography of the site (refer to table below);
- b. New school sites will be evaluated with Wake County and municipalities to determine the feasibility of joint development;
- c. Land held by WCPSS will be the minimum practical number of acres needed for educational program and regulatory requirements;
- d. The requirements of environmental and local ordinances will be met;
- e. Continue the practice of building multistory middle and high schools. Elementary school height will be evaluated based on the cost of land versus the cost of multiple story construction. Elementary schools will be two stories, unless an analysis of construction cost versus land cost indicates single story is more economical.
- f. For capital planning purposes, property acquisition will be based on average acreage requirement of 19 acres for elementary, 31 acres for middle, and 65 acres for high.

School Type	Acres required for current Standard Program	Average acres required for compliance with environmental regulations and local ordinances
Elementary	10	9
Middle	17	14
High	37	28

- g. *NC Department of Public Instruction guidelines are as follows:*

Grades	Developable Acreage	Applied to WCPSS Standard School Sizes
K-6	10 + (1/100 ADM)	10 + (655/100)=16.55
5-8	15 + (1/100ADM)	15 + (981/100) = 24.81
7-9	20 + (1/100 ADM)	N/A
9-12	30 + (1/100 ADM) + (10 acres for stadium and parking)	30 + (1,663/100) + 10 = 56.63

14. Property Acquisition:

- a. WCPSS will actively work with municipalities to create a multi-jurisdiction coordinated study to establish standards for land-banking;
- b. Sites will be sought for land-banking five years in advance of the construction start dates;
- c. Location and schedule of new schools will be guided by current crowding, projected growth, and increasing student assignment stability; new schools may also provide temporary swing space for renovations of schools in the area;
- d. Due to the dynamic growth in real estate prices and the varying prices in different parts of the county, the trends in land cost data will be used for escalation of future prices;
- e. Off-site utility and road construction will be budgeted as a separate line item;
- f. The cost of off-site infrastructure and projected site development costs will be included in analyzing candidate school sites;
- g. School sites are currently allowed in watersheds zoned R-40W. The additional siting and development of school sites within designated watershed areas will require significant policy discussion and potential legislative action. WCPSS, Wake County, municipalities, and stakeholders will be convened to discuss all relevant policy implications;
- h. Note: The ownership of land remains an outstanding policy issue yet to be resolved.

15. Support Facilities:

- a. Projects for essential health and safety items in existing facilities will be listed as prioritized needs;
- b. Enrollment growth as well as needs caused by normal usage and wear may require renovation and expansion of existing support facilities and construction of new facilities such as: satellite transportation centers; infrastructure upgrades or replacement of administrative buildings; and regional shops for maintenance personnel.

16. Technology:

- a. Meeting the basic technology requirements in schools enables effective delivery of instruction as specified in the WCPSS Technology Plan and in alignment with the state technology plan;
- b. the educational resources enabled by the technology infrastructure are effectively utilized in instructional delivery only with functional, capable computers;
- c. School computer needs will be based on five computers per classroom, one per teacher and administrator;
- d. A five-year replacement cycle will be included.

#### 17. Year-Round Calendar Schools:

- a. Additional year-round schools will be established in order to reduce the number of new schools to be constructed;
- b. Consideration will be given to opening Brier Creek and Barwell Road elementary schools on a year-round calendar in 2006, and to opening future elementary and middle schools on the year-round calendar;
- c. Future consideration will be given to the addition of single-track year-round calendar high schools that would support the multi-track year-round K-8 schedules.
- d. Criteria for conversion will include over-crowding of existing schools, projected enrollment growth, health of converted school and impacted schools, the number of mobile/modular units, and other factors;
- e. The number of schools to be established on a year-round calendar will be determined as part of a comprehensive facilities plan that addresses construction of new schools and renovation of existing schools, as well as the number of year-round schools.

#### 18. Student Enrollment Projection:

- a. Wake County Planning Department will annually generate WCPSS 20<sup>th</sup> day student membership projections, using the projection model retooled by Informed Decisions Inc. in February 2005. The projections generated in November 2005 will be based on the 20<sup>th</sup> day membership data verified by the North Carolina Department of Public Instruction.
- b. Wake County enrollment projections include a statistical range of +/-1% for the first five years, +/-1.5% for the next five years, and +/-2% beyond. The high-end projections will be used in calculating long-range student enrollment.
- c. An annual review of the projections versus actual enrollment will identify any seating shortfall or surplus.

#### 19. Time Frame:

Capital planning needs will be projected 20 years out, through 2025.

#### 20. Program Price Bases:

- a. Estimates for new schools and renovations are based on actual costs of PLAN 2004 projects bid in 2005;
- b. Costs are based on BoE approved space standards and existing prototype designs and include: construction cost, on-site development, demolition, design, materials testing, surveying, hazardous materials abatement (if any), moving costs, interim housing, furniture, custodial equipment, media center equipment and books, educational equipment and technology infrastructure;
- c. Land purchases are budgeted separately from construction project cost, and acquisition budget is based on the cost trend of PLAN 2004 purchases;
- d. Off-site development costs will be listed in a separate line item and will be based on the actual costs of off-site development in PLAN 2004;

- e. The cost of annual building assessments will be budgeted as a separate line item;
- f. Renovation projects will have a 10% contingency; new school projects will have a 5% contingency
- g. Project costs will be adjusted by 5% per year, through 2010, and 3.5% beyond that with an annual reassessment of actual costs;
- h. The building program will have a 2% contingency, budgeted separately. This contingency is included to provide funding of emergency projects; or to provide funding in the event critical assumptions (class size, school site size, cost of property acquisition, enrollment projections, etc.) differ substantially from actual experience. The Board of Education will review such critical needs and, if appropriate, request that the Board of Commissioners reallocate funds.
- h. Program management budget will be 3.5%.

## 21. Funding

- a. The building program will be funded through a variety of funding options to potentially include general obligations bonds, pay-as-you-go funds, state and federal funding.
- b. Pay as you go funds should be targeted to the non-capitalized technology and equipment.
- c. Alternate means of funding capital construction such as the lease of privately constructed school facilities and the potential for public-private partnerships for the construction of new schools will be considered.

# Capital Program Planning Issues

As Approved by  
The Board of Education  
&  
The Board of County Commissioners

September 21, 2005  
Joint Board Meeting

**ADDENDUM**  
**Prepared by WCPSS and Wake County Staff**

**Achievement Status**  
**As Reflected**  
**in the Development of**  
**CIP 2006 School Building Program**

Adopted by  
The Board of Education

May 16, 2006  
School Board Meeting

## Overview

Below is a list of key issues addressed in the planning assumptions adopted by the Board of Education and the Board of Commissioners. These assumptions were achieved in the development of the Board of Education's CIP 2006 except where noted. Deviations from these assumptions are noted with an asterisk and further clarified below.

- |  |  |
|--|--|
| 1. High Performance Guidelines                                     | 12. New School Size & Space Standards* |
| 2. Program Magnet Schools  | 13. School Site Size                   |
| 3. Non-traditional School Facilities - Public/Private Partnerships | 14. Property Acquisition*              |
| 4. School Grade Configurations                                     | 15. Support Facilities                 |
| 5. Class Size Ratio  | 16. Technology                         |
| 6. Renovation of Existing Schools*                                 | 17. Year Round Calendar Schools        |
| 7. Student Accommodations*   | 18. Student Enrollment Projection      |
| 8. Education Program   | 19. Timeframe                          |
| 9. Pre-Kindergarten, Ages 3-4                                      | 20. Program Price Bases                |
| 10. Kindergarten Program   | 21. Funding                            |
| 11. School Capacity Models*  |  |

### 6. Renovation of Existing Schools\*

- The building assumptions called for the target of eliminating the backlog of deferred major renovation projects and deferred life cycle replacement projects to be attained by 2012.
- This target to be attained by 2015, rather than 2012

### 7. Student Accommodations\*

- The assumptions stated the goal is for no more than 8% of students to be in mobile/modular units, including modular schools; this does not include units provided as swing-space for renovation projects.
- The target of 8% will be attained by 2015 rather than 2012. Mobile percentages are estimated below:

	2005-2006	2010-2011
Elementary	27.3%	16.2%
Middle	14.7%	15.5% **
High	14.5%	13.4%
TOTAL	20.6%	17.9%

\*\* Subject to change pending potential year-round conversions.

- The assumptions called for the long-range capital planning to be based on a target of 95% utilization of permanent elementary and middle school seats, 97.5% utilization of permanent high school seats, and 100% of mobile and modular spaces. This allows for a 2 ½ % to 5% student management factor for flexibility in student assignment and classroom utilization, in recognition of the facts that: a) any given school's enrollment may increase during the school year; and b) it is not reasonable to achieve a one-to-one ratio (100% utilization) of students to available seats in a school, at a grade level, or in a classroom.
- Utilization targets to be attained by 2018 rather than 2015.
- CIP 2006 is based on 100% utilization of all seats, and 100% of mobile and modular space.

11. School Capacity Models\*

- CIP 2006 uses larger middle and high school capacity models than those included in the planning assumptions.

	Planning Assumptions School Capacity	CIP 2006 School Capacity
Middle	981	1,311
High	1,663	2,223

- The assumptions called for the building program's design and construction to be based on the October 2005 Capacity Report's models, definitions, and assumptions.
- Because the models were changed, the program's designs and construction will be based on new models to be included in future capacity reports.

12. New School Size and Space Standards\*

- The sizes of new middle and high schools were increased to larger capacities and the standard capacity model for elementary schools was not used.

Model	DPI Capacity Guidelines	Building Capacity: Traditional Calendar	Capacity with 4 or 6 mobile Classrooms (a&b)	Building Capacity: Year-Round Conversion (c)	Space Standards (Square Feet) Space Std. (d)
<del>Elementary (std.)</del>	400	<del>655</del>	747	843	86,880
Elementary (lg.)	700	800	892	1,124	104,039 <del>102,970</del>
Middle (std.)	600-800	981	1,137	1,293	151,760 <del>159,752</del>
Middle (lg.)	600-800	1,311 <del>981</del>	1,467 <del>1,137</del>	1,623 <del>1,293</del>	199,246 <del>159,752</del>

Model	DPI Capacity Guidelines	Building Capacity: Traditional Calendar	Capacity with 4 or 6 mobile Classrooms (a&b)	Building Capacity: Year-Round Conversion (c)	Space Standards (Square Feet) Space Std. (d)
High (std.)	800-1200	1,663	1,807	N/A	268,220** <del>261,744</del>
High (lg.)	800-1200	2,223 <del>1,663</del>	2,365 <del>1,807</del>	N/A	333,798** <del>261,744</del>

\*\* Corrected to include stadium

- (a) “4 or 6” non-permanent teaching spaces: 4 for elementary, 6 for secondary
- (b) Includes Special Needs teaching spaces.
- Elementary large - 12.
  - Due to larger school capacities, special needs spaces for middle schools increased to 16 from 12 and special needs spaces in high schools increased to 17 from 14.
- (c) Elementary (lg.): All 4 double loaded tracks with 3 mobiles. Middle schools will be; all single loaded tracks with one double loaded track instead of all single loaded tracks with 1 mobile as noted in the planning assumptions.
- (d) Actual prototypes may vary depending on code requirements. Elementary square footage reflects a 2-story design.

#### 14. Property Acquisition\*

- The planning assumptions stated that school sites would be sought for land-banking five years in advance.
- Land banking is not a component of CIP 2006; land will be sought in advance of construction start dates.
- The planning assumptions included a note about the ownership of land needing to be resolved. The ownership of land has been resolved. Title will be temporarily held by Wake County if necessary for sales tax purposes.

**Capital Planning**  
**Bond Assumptions**  
for the Next  
Capital Improvement Program  
as approved by the Board of Education  
on July 24, 2012

## Capital Planning Bond Assumptions

### **Purpose**

This document outlines the planning principles of the Wake County Public School System (WCPSS) long-range capital building program.

These planning principles will be used to identify and quantify the investment to construct new schools to accommodate the growing student enrollment and to ensure that existing schools are safe quality places for students to learn. The resulting project list will be prioritized and accomplished through multiple building programs. Future bond programs will be based upon a comprehensive capital improvement plan that addresses construction of new schools and renovation of existing schools.

Project priorities should:

- 1) ensure the health and safety of children and staff;
- 2) ensure adequacy of facilities and technology for effective learning;
- 3) reduce school overcrowding; and
- 4) provide sustainable facilities.

## Capital Planning Bond Assumptions

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## Capital Planning Bond Assumptions

### PROGRAM

#### 1. School Grade Configurations:

- a. Current grade configurations of Pre-K-5, 6-8 and 9-12 will be retained;
- b. Other grade configurations may be considered based upon educational suitability, space needs, and cost analysis.

#### 2. Educational Program:

Space will be provided to appropriately house programs to deliver the Standard Course of Study as prescribed by the State Board of Education; additional space may be provided in order to house additional educational programs approved by the WCPSS Board of Education.

Children with disabilities will continue to be served in accordance with the Strategic plan that complies with federal and state requirements. New school design models will include spaces to accommodate these requirements.

##### a. Classrooms Dedicated to Serving Students with Disabilities:

Disability law requires the provision of special education and related/special needs services to students with disabilities, ages 3 through 21, as per the Individuals with Disabilities Education Act (IDEA), Section 300 (Placement Decisions) and Section 504 of the Rehabilitation Act, Americans with Disability Act (ADA), and the NC Procedures Governing Programs and Services for Children with Disabilities.

Student/teacher ratio changed from 9 to 8 as a result of The North Carolina Policies Governing Services for Children with Disabilities, June, 2007, which modified the student class size requirements (NC 1508-3). These modifications remain in effect.

Go to: <http://www.ncpublicschools.org/docs/ec/policy/2007policies.pdf>;

NC 1508 Class Size: School Age and Preschool on page 139.

Elementary: 2 Adaptive Curriculum classrooms @8 students average and 6 Special Education Services classrooms

Middle: 4 Adaptive Curriculum classrooms @8 students average and 9 Special Education Services classrooms

High: 2 Adaptive Curriculum classrooms@8 students average, 3 Occupational Course of Study (OCS) classrooms @ 12 students average, and 10 Special Education Services classrooms @ 12 students average.

##### b. Classrooms Dedicated to Serving General Education Support:

The general population of students with special needs is housed in regular classrooms with “pulled out” programs for special services to include:

## Capital Planning Bond Assumptions

- 1) Classrooms dedicated to serving Academically Gifted (AG) programs: – G.S.115C-150.7 requires local school districts “...to demonstrate it “is providing appropriate services to meet the diversity of identified academically or intellectually gifted students”.
- 2) Intervention - State Board Policy 16 NCAC 6D.0505 requires local school districts to provide “...focused intervention to all students who do not meet statewide student accountability standards.”
- 3) English as a Second Language (ESL): Title VI of the Civil Rights Act of 1964 and subsequent federal and state legislation and case law require local school districts to serve limited English proficient (LEP) students. LEP students are given special instruction in English.
- 4) Title I: Title I of the Elementary and Secondary Education Act of 1965 requires local school districts “... to ensure that all children have a fair, equal, and significant opportunity to obtain a high quality of education and reach, at a minimum, proficiency on challenging state academic standards and state academic assessments.

General Education Support (AG, Intervention, LEP, Title I):

Elementary: 4 classrooms

Middle: 3 classrooms

High: 2 classrooms

Additional classroom spaces may be considered for some schools in order for special needs students to remain in close proximity to their residence – a requirement of federal law.

### 3. Pre-kindergarten, Ages 3 through 4:

Elementary schools will include two classrooms and an outdoor learning environment for students at risk or with disabilities, ages 3 through 4, in accordance with the Individuals with Disabilities Education Act (IDEA) Part B, the federal law that states that children with disabilities age 3 – 21 “have the right to free and appropriate education.” Title I Guidance strongly supports Pre-K programs and Section 1112(c)(1)(F) of the Elementary and Secondary Education Act requires LEAs to provide an assurance that they will take into account the experience of model programs for the educationally disadvantaged.

These programs are funded from state and federal initiatives. WCPSS has self-contained and blended classes, based on the needs of the students. If the classrooms are not used for these programs, then the room(s) converts to space to accommodate students in grades K-5. Otherwise, capacity for this space is reported separately from the K-12 calculations.

### 4. Kindergarten Program:

Full-day kindergarten will continue to be offered.

## Capital Planning Bond Assumptions

### 5. Technology:

Development of 21<sup>st</sup> century skills in our students, effective instruction by our teachers, and assessment of student progress, requires the utilization of technology in our classrooms and schools. Effective utilization of technology leverages the capacity of the teacher, expands the physical boundaries of the classroom to the world, and engages students in ways that other instructional tools cannot. It is paramount that the next WCPSS Capital Program provides resources to equip new schools and renovate technology in existing schools to meet the expectations and challenges of our teachers and students.

#### a. General Assumptions

- 1) Technology is in a continual state of change. Assumptions made at the beginning of a Multi-Year Capital Program may become stale or no longer appropriate before the end of the Program. It is important the plan have capacity to amend the technology component of the Program during its term.
- 2) WCPSS targets attainment of a one to one student computing device ratio to provide the basis for development of 21<sup>st</sup> century technical skills and provide basis for delivery of 21<sup>st</sup> century learning content. Such initiatives are becoming the norm across the country. Meeting this standard will require a complete implementation of one to one devices for all students and the deployment of the necessary underlying infrastructure to support one to one devices. North Carolina currently has over 50 LEA's implementing initiatives to provide universal access to personal learning and teaching devices for both students and teacher
- 3) Costs associated with the deployment of technology infrastructure in new schools, deployment of technology renovation in existing schools, and deployment of technology in mobile modular classrooms is an integral component of the overall Program
- 4) Central Administration Leadership from Instructional and Technology areas will guide the decisions and standards for the technology infrastructure of newly built schools and the technology renovation of existing schools
- 5) The leadership of the Wake County Public School System recognizes that the utilization of technology is a key component of the learning and teaching process and preparation of our students for graduation and competing in the world. Further, the leadership understands the need for Central Administration to continue to drive the infusion of technology into curriculum, the expectation that School Administrators and Teachers understand how to effectively utilize technology infrastructure during instruction, and the provision of professional development to Central Administration, School Administrators, and Teachers to accomplish this.
- 6) Central Administration leadership recognizes that development of instructional technology standards for the district, and comprehensive utilization of technology infrastructure in the schools is essential for leveraging the capacity of teachers, engaging all students, developing 21<sup>st</sup> century skills in our students, and maximizing return on the significant investment made in technology.

## Capital Planning Bond Assumptions

### b. New School Assumptions

- 1) One to one devices for students and staff will become the norm. Networking, wired, and wireless infrastructure must have capacity to support fully implemented one to one device initiatives for students and staff.
- 2) Decreasing unit costs for laptop computers to a point close to desktop units, directs that the primary computer devices become a laptop creating utilization flexibility.
- 3) During the transition to a one to one device environment, the practice of equipping all classrooms with a minimum of 5 desktop computers should be revised with a shift to laptop carts capable of bringing an entire “computer lab” to the classroom.
- 4) Alternative one to one devices, including tablet computers, will provide a complement to traditional laptop computers as instructional tools. Deployment of one to one carts will provide maximum utility and flexibility.
- 5) All instructional areas should be equipped with an interactive device such as a Smartboard or Promethean board and student response devices.
- 6) Acquisition of underlying operating system licenses, office productivity software licenses, and other application software licenses, device management applications, and initial set-up/installation, shall be a component of the program. Technology hardware, operating systems, and applications are all components of the technology itself, and all must be present and installed for use.
- 7) For schools built in areas not having adequate signals from WCPSS’ cell phone provider, funding shall be allotted for in building repeaters and related equipment to ensure emergency phones and communications take place in an effective manner.
- 8) Voice over IP is becoming the new norm for wired phone communication and shall be considered for all new schools.
- 9) Building automation infrastructure shall be incorporated within new facilities.

### c. Existing School Assumptions

- 1) School facility and technology infrastructure life cycles differ significantly. Components of the facility have life cycles of decades, while most technology life cycles run in the three to five year range. The Program must recognize this and provide for renovation of technology in existing schools to be on par with the equipping of newly constructed schools.
- 2) The technology infrastructure of a large number of existing WCPSS schools is significantly overdue for renovation. Technology shifts from blackboards and chalk to white boards and dry erase markers have not been maintained to the current technology of interactive boards. Many existing schools have limited access for all students in a class utilizing one to one devices on a regular basis during the course of instruction. Regular leveraging of teacher’s time through utilization of technology cannot be accomplished in many of our existing schools.

## Capital Planning Bond Assumptions

- 3) Technology infrastructure in the schools also includes all aspects of the technology backbone required to support end devices used by students and teachers. Infrastructure supporting student and teacher device use includes wired and wireless networking equipment, wiring, servers, backup UPS systems, switches, etc. In the effort to drive costs down and improve levels of service, as school renovations take place, alternatives for provision of the back-bone infrastructure will be considered including cloud based technology.
- 4) To drive the renovation of technology infrastructure and equipment in existing schools to be on par with technology in newly built schools, the Program will target investment of \$200 per WCPSS student per year for the term of the Program. Further, the Program will seek funding streams to maintain this level of investment in technology renovation on an ongoing basis subsequent to the termination of the facility building/renovation component.
- 5) Voice over IP is becoming the new norm for wired phone communication and shall be considered for all existing schools.

### d. Mobile/Modular Unit Assumptions

As mobile or modular units are added to a school campus, the Program will provide for a technology infrastructure on par with that found in a regular classroom. This will include the investment necessary to provide the temporary classrooms with interactive devices and related assessment systems, access to laptop and or tablet carts, and complete wired and wireless networking capacity. In the 21<sup>st</sup> century, the utility of network/internet wired and wireless access is a basic requirement similar to water and electricity.

## Capital Planning Bond Assumptions

### SCHOOL CAPACITY & MEMBERSHIP

#### 6. School Campus Capacity:

- a. Utilization – Facilities utilization will be based on class size averages and the optimum number of temporary classrooms supported by each school’s program and site. Planning for the number of schools needed to accommodate student enrollment will be based on a utilization of 95% for elementary and middle schools, and 97.5% for high schools. This process offers the opportunity to align overcrowded schools with under-utilized ones and eventually bring all schools’ utilization in line with their core facilities and site constraints. This will require the reallocation and eventual reduction of temporary classroom units, targeting those older than 25 years.
- b. Class Size Ratios – School models will be based upon allowable system-wide class-size ratios for numbers of students per classroom. NCGS 115C-301 and Session Law 2011-145 (House Bill 200) governs class sizes and teaching loads. “Local boards of education must maintain a LEA-wide class size average no higher than the class size ratio of teachers to students of the following: [Kindergarten – Grade 3: 1 to 21]”

Grade Level	Class Size Requirements (Grade Span Average)
K-3	21
4-8	26
9-12	24
Special Needs - Self-Contained	8 (Range of 4 to 12)
Pre-K	10 (Range 4 to 18)

Note: Special Education average usage is based on Policies Governing Services for Children with Disabilities: NC 1508-3 Class Size Chart. See Bond Assumption #2. High school total reflects average usage.

See Appendix

#### 7. Temporary Classrooms:

Optimum temporary classrooms should not exceed the maximum that can be supported by the core facilities (dining, office support, parking, playfields, etc.) with consideration of site limitations. Standard designs accommodate ~100 more seats or the equivalent of four temporary classrooms when the site allows. This does not include units utilized as swing-space for renovation projects. Mothballed or surplus units will be redistributed to better align a campus' efficiencies with its program.

## Capital Planning Bond Assumptions

The six 2003 adopted criteria for determining optimum instructional temporary classrooms (what the core can support) are reflected in the annual Facilities Utilization report:

- 1) can be physically accommodated on the site;
- 2) are permissible by the authorities having jurisdiction and by zoning, etc.;
- 3) can be supported by no more than one toilet trailer unit;
- 4) can be supported by dining room facilities with no more than 3 seatings based on Department of Public Instruction Guidelines;
- 5) can be accommodated within 300 feet of the closest building access point; and,
- 6) can be supported by specialized educational program spaces like Career Technical Education, science, gym, etc.

... plus can be supported by vehicle traffic patterns (added in 2010).

See Appendix

### 8. Year-Round Calendar Schools:

Operating schools on a multi-track, year-round calendar is one strategy that the district has used to increase the capacity of school buildings. When operated on such a calendar, with full utilization on all four tracks, additional capacity of up to 33% can be gained over using the building as a single-track, traditional calendar school.

Any assumptions to establish schools to be operated on the year-round, multi-track schedule will be determined as part of a comprehensive facilities plan that will include a detailed review of capacities at existing schools, assignment and growth patterns, the district's track record on being able to maintain full utilization on all four tracks of the multi-tracks schools currently in operation and the resulting actual cost savings from operation of current year-round schools. Public feedback should also be sought to measure the community's tolerance for these alternate schedules. The assumption at this time is to maintain a minimal portion of schools operated on the year-round, multi-track calendar.

See Appendix

### 9. Student Enrollment Projection:

- a. Staff from the Wake County and WCPSS will jointly produce enrollment projections. Enrollment projections will be reviewed and subsequently presented to the Board of Commissioners and Board of Education at a joint board meeting for approval.
- b. Enrollment projections will be developed for operating budget and capital budgeting purposes. The methodology for capital projections may vary from the methodology used for the operating budget projection.

## Capital Planning Bond Assumptions

Capital projections are based on an economic cycle model, based on the need to project capital budgeting projections for a longer period of time over a varying economic climate. Economic indicators such as unemployment, sales tax revenue growth, building permits, as well as student enrollment indicators such as market share are taken into account. The operating budget is approached differently, based on the same rate of growth as the previous year.

## Capital Planning Bond Assumptions

### LAND AND BUILDING

#### 10. Energy and Environmental Guidelines:

WCPSS and Wake County support design principles that minimize life-cycle costs and energy costs, and do not have significant adverse effects on the environment. On all projects, WCPSS will comply with the Guidelines for Design and Construction of Energy-Efficient County Government Facilities and Schools, dated June 2004 (jointly developed and adopted by Wake County Government and WCPSS).

WCPSS will incorporate sustainable design features, wherever most financially responsible, consistent with the recommendations of the US Green Building Council in its LEED for Schools certification guidelines. A sustainability checklist will be used to optimize the use of "green" features in design and a sustainable energy cost benefit analysis will be conducted during Design Development of each project.

#### 11. Renovation of Existing Facilities:

- a. Existing facility projects will be included in one of the following categories:
  - 1) Life Cycle Replacements – individual systems to be replaced before failure;
    - a) Systems that are approaching or have exceeded system life will be targeted based on facility assessments
    - b) All Life Cycle replacement projects will be summarized in one line item in the CIP
    - c) Projects will be prioritized using a priority matrix that focuses on health, safety and immediate needs
  - 2) Major Renovations – may include complete renewal or replacement of structural, mechanical, electrical, plumbing, codes and educational program;
    - a) Facility square footage approaching or exceeding 40 years since a major renovation will be evaluated for a potential project

- b) Projects will be prioritized using a weighted evaluation sheet that includes the Facility Condition Index (FCI), academic improvement, student assignment, and health and safety...
- c) Each project will be listed as a separate line item in the CIP
- d) The amenities and finishes (walls, floors, etc.) in renovated schools will be of same standard as new schools
- e) Spaces in existing schools will be considered adequate if the size is not less than 75% of the approved space standards
- f) Renovation costs exceeding 75% of new construction will trigger a life-cycle cost analysis of major renovation vs. demolition/replacement
- g) Existing campuses will be reviewed to determine ability to add capacity
- h) Funding will be included for replacement of furniture, equipment, and technology if required

### Capital Planning Bond Assumptions

WCPSS will conduct a facility assessment on 1/7<sup>th</sup> of the total square footage each year. The assessment will identify facility deficiencies and system life cycle due dates. This data will be used to establish initial project scopes, determine facility condition index, establish priorities and project future requirements.

See Appendix

#### 12. New School Size and Space Standards:

- a. School infrastructure, cafeteria, media center, and other core spaces will be designed to accommodate the number of students in permanent buildings, plus additional seats in potential temporary classrooms. Utility infrastructure and site plans will provide for temporary classrooms where site conditions allow;
- b. Alternate and non-traditional sizes of schools and sites will be considered based on availability of property.
- c. Square footage totals are based on the latest space standards and subject to change pending program and operational needs. School model sizes are:

	DPI Capacity Guidelines	Building Capacity: Traditional Calendar	Building Capacity: Year-Round Calendar	Space Standards (Square Feet)
Elementary (lg)	700	780	1058	105k
Middle (std)	600-800	1,280	1,592	200k
High (std)	800-1,200	2,228	N/A	335k

- 1) Capacity totals reflect capacity models and the reduction in the special education student ratio;
- 2) Capacity totals include Special Needs teaching spaces to include both Special Education Services and General Education Support; elementary - 12; middle - 16; high - 17.
- 3) Elementary (lg): Year-round has all double loaded tracks with 2 temporary classrooms;  
Middle (lg): Year-round has 1 double loaded track and 3 single tracks.

13. School Site Size and Property Acquisition:

Land will be the minimum practical needed for educational program and regulatory requirements. Future capital programs will utilize Department of Public Instruction (DPI) guidelines, plus two acres for temporary classrooms and/or additional municipal requirements such as extra queuing. North Carolina Department of Public Instruction guidelines and recommended site sizes are as follows:

Capital Planning Bond Assumptions

Grades	Developable Acreage	Applied to WCPSS Standard School Sizes (without temporary classrooms)	WCPSS Net Usable Acres
K-6	10 + (1/100 ADM)	10 + (796/100 ADM) = 17.96	20
5-8	15 + (1/100 ADM)	15 + (1,304/100 ADM) = 28.04	30
9-12	30 + (1/100 ADM) + 10 acres for parking & stadium	30 + (2,223/100 ADM) + 10 = 62.23	64

- a. The size of new school sites is based upon the educational program needs, the environmental/regulatory requirements of the jurisdictions in which they are located and configuration/topography of the site;
- b. New school sites will be evaluated to determine the feasibility of joint development with other governmental agencies;
- c. The use of smaller tracts will be considered when necessary, but may require changes to a school's capacity and educational program;
- d. Sites will be sought for schools five years in advance of the construction start dates and opportunities to identify sites will be actively worked with municipalities;
- e. Location and schedule of new schools will be guided by current crowding, projected growth, and needs identified from data in the student assignment process; new schools may also provide temporary swing space for renovations of schools in the area;
- f. The projected cost of public infrastructure and site development will be included in analyzing candidate school sites;
- g. Consideration will be given, on a case-by-case basis, to acquisition of existing buildings that would be suitable for conversion to schools; some traditional program elements might be compromised if such a facility were used;

14. Support Facilities:

- a. Projects for essential health and safety items in existing support facilities will be listed as prioritized needs;
- b. Enrollment growth as well as needs caused by normal usage and wear may require renovation and expansion of existing support facilities and construction of new facilities such as: satellite transportation centers, infrastructure upgrades and regional shops for maintenance personnel. Where appropriate, expansion may require property acquisition.

15. Security:

Project priorities include ensuring the health and safety of children and staff; that schools are safe quality places for students to learn. To that end, the following assumptions will ensure that these objectives are met. All new and existing schools shall have consistent security systems with the most up to date technologies equivalent to those used in all new schools. All new facilities and major renovations shall utilize Crime Prevention through Environmental Design (CPTED)

Capital Planning Bond Assumptions

principles. The purpose of these proposed assumptions is to have a centralized security system for all schools.

<u>System</u>	<u>Elementary</u>	<u>Middle</u>	<u>High</u>
Closed Circuit Television System	Integrated IP based: minimum 16 camera system	Integrated IP based: minimum 32-64 camera system	Integrated IP based: minimum 64-80 camera system
Access Control	Enterprise based access control system	Enterprise based access control system	Enterprise based access control system
Visitor Management	Networked kiosk for visitor sign-in and sex offender checks	Networked kiosk for visitor sign-in and sex offender checks	Networked kiosk for visitor sign-in and sex offender checks
Intrusion Alarm System	Upgraded to audible	Upgraded to audible	Upgraded to audible
Public Address Systems/Intercoms	Broadcast location added for designated incident command (principal conference room)	Broadcast location added for designated incident command (principal conference room)	Broadcast location added for designated incident command (principal conference room)

## Capital Planning Bond Assumptions

### FISCAL

#### 16. Program Price Bases:

- a. Project estimates and cost models will be developed for pricing the new bond and will be independently validated;
- b. Costs are based on BoE approved space standards, ed specs, design guidelines, and existing prototype designs. Cost may include: construction cost, site development, demolition, design, materials testing, surveying, hazardous materials abatement (if any), moving costs, interim housing, furniture, custodial equipment, media center equipment and books, educational equipment and technology infrastructure;
- c. Land purchases and due diligence costs are budgeted separately from construction project cost and the land acquisition budget is based on the cost trend of recent land purchases and economic projections;
- d. Public infrastructure costs will be listed in a separate line item and will be based on the actual costs of current market trends;
- e. The cost of annual facilities assessments will be budgeted as a separate line item;
- f. Renovation projects will have a 10% contingency; new school projects will have a 5% contingency;
- g. The inflation estimate will be determined based upon information provided by up to four different independent construction companies; project costs will be adjusted each year based on anticipated annual inflation.
- h. The building program will have a 1.5% funded reserve budget. This budget would be used for funding of emergency projects or in the event critical assumptions (class size, school site size, cost of property acquisition, enrollment projections, etc.) differ substantially from actual experience. The reserve budget will be the designated location for any savings and will be held by the Board of Commissioners. Board of Education will review any critical needs and, if appropriate, request reallocation of funds from the Board of Commissioners.
- i. Program management budget will be based on the number of projects and timing of delivery.
- J To maintain a continuous building program, each CIP will include funds for the property acquisition and early start design of new projects funded in the next CIP.

#### 17. Funding

- a. The building program will be funded through a variety of funding options to potentially include general obligations bonds, pay-as-you-go funds, state and federal funding.
- b. Pay-as-you-go funds should be targeted to non-capitalized technology and equipment. Alternate means of funding schools should be considered.
- c. Lottery funds awarded to the county and WCPSS will be used towards debt service costs of WCPSS general obligation bonds
- d. Opportunities for public/private partnerships will be considered, if advantageous to the educational program and if such partnerships are evaluated as cost effective.

## Capital Planning Bond Assumptions

### APPENDIX

#### 6. School Campus Capacity:

- a. Utilization – System-wide Long Range School Campus Capacity [LRSCC] utilization based on 2012-13 20<sup>th</sup> day membership and optimum temporary classrooms:

	2012-13 20 <sup>th</sup> Day Student Membership	LRSCC Seats (Including Program Adj.)	Optimal # Temporary Classrooms	% Utilization (Including Program Adj.)
Elementary	71,160	70,443	378	101.0%
Middle	34,505	35,717	65	96.6%
High	43,435	38,237	68	113.6%
Special/Optional	408	408	1	100.2%
<b>TOTAL</b>	<b>149,508</b>	<b>144,804</b>	<b>512</b>	<b>103.2%</b>

#### 7. Temporary Classrooms:

- a. Temporary classrooms compared to total school capacities as of 2012-13:

	Optimum Long-Range Temporary Classrooms (Max Supported by Core*/Site) Total # / Percentage	Actual Temporary Classrooms Total # / Percentage	Difference
Elementary	378 / 11.6%	579 / 17.7%	201
Middle	65 / 4.6%	207 / 13.2%	142
High	68 / 4.2%	349 / 18.4%	289
<b>TOTAL</b>	<b>1 / 2.5%</b>	<b>1 / 2.5%</b>	<b>1</b>

\*Core includes dining, office support, group toilets, parking, playfields, traffic, etc

- b. Schools and Temporary Classrooms as of 2012-13:

	Number of Schools that Exceed Optimum Temporary Classrooms	Number of Temporary Classrooms /Number of Seats that Exceed the Maximum
Elementary	50	255 / 5,717
Middle	17	143 / 3,718
High	20	277 / 6,375
<b>TOTAL</b>	<b>87</b>	<b>675 / 15,810</b>

## Capital Planning Bond Assumptions

### 8. Year-Round Calendar Schools:

	Number of Year-Round Schools / Total Schools as of 2012-13	Number of Year-Round Seats / Total Seats as of 2012-13
Elementary	40 / 104	33,920 / 74,256
Middle	10 / 34	13,187 / 38,352

Note that 5 of the 40 year-round elementary schools are on a single track calendar

### 11. Renovation of Existing Facilities:

- a. 1.1 million out of 21.1 million permanent square feet exceed 40 years since a major renovation as of December 2012.
- b. \$167 million in unfunded deferred life cycle projects have been identified as of December 2012,

#### Square Footage by Year:

- 1) The square footage that turns 40 in 2013 = 20,732 GSF
- 2) The square footage that turns 40 in 2014 = 59,212 GSF
- 3) The square footage that turns 40 in 2015 = 284,425 GSF

Total: 2016 - 2020 = 93,225 GSF

Comparison of 2006 and 2012 Assumption Documents

## Capital Planning and Bond Assumptions

### Key

Analysis Summary:

County Staff has provided a synopsis of changes with description of impact if available or known. This is inserted before the assumptions for each Table of Contents topic item. It will be highlighted in gray and will be accompanied by comparison charts between CIP 2006 and the proposed assumptions, where relevant.

Black Text: CIP 2006 Planning Assumptions

Red Text: Substantive Modifications to CIP 2006 Planning Assumptions by Board of Education

## Capital Planning and Bond Assumptions

### Purpose

This document outlines the planning principles of the Wake County Public School System (WCPSS) long-range capital building program.

These planning principles will be used to identify and quantify the investment to construct new schools to accommodate the growing student enrollment and to ensure that existing schools are safe, quality places for students to learn. The resulting project list will be prioritized and accomplished through multiple building programs. Future bond programs will be based upon a comprehensive capital improvement plan that addresses construction of new schools and renovation of existing schools.

~~Capital construction program planning will support the attainment of Goal 2008, which states: “WCPSS is committed to academic excellence. By 2008, 95% of students in grades 3 through 12 will be at or above grade level as measured by the State of North Carolina End of Grade or Course tests, and all students groups will demonstrate high growth”.~~

~~The impact on the health of existing schools will be taken into consideration with any decision regarding capital projects or school calendars. Characteristics of healthy schools include: high academic achievement by all students; strong parental support and commitment; strong community support and commitment; highly trained and effective staff; attractive and appropriate learning facilities; a safe, orderly, and inviting learning climate; strong and effective leadership; and a diverse student body.~~

Project priorities should:

- 1) ensure the health and safety of children and staff;
- 2) ensure adequacy of facilities and technology for effective learning;
- 3) reduce school overcrowding; and
- 4) ~~complete phased renovations~~provide sustainable facilities.

# Capital Planning and Bond Assumptions

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|--|--|
| 1. <del>High Performance Guidelines</del>  | 11. <del>School Capacity Models</del>                |
| 2. <del>Program Magnet Schools</del>   | 12. <del>New School Size &amp; Space Standards</del> |
| 3. <del>Non-traditional School Facilities—<br/>Public/Private Partnerships</del> | 13. <del>School Site Size</del>                      |
| 4. <del>School Grade Configurations</del>  | 14. <del>Property Acquisition</del>                  |
| 5. <del>Class Size Ratio</del>   | 15. <del>Support Facilities</del>                    |
| 6. <del>Renovation of Existing Schools</del>                                     | 16. <del>Technology</del>                            |
| 7. <del>Student Accommodations</del>   | 17. <del>Year Round Calendar Schools</del>           |
| 8. <del>Education Program</del>  | 18. <del>Student Enrollment Projection</del>         |
| 9. <del>Pre-Kindergarten, Ages 3-4</del>   | 19. <del>Timeframe</del>                             |
| 10. <del>Kindergarten Program</del>  | 20. <del>Program Price Bases</del>                   |
|  | 21. <del>Funding</del>                               |

## **Program**

1. School Grade Configuration
2. Education Program
3. Pre-Kindergarten, Ages 3-4
4. Kindergarten Program
5. Technology

## **School Capacity and Membership**

6. School Campus Capacity
7. Temporary Classrooms
8. Year-Round Calendar Schools
9. Student Enrollment Projections

## **Land and Building**

10. Energy and Environmental Guidelines
11. Renovation of Existing Facilities
12. New School Size and Space Standards
13. School Site Size and Property Acquisition
14. Support Facilities
15. Security

## **Fiscal**

16. Program Price Bases
17. Funding

## Capital Planning and Bond Assumptions

### PROGRAM

#### 1. School Grade Configurations:

Analysis Summary:  
 -Includes Pre-K; prior assumptions did not.

Assumptions:

- a. Current grade configurations of Pre-K-5, 6-8 and 9-12 will be retained;
- b. Other grade configurations may be considered based upon educational suitability, space needs, and cost analysis.

#### 2. Education Program:

Analysis Summary:  
 -No change from current operation, but different from CIP 2006 assumption.  
 -The student/teacher ratio in self-contained programs changed from 9 to 8, per the North Carolina Policies Governing Services for Children with Disabilities, June 2007 (NC 1508-3).  
 -Reflects transition from the standard, or smaller, school model to the large school model.  
 -A shift from Separate Services (self-contained) toward inclusion/pull-out keeps the number of classrooms the same, but slightly increases the number of seats at high schools while slightly decreasing the number at elementary and middle schools.

<u>Special Education Student Classroom Plan Comparison:</u>			
	<u>Sept 2005 Assumptions Based on a "small" capacity model</u>	<u>CIP 2006 Current Operation Based on May 2006 Addendum</u>	<u>Future Building Program Assumptions</u>
Elementary	3 Self-contained classrooms @ 9 students average; 2 Resource Classrooms (pull out)	4 Self-contained classrooms @ 9 students average and 4 Resource classrooms = 8	2 Adaptive Curriculum classrooms @ 8 students average and 6 Special Education Services classrooms =8
Middle	5 Separate Services classrooms @ 9 students average; 2 Resource Classrooms (pull out)	7 Self-Contained classrooms @ 9 students average and 6 Special Education Services classrooms =13	4 Adaptive Curriculum classrooms @ 8 students average and 9 Special Education Services classrooms =13
High	2 Separate Services classrooms @ 9 students average; 7 Resource Classrooms @ 12 students average; 3 Occupational Course of Study @ 12 Students Average	4 Separate Services classrooms @ 9 students average, 3 Occupational Course of Study (OCS) classrooms @ 12 students average, and 8 Resource classrooms @ 12 students average = 15	2 Adaptive Curriculum classrooms @ 8 students average, 3 Occupational Course of Study (OCS) classrooms @ 12 students average, and 8 Special Education Services classrooms @ 12 students

## Capital Planning and Bond Assumptions

			average =13
<u>General Education Number of Classrooms Comparison:</u>			
	<u>Sept 2005 Assumptions Based on "small" capacity model</u>	<u>CIP 2006 Current Operation Based on May 2006 Addendum</u>	<u>Future Building Program Assumptions</u>
Elementary	3 General Education Classrooms (pull out)	4 classrooms	4 classrooms
Middle	2 General Education Classrooms (pull out)	3 classrooms	3 classrooms
High	2 General Education Classrooms (pull out)	2 classrooms	1 classroom

### Assumptions:

Space will be provided to appropriately house programs to deliver the Standard Course of Study as prescribed by the State Board of Education' additional space may be provided in order to house additional educational programs approved by the WCPSS Board of Education.

Children with disabilities will continue to be served in accordance with the Strategic plan that complies with federal and state requirements. New school design models will include spaces to accommodate these requirements.

a. Classrooms Dedicated to Serving Students with Disabilities:

Disability law requires the provision of special education and related/special needs services to students with disabilities, ages 3 through 21, as per the Individuals with Disabilities Education Act, (IDEA), Section 300 (Placement Decisions) and Section 504 of the Rehabilitation Act, Americans with Disability Act (ADA), and the NC Procedures Governing Programs and Services for Children with Disabilities.

Student/teacher ratio changed from 9 to 8 as a result of The North Carolina Policies Governing Services for Children with Disabilities, June 2007, which modified the student class size requirements (NC 1508-3). These modifications remain in effect.

Go to: <http://www.ncpublicschools.org/docs/ec/policy/2007policies.pdf>;

NC 1508 Class Size: School Age and Preschool on page 139.

Elementary-(std): 2 Adaptive Curriculum classrooms @ 8 students average and 6 Special Education Services classrooms 3 Self-contained classrooms @ 9 students average; 2 Resource Classrooms (pull out)

Middle: 4 Adaptive Curriculum classrooms @ 8 students average and 9 Special Education Services classrooms 5 Separate Services classrooms @ 9 students average; 5 Resource Classrooms (pull out)

High: 2 Adaptive Curriculum classrooms @ 8 students average, 3 Occupational Course of Study (OCS) classrooms @ 12 students average, and 4 Special Education Services classrooms @ 12 students average 2 Separate Services classrooms @ 9 students average; 7

## Capital Planning and Bond Assumptions

~~Resource Classrooms @ 12 students average; 3 Occupational Course of Study @ 12 students average.~~

### b. Classrooms Dedicated to Serving General Education Support:

The general population of students with special needs is housed in regular classrooms with “pulled out” programs for special services to include:

- 1) Classrooms dedicated to serving Academically Gifted (AG): – G.S.115C-150.7 requires local school districts “...to demonstrate it ’is providing appropriate services to meet the diversity of identified academically or intellectually gifted students”.
- 2) ~~Intervention: Accelerated Learning Program (ALP)~~: – State Board Policy 16 NCAC 6D.0505 requires local school districts to provide “...focused intervention to all students who do not meet statewide student accountability standards.”
- 3) English as a Second Language (ESL): Title VI of the Civil Rights Act of 1964 and subsequent federal and state legislation and case law require local school districts to serve limited English proficient (LEP) students. LEP students are given special instruction in English.
- 4) Title I: Title I of the Elementary and Secondary Education Act of 1965 requires local school districts “... to ensure that all children have a fair, equal, and significant opportunity to obtain a high quality of education and reach, at a minimum, proficiency on challenging state academic standards and state academic assessments.”

General Education Support (AG, Intervention, LEP, Title I):

Elementary ~~(std)~~: 4 classrooms ~~3 General Education classrooms (pull out)~~

Middle: 3 classrooms ~~2 General Education classrooms (pull out)~~

High: 2 classrooms ~~2 General Education classrooms (pull out)~~

Additional classroom spaces may be considered for some schools in order for special needs students to remain in close proximity to their residence – a requirement of federal law.

### 3. Pre-kindergarten, Ages 3 through 4:

#### Analysis Summary:

-CIP called for one Pre-K classroom. New assumptions call for two Pre-K classrooms per elementary school, an increase of 1,100 square feet.

#### Assumptions:

Elementary schools will include ~~one~~ two classrooms and an outdoor learning environment for students at risk or with disabilities, ages 3 through 4, in accordance with the Individuals with Disabilities Education Act (IDEA) Part B, the federal law that states that children with disabilities age 3 – 21 “have the right to free and appropriate education.” Title I Guidance strongly supports Pre-K programs and Section

## Capital Planning and Bond Assumptions

1112(c)(1)(F) of the Elementary and Secondary Education Act requires LEAs to provide an assurance that they will take into account the experience of model programs for the educationally disadvantaged.

These programs are funded from state and federal initiatives. WCPSS has self-contained and blended classes, based on the needs of the students. If the classrooms are not used for these programs, then the room(s) convert(s) to space to accommodate students in grades K-5. Otherwise, capacity for this space is reported separately from the K-12 calculations.

### 3.4. Kindergarten Program:

#### Analysis Summary:

-No changes

#### Assumptions:

Full-day kindergarten will continue to be offered.

### 5. Technology:

#### Analysis Summary:

- Target attainment of a one to one device ratio.
- Laptops/portable computing to be primary devices.
- Laptop/portable carts to be utilized to bring computer labs into classrooms.
- Centrally driven standards to be used for equipping new schools and renovating technology in existing schools.
- Mobile/modular classrooms to have same technology infrastructure and access as brick and mortar classrooms.
- Interactive devices (e.g. SmartBoards) for all instructional spaces. VOIP to be explored for cost effectiveness.
- Investment of \$200 per student per year for technology renovation to drive technology deployment towards a state of parity for WCPSS schools. Vehicles to maintain this investment beyond the formal CIP program to be explored.
- State mandate of testing to be done online by 2015 may require more technology investment, may require more cash funding of building program to finance technology needs.

#### Assumptions:

- ~~a. Meeting the basic technology requirements in schools enables effective delivery of instruction as specified in the WCPSS Technology Plan and in alignment with the state technology plan;~~
- ~~b. the educational resources enabled by the technology infrastructure are effectively utilized in instructional delivery only with functional, capable computers;~~

## Capital Planning and Bond Assumptions

- ~~e. School computer needs will be based on five computers per classroom, one per teacher and administrator;~~
- ~~d. A five year replacement cycle will be included.~~

Development of 21<sup>st</sup> century skills in our students, effective instruction by our teachers, and assessment of student progress, requires the utilization of technology in our classrooms and schools. Effective utilization of technology leverages the capacity of the teacher, expands the physical boundaries of the classroom to the world, and engages students in ways that other instructional tools cannot. It is paramount that the next WCPSS Capital Program provides resources to equip new schools and renovate technology in existing schools to meet the expectations and challenges of our teachers and students.

### a. General Assumptions

- 1) Technology is in a continual state of change. Assumptions made at the beginning of a Multi-Year Capital Program may become stale or no longer appropriate before the end of the Program. It is important the plan have capacity to amend the technology component of the Program during its term.
- 2) WCPSS targets attainment of a one to one student computing device ratio to provide the basis for development of 21<sup>st</sup> century technical skills and provide basis for delivery of 21<sup>st</sup> century learning content. Such initiatives are becoming the norm across the country. Meeting this standard will require a complete implementation of one to one devices for all students and the deployment of the necessary underlying infrastructure to support one to one devices. North Carolina currently has over 50 LEA's implementing initiatives to provide universal access to personal learning and teaching devices for both students and teacher.
- 3) Costs associated with the deployment of technology infrastructure in new schools, deployment of technology renovation in existing schools, and deployment of technology in mobile modular classrooms is an integral component of the overall Program
- 4) Central Administration Leadership from Instructional and Technology areas will guide the decisions and standards for the technology infrastructure of newly built schools and the technology renovation of existing schools
- 5) The leadership of the Wake County Public School System recognizes that the utilization of technology is a key component of the learning and teaching process and preparation of our students for graduation and competing in the world. Further, the leadership understands the need for Central Administration to continue to drive the infusion of technology into curriculum, the expectation that School Administrators and Teachers understand how to effectively utilize technology infrastructure during instruction, and the provision of professional development to Central Administration, School Administrators, and Teachers to accomplish this.
- 6) Central Administration leadership recognizes that development of instructional technology standards for the district, and comprehensive utilization of technology infrastructure in the schools is essential for leveraging the capacity of teachers, engaging all students, developing

## Capital Planning and Bond Assumptions

21<sup>st</sup> century skills in our students, and maximizing return on the significant investment made in technology.

### b. New School Assumptions

- 1) One to one devices for students and staff will become the norm. Networking, wired, and wireless infrastructure must have capacity to support fully implemented one to one device initiatives for students and staff.
- 2) Decreasing unit costs for laptop computers to a point close to desktop units, directs that the primary computer devices become a laptop creating utilization flexibility.
- 3) During the transition to a one to one device environment, the practice of equipping all classrooms with a minimum of 5 desktop computers should be revised with a shift to laptop carts capable of bringing an entire “computer lab” to the classroom.
- 4) Alternative one to one devices, including tablet computers, will provide a complement to traditional laptop computers as instructional tools. Deployment of one to one carts will provide maximum utility and flexibility.
- 5) All instructional areas should be equipped with an interactive device such as a Smartboard or Promethean board and student response devices.
- 6) Acquisition of underlying operating system licenses, office productivity software licenses, and other application software licenses, device management applications, and initial set-up/installation, shall be a component of the program. Technology hardware, operating systems, and applications are all components of the technology itself, and all must be present and installed for use.
- 7) For schools built in areas not having adequate signals from WCPSS’ cell phone provider, funding shall be allotted for in building repeaters and related equipment to ensure emergency phones and communications take place in an effective manner.
- 8) Voice over IP is becoming the new norm for wired phone communication and shall be considered for all new schools.
- 9) Building automation infrastructure shall be incorporated within new facilities.

### c. Existing School Assumptions

- 1) School facility and technology infrastructure life cycles differ significantly. Components of the facility have life cycles of decades, while most technology life cycles run in the three to five year range. The Program must recognize this and provide for renovation of technology in existing schools to be on par with the equipping of newly constructed schools.
- 2) The technology infrastructure of a large number of existing WCPSS schools is significantly overdue for renovation. Technology shifts from blackboards and chalk to white boards and dry erase markers have not been maintained to the current technology of interactive boards.

## Capital Planning and Bond Assumptions

Many existing schools have limited access for all students in a class utilizing one to one devices on a regular basis during the course of instruction. Regular leveraging of teacher's time through utilization of technology cannot be accomplished in many of our existing schools.

- 3) Technology infrastructure in the schools also includes all aspects of the technology backbone required to support end devices used by students and teachers. Infrastructure supporting student and teacher device use includes wired and wireless networking equipment, wiring, servers, backup UPS systems, switches, etc. In the effort to drive costs down and improve levels of service, as school renovations take place, alternatives for provision of the back-bone infrastructure will be considered including cloud based technology.
- 4) To drive the renovation of technology infrastructure and equipment in existing schools to be on par with technology in newly built schools, the Program will target investment of \$200 per WCPSS student per year for the term of the Program. Further, the Program will seek funding streams to maintain this level of investment in technology renovation on an ongoing basis subsequent to the termination of the facility building/renovation component.
- 5) Voice over IP is becoming the new norm for wired phone communication and shall be considered for all existing schools.

### d. Mobile/Modular Unit Assumptions

As mobile or modular units are added to a school campus, the Program will provide for a technology infrastructure on par with that found in a regular classroom. This will include the investment necessary to provide the temporary classrooms with interactive devices and related assessment systems, access to laptop and or tablet carts, and complete wired and wireless networking capacity. In the 21<sup>st</sup> century, the utility of network/internet wired and wireless access is a basic requirement similar to water and electricity.

Capital Planning and Bond Assumptions

**SCHOOL CAPACITY AND MEMBERSHIP**

4.6.School Campus Capacity:

**Analysis Summary:**  
 -Special Needs self-contained class size decreases from 9 to 8.  
 -No change in class size for other grade levels, except for elimination of reference to class size State maximum for high schools.

**Utilization:**

Status: As of October 2005:

	2005-06 20 <sup>th</sup> Day Student Membership	LRSCC Seats	Optimal # Temporary CRs	% Utilization (Including Program Adj.)
Elementary School	58,220	46,907	199	124.10%
Middle School	27,686	24,797	45	111.70%
High School	34,286	30,286	40	113.20%
Special/Optional	315	356	0	88.50%
<b>TOTAL</b>	<b>120,507</b>	<b>102,346</b>	<b>284</b>	<b>117.70%</b>

Status: As of February 2013:

	2012-13 20 <sup>th</sup> Day Student Membership	LRSCC Seats	Optimal # Temporary CRs	% Utilization (Including Program Adj.)
Elementary	71,160	70,443	378	101.0%
Middle	34,505	35,717	65	96.6%
High	43,435	38,237	68	113.6%
Special/Optional	408	408	1	100.2%
<b>TOTAL</b>	<b>149,508</b>	<b>144,804</b>	<b>512</b>	<b>103.2%</b>

**Class Size Ratios:**

	<u>CIP 2006 Assumptions</u>	<u>Future Building Program Assumptions</u>
K-3	21	21
4-8	26	26
9-12	24 (State Maximum = 29)	24
Special Needs – Self Contained	9 (Range of 4 to 16)	8 (Range of 4 to 12)
Pre-K	10	10 (Range of 4 to 18)

## Capital Planning and Bond Assumptions

Assumptions:

~~Long range capital planning will be based on a target of 95% utilization of permanent elementary and middle school seats, 97.5% utilization of permanent high school seats, and 100% of mobile and modular spaces. This allows for a 2 ½ % to 5% student management factor for flexibility in student assignment and classroom utilization, in recognition of the facts that: a) any given school's enrollment may increase during the school year; and b) it is not reasonable to achieve a one to one ratio (100% utilization) of students to available seats in a school, at a grade level, or in a classroom. Utilization targets will be reached by 2015.~~

a. Utilization – Facilities utilization will be based on class size averages and the optimum number of temporary classrooms supported by each school’s program and site. Planning for the number of schools needed to accommodate student enrollment will be based on a utilization of 95% for elementary and middle schools and 97.5% for high schools. This process offers the opportunity to align overcrowded schools with under-utilized ones and eventually bring all schools’ utilization in line with their core facilities and site constraints. This will require the reallocation and eventual reduction of temporary classroom units, targeting those older than 25 years.

System-wide Long Range School Campus Capacity [LRSCC] utilization based on 2011-2012 20<sup>th</sup> day membership and optimum temporary classrooms:

b. Class Size Ratio - School models will be based upon allowable system-wide class-size ratios for numbers of students per classroom. NCGS 115C-301 and Session Law 2011-145 (House Bill 200) governs class sizes and teaching loads. “Local boards of education must maintain a LEA-wide class size average no higher than the class size ratio of teachers to students of the following: [Kindergarten – Grade 3: 1 to 21]”.

Grade Level	Class Size Requirements (Grade Span Average)
K-3	21
4-8	26
9-12	24 * <del>(State Maximum = 29)</del>
Special Needs - Self-Contained	<del>12</del> * (Range of 4 to <del>16</del> 12)
Pre-K	10 * <del>(Range 4 to 18)</del>

Note: Special Education average usage is based on Policies Governing Services for Children with Disabilities: NC 1508-3 Class Size Chart. See Capital Planning and Bond Assumption Issue #2. High school total reflects average usage.

See Appendix

## Capital Planning and Bond Assumptions

### 5.7. Temporary Classrooms:

#### Analysis Summary:

- CIP 2006 assumptions called for no more than 8%, however, this was not implemented with the program. New assumptions result in 8.5%.
- Actual percentage utilization of mobile units at the elementary level increases to 12.5% and secondary school decreases to less than 5%. Overall optimum district use increases from 8% to 8.5% based on 2011-12 data.
- Attaining an 8% goal by 2012 is deleted; 2011-12 utilization of temporary classrooms is 16.4%.
- New assumptions outline criteria of when a mobile may be placed on a campus and considered supported and counted as optimum long-range classroom space.

#### Schools and Temporary Classrooms

	Number of Schools that Exceed Optimum Temporary Classrooms		Number of Temporary Classrooms that Exceed Maximum/Number of Seats	
	Status as of October 2005	Status as of October 2012	Status as of October 2005	Status as of October 2012
Elementary School	57	50	414	255 / 5,717
Middle School	17	17	130	143 / 3,718
High School	14	20	176	277 / 6,375
TOTAL	88	87	720	675 / 15,810

\*Core includes dining, office support, group toilets, parking, playfields, traffic, etc.

These 2012 totals do not include the Young Men's Leadership Academy housed at a modular campus

#### Assumptions:

Optimum temporary classrooms should not exceed the maximum that can be supported by the core facilities (dining, office support, parking, playfields, etc.) with consideration of site limitations. Standard designs accommodate ~ 100 more seats or the equivalent of four temporary classrooms when the site allows. a. — The goal is for no more than 8% of students to be in mobile/modular units, including modular schools; this — This does not include units provided-utilized as swing-space for renovation projects. This target will be attained by 2012 (5 years from the start of the next building program). Mothballed or surplus units will be redistributed to better align a campus' efficiencies with its program.

The six 2003 adopted criteria for determining optimum instructional temporary classrooms (what the core can support) are reflected in the annual Facilities Utilization Report:

- 1) can be physically accommodated on the site;
- 2) are permissible by the authorities having jurisdiction and by zoning, etc;
- 3) can be supported by no more than one toilet trailer unit;

## Capital Planning and Bond Assumptions

- 4) can be supported by dining room facilities with no more than 3 seatings based on Department of Public Instruction Guidelines;
- 5) can be accommodated within 300 feet of the closest building access point; and
- 6) can be supported by specialized educational program spaces like career technical education, science, gym, etc.

.....plus can be supported by vehicle traffic patterns (added in 2010).

See Appendix

## Capital Planning and Bond Assumptions

### 6.8. Year-Round Calendar Schools:

#### Analysis Summary:

- Year-Round schools are considered one strategy to increase the capacity of schools building.
- Additional Year-Round schools will be considered as a minimal portion and determined as part of a comprehensive facilities plan that takes into account the student assignment process and the need for additional seats.
- Consideration to add single-track, year-round calendar high schools has been deleted.

#### Assumptions:

- ~~a. Additional year round schools will be established in order to reduce the number of new schools to be constructed;~~
- ~~b. Consideration will be given to opening Brier Creek and Barwell Road elementary schools on a year round calendar in 2006, and to opening future elementary and middle schools on the year round calendar;~~
- ~~c. Future consideration will be given to the addition of single track year round calendar high schools that would support the multi track year round K-8 schedules.~~
- ~~d. Criteria for conversion will include over crowding of existing schools, projected enrollment growth, health of converted school and impacted schools, the number of mobile/modular units, and other factors;~~
- ~~e. The number of schools to be established on a year round calendar will be determined as part of a comprehensive facilities plan that addresses construction of new schools and renovation of existing schools, as well as the number of year round schools.~~

Operating schools on a multi-track, year-round calendar is one strategy that the district has used to increase the capacity of school building. When operated on such a calendar, with full utilization on all four tracks, additional capacity of up to 33% can be gained over using the building as a single-track, traditional calendar school.

Any assumptions to establish schools to be operated on the year-round, multi-track schedule will be determined as part of a comprehensive facilities plan that will include a detailed review of capacities at existing schools, assignment and growth patterns, the district's track record on being able to maintain full utilization on all four tracks of the multi-tracks schools currently in operation and the resulting actual costs savings from operation of current year-round schools. Public feedback should also be sought to measure the community's tolerance for these alternate schedules. The assumption at this time is to maintain a minimal portion of schools operated on the year-round, multi-track calendar.

	<u>Number of Year-Round Schools/ Total Schools as of 2011-12</u>	<u>Number of Year-Round Seats/ Total Seats as of 2011-12</u>
<u>Elementary</u>	<u>40 / 104</u>	<u>33,920 / 74,256</u>
<u>Middle</u>	<u>10 / 34</u>	<u>13,187 / 38,352</u>

See Appendix

## Capital Planning and Bond Assumptions

### 7.9. Student Enrollment Projection:

#### Analysis Summary:

-Staff from WCPSS now jointly produces enrollment projections with Wake County staff.

#### Assumptions:

- a. Staff from Wake County and WCPSS will jointly produce enrollment projections. Enrollment projections will be reviewed and subsequently presented to the Board of Commissioners and Board of Education at a joint board meeting for approval. will annually generate WCPSS 20<sup>th</sup> day student membership projections, using the projection model retooled by Informed Decisions Inc. in February 2005. The projections generated in November 2005 will be based on the 20<sup>th</sup> day membership data verified by the North Carolina Department of Public Instruction.
- b. Enrollment projections will be developed for operating budget and capital budgeting purposes. The methodology for capital projections may vary from the methodology used for the operating budget projection.

Capital projections are based on an economic cycle model, based on the need to project capital budgeting projections for a longer period of time over a varying economic climate. Economic indicators such as unemployment, sales tax revenue growth, building permits, as well as student enrollment indicators such as market share, are taken into account. The operating budget is approached differently, based on the same rate of growth as the previous year.

- a. ~~Wake County enrollment projections include a statistical range of +/- 1% for the first five years, +/- 1.5% for the next five years, and +/- 2% beyond. The high-end projections will be used in calculating long-range student enrollment.~~
- b. ~~An annual review of the projections versus actual enrollment will identify any seating shortfall or surplus.~~

## **LAND AND BUILDING**

### 10. Energy and Environmental Guidelines:

#### Analysis Summary:

-Formerly titled "High Performance Guidelines".

#### Assumptions:

WCPSS and Wake County support design principles that minimize life-cycle costs and energy costs, and do not have significant adverse effects on the environment. On all projects, WCPSS will comply with

## Capital Planning and Bond Assumptions

the Guidelines for Design and Construction of Energy-Efficient County Government Facilities and Schools, dated June 2004 (jointly developed and adopted by Wake County Government and WCPSS).

WCPSS will incorporate sustainable design features, wherever most financially responsible, consistent with the recommendations of the US Green Building Council in its LEED for Schools certification guidelines. A sustainability checklist will be used to optimize the use of “green” features in design and a sustainable energy cost benefit analysis will be conducted during Design Development of each project.

### 8.11. Renovation of Existing Facilities:

#### Analysis Summary:

- Eliminating the backlog of deferred major renovation projects and deferred life cycle replacement projects by 2012 is deleted. 850,000 permanent square feet exceed 40 years since a major renovation and \$85 million in unfunded deferred life cycle projects have been identified as of December 2011.
- Systems approaching or exceeding 40 years since a major renovation will be evaluated for potential project.

#### Assumptions:

- ~~a. The target of eliminating the backlog of deferred major renovation projects and deferred life cycle replacement projects will be attained by 2012 (5 years from the start of the next building program).~~
- b.a. Existing school requirements facility projects will be included in one of the following categories:
  - 1) Life Cycle Replacements – individual systems to be replaced before failure;
    - a) Systems that are approaching or have exceeded system life will be targeted based on facility assessments
    - b) All Life Cycle replacement projects will be summarized in one line item in the CIP
    - c) Projects will be prioritized using a priority matrix that focuses on health, safety, and immediate needs.
  - 2) Major Renovations – may include complete renewal or replacement of structural, mechanical, electrical, plumbing, codes and educational program;
    - a) Facility square footage approaching or exceeding ~~renovation cycle is~~ 40 years since a major renovation will be evaluated for a potential project;
    - b) Projects will be prioritized using a weighted evaluation sheet that includes the Facility Condition Index (FCI), academic improvement, student assignment and health and safety.
    - c) Each project will be listed as separate line item in the CIP.
    - d) The amenities and finishes (walls, floors, etc.) in renovated schools will be of same standard as new schools;
    - e) Spaces in existing schools will be considered adequate if the size is not less than 75% of the approved space standards;
    - f) Renovation costs exceeding 75% of new construction will trigger a life-cycle cost analysis of renovation vs. demolition/replacement;
    - g) Existing campuses will be reviewed to determine ability to add capacity.

## Capital Planning and Bond Assumptions

h) Funding will be included for replacement of furniture, equipment, and technology if required.

a)i)

- ~~2) Deferred major renovation and life cycle replacement projects—buildings that are past the 40 year major renovation cycle, or systems that exceed industry recognized life;~~
- ~~e. Major renovation projects will be based on renovating 1/40<sup>th</sup> of the total system wide square footage each year;~~
- ~~d. WCPSS will assess by 2010 the total system wide square footage. After 2010, WCPSS will assess 1/7 of the total system wide square footage each year. WCPSS and Wake County will enter into an inter-local agreement for the purpose of developing facility and maintenance standards for all classifications of buildings and develop benchmark comparisons for annual budgets for facilities maintenance.~~

### Notes:

- 850,000 out of 21.1 million permanent square feet exceed 40 years since a major renovation as of December 2011.
- \$85 million in unfunded deferred lifecycle projects have been identified as of December 2011:
  - o Square Footage By Year:
    - The square footage that turns 40 in 2012 = 87,983 GSF
    - The square footage that turns 40 in 2013 = 19,028 GSF
    - The square footage that turns 40 in 2014 = 57,162
    - The square footage that turns 40 in 2015 = 279,568 GSF

Total: 2012-2015 = 443,741 GSF

Total: 2016-2020 = 134,556 GSF (estimate)

### Appendix

#### 9.12. New School Size and Space Standards:

##### Analysis Summary:

-Original CIP 2006 assumptions did not include large models; these were included in an addendum and used in actual program.  
-No significant square footage and capacity changes from models used in CIP 2006.  
Middle schools increase from 981 students to 1,280; High schools increase from 1,663 students to 2,228;  
Cost and square footage per student decreases.

##### Assumptions:

- a. School infrastructure, cafeteria, media center and other core spaces will be designed to accommodate the number of students in permanent buildings, plus additional seats in potential temporary classrooms. Utility infrastructure and site plans will provide for temporary classrooms where site conditions allow;

Capital Planning and Bond Assumptions

b. Alternate and non-traditional sizes of school and sites will be considered based on availability of property.

Square footage totals are based on the latest space standards and subject to change pending program and operational needs. School model sizes are:

	<u>DPI Capacity Guidelines</u>	<u>Building Capacity: Traditional Calendar</u>	<u>Building Capacity: Year-Round Calendar</u>	<u>Space Standards (Square Feet)</u>
<u>Elementary (Lg)</u>	<u>700</u>	<u>780/10</u>	<u>1,058/20</u>	<u>105K</u>
<u>Middle (Std)</u>	<u>600-800</u>	<u>1,280</u>	<u>1,592</u>	<u>200K</u>
<u>High (Std)</u>	<u>800-1,200</u>	<u>2,262</u>	<u>N/A</u>	<u>335K</u>

(a) Capacity totals reflect capacity models and the reduction in the special education student ratio;

(b) Capacity totals include Special Needs teaching spaces to include both Special Education Services and General Education Support; Elementary – 12; Middle – 16; High – 1714.

(c) Elementary (Lg): Year-Round has all double loaded tracks with 2 temporary classrooms; Middle (Lg): Year-Round has 1 double loaded track and 3 single tracks.

10.13. School Site Size and Property Acquisition:

<u>Analysis Summary:</u> -No Changes		
<u>Developable Acreage Comparison:</u>		
<b>CIP 2006 Assumptions</b>		
	Developable Acreage	Applied to WCPSS Standard School Sizes
K-6	10 + (1/100 ADM)	10 + (655/100) = 16.55
5-8	15 + (1/100 ADM)	15 + (981/100) = 24.81
7-9	20 + (1/100 ADM)	N/A
9-12	30 + (1/100 ADM) + (10 acres for stadium and parking)	30 + (1,663/100) + 10 = 56.63
<b>Future Building Plan Assumptions</b>		
	Developable Acreage	Applied to WCPSS Standard School Sizes (excluding temporary classrooms)
K-6	10 + (1/100 ADM)	10 + (780/100 ADM) = 17.80
5-8	15 + (1/100 ADM)	15 + (1,280/100 ADM) = 27.80

## Capital Planning and Bond Assumptions

9-12	30 + (1/100 ADM) + 10 acres for parking and stadium)	30 + (2,228/100 ADM) + 10 = 62.28
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Assumptions:

Land will be the minimum practical needed for educational program and regulatory requirements.

Future capital programs will utilize Department of Public Instruction (DPI) guidelines, plus two acres for temporary classrooms and/or additional municipal requirements such as extra queuing. North Carolina Department of Public Instruction guidelines and recommended site sizes are as follows:

Grades	Developable Acreage	Applied to WCPSS Standard School Sizes (w/o temporary classrooms)	WCPSS Net Usable Acres
K-6	10 + (1/100 ADM)	10 + (780/100 ADM) = 17.80	20
5-8	15 + (1/100 ADM)	15 + (1,280/100 ADM) = 27.80	30
9-12	30 + (1/100 ADM) + 10 acres for parking and stadium	30+ (2,228/100 ADM) + 10 = 62.28	64

- a. The size of new school sites is based upon the educational program needs, the environmental/regulatory requirements of the jurisdictions in which they are located and configuration/topography of the site;
- b. New school sites will be evaluated to determine the feasibility of joint development with other governmental agencies;
- c. The use of smaller tracts will be considered when necessary, but may require changes to a school's capacity and educational program;
- d. Sites will be sought for schools five years in advance of the construction start dates and opportunities to identify sites will be actively worked with municipalities;
- e. Location and schedule of new schools will be guided by current crowding, projected growth, and needs identified from data in the Student Assignment process; new schools may also provide temporary swing space for renovations of schools in the area;
- f. The projected cost of public infrastructure and site development will be included in analyzing candidate school sites;
- g. Consideration will be given, on a case-by-case basis to acquisition of existing buildings that would be suitable for conversion to schools; some traditional program elements might be compromised if such a facility were used.

11-14. Support Facilities:

Analysis Summary:

-No Changes.

## Capital Planning and Bond Assumptions

### Assumptions:

- a. Projects for essential health and safety items in existing facilities will be listed as prioritized needs;
- b. Enrollment growth as well as needs caused by normal usage and wear may require renovation and expansion of existing support facilities and construction of new facilities such as: satellite transportation centers; infrastructure upgrades and regional shops for maintenance personnel. Where appropriate, expansion may require property acquisition.

### 15. Security:

#### Analysis Summary:

- This is a new category/assumption to ensure all schools utilize the Crime Prevention through Environmental Design (CPTED) principles that includes a centralized security system.
- A cost estimate is not known at this time.

### Assumptions:

Project priorities include ensuring the health and safety of children and staff; that schools are safe quality places for students to learn. To that end, the following assumptions will ensure that these objectives are met. All new and existing schools have consistent security systems with the most up-to-date technologies equivalent to those used in all new school. All new facilities and major renovations shall utilize Crime Prevention through Environmental Design (CPTED) principles. The purpose of these proposed assumptions is to have a centralized security system for all schools.

<u>System</u>	<u>Elementary</u>	<u>Middle</u>	<u>High</u>
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## Capital Planning and Bond Assumptions

<u>Closed Circuit Television System</u>	<u>Integrated IP based: minimum 16 camera system</u>	<u>Integrated IP based: minimum 32-64 camera system</u>	<u>Integrated IP based: minimum 64-80 camera system</u>
<u>Access Control</u>	<u>Enterprise based access control system</u>	<u>Enterprise based access control system</u>	<u>Enterprise based access control system</u>
<u>Visitor Management</u>	<u>Networked kiosk for visitor sign-in and sex offender checks</u>	<u>Networked kiosk for visitor sign-in and sex offender checks</u>	<u>Networked kiosk for visitor sign-in and sex offender checks</u>
<u>Intrusion Alarm System</u>	<u>Upgraded to audible</u>	<u>Upgraded to audible</u>	<u>Upgraded to audible</u>
<u>Public Address Systems/Intercoms</u>	<u>Broadcast location added for designated incident command (principal conference room)</u>	<u>Broadcast location added for designated incident command (principal conference room)</u>	<u>Broadcast location added for designated incident command (principal conference room)</u>

### FISCAL

#### 12.16. Program Price Bases:

##### Analysis Summary:

- Project estimates and cost models will not be based on actual costs of PLAN 2004 projects bid in 2005, but will be specifically developed for pricing the new bond and will be independently validated.
- Land acquisition and due diligence costs are not based on PLAN 2004 purchases, but on recent land purchases and economic projections.
- Public infrastructure costs will not be based on costs of off-site development in PLAN 2004, but by current market trends.
- The inflation estimate will be determined based upon information provided by up to four different independent construction companies rather than 5%.

## Capital Planning and Bond Assumptions

-The building program will have a 1.5% funded reserve budget rather than 2%.  
-Program management budget will be based on the number of projects and timing of delivery rather than 3.5%.

### Assumptions:

- a. ~~Project Estimates~~ and cost models will be developed for pricing the new bond and will be independently validated for new schools and renovations are based on actual costs of PLAN 2004 projects bid in 2005;
- b. Costs are based on BoE approved space standards, educational specs, design guidelines, and existing prototype designs. Cost may include: construction cost, site development, demolition, design, materials testing, surveying, hazardous materials abatement (if any), moving costs, interim housing, furniture, custodial equipment, media center equipment and books, educational equipment and technology infrastructure;
- c. Land purchases and due diligence costs are budgeted separately from construction project cost, and the land acquisition budget is based on the cost trend of recent land purchases and economic projections~~PLAN 2004 purchases;~~
- d. Public infrastructure costs will be listed in a separate line item and will be based on the actual costs of ~~off site development in PLAN 2004~~current market trends;
- e. The cost of annual building facilities assessments will be budgeted as a separate line item;
- f. Renovation projects will have a 10% contingency; new school projects will have a 5% contingency;
- g. The inflation estimate will be determined based upon information provided by up to four different independent construction companies; project costs will be adjusted each year based on anticipated annual inflation; Project costs will be adjusted by 5% per year, through 2010, and 3.5% beyond that with an annual reassessment of actual costs;
- h. The building program will have a 21.5% funded reserve budget. This budget would be used for funding of emergency projects or in the event critical assumptions (class size, school site size, cost of property acquisition, enrollment projections, etc.) differ substantially from actual experience. The reserve budget will be the designated location for any savings and will be held by the Board of Commissioners. The Board of Education will review any critical needs and, if appropriate, request reallocation of funds from the Board of Commissioners;
- h. ~~Program management budget will be 3.5%.~~will be based on the number of projects and timing of delivery;
- h.i. To maintain a continuous building program, each CIP will include funds for the property acquisition and early-start design of new projects funded in the next CIP.

### 13.17. Funding

#### Analysis Summary:

-Lottery funds awarded to the County and WCPSS will be used towards debt service costs of WCPSS general obligation bonds.

### Assumptions:

## Capital Planning and Bond Assumptions

- a. The building program will be funded through a variety of funding options to potentially include general obligations bonds, pay-as-you-go funds, state and federal funding.
- b. Pay as you go funds should be targeted to the non-capitalized technology and equipment. Alternate means of funding schools should be considered.
- c. Lottery funds awarded to the County and WCPSS will be used towards debt service costs of WCPSS general obligation bonds.
- e.d. Opportunities for public-private partnerships will be considered, if advantageous to the educational program and if such partnerships are evaluated as cost-effective.

## Pre-K Classrooms: 3- Year Master Plan -- as of January 2013

If the number of Pre-K programs exceeds the number of current & projected Pre-K facilities

If the number of Pre-K facilities exceeds the number of current & projected Pre-K programs

School Name	# Pre-K Programs 2012-13	Subject to Change			Schools w/ Pre-K Facilities
		Additions 2013-14	Additions 2014-15	Additions 2015-16	
Adams Elementary School	1				0
Alston Ridge	1				1
Apex Elementary School	1				1
Aversboro Elementary School	2				1
Baileywick Elementary School	2				1
Ballentine Elementary School	1				1
Banks Road Elementary	1	1			1
Barwell Road Elementary School	2				1
Baucom Elementary School	1				1
Brassfield Elementary School	0				0
Brentwood Elementary School	2				0
Briarcliff Elementary School	2				1
Brier Creek Elementary School	1		1		1
Brooks Elementary School	1				1
Bugg Elementary School	2				1
Carpenter Elementary School	1				1
Carver Elementary School	2				1
Cary Elementary School	1				no observ
Cedar Forks Elementary School	1				1
Combs Elementary School	1				1
Conn Elementary School	1				1
Creech Road Elementary School	1				0
Davis Drive Elementary School	0				1
Dillard Drive Elementary School	2				1
Douglas Elementary School	1				1
Durant Road Elementary School	1				0
East Garner Elementary School	2				1
Farmington Woods Elementary School	0	1			1
Forest Pines Drive Elementary School	1				1
Forestville Road Elementary School	2				1
Fox Road Elementary School	0				0
Fuller Elementary School	0				0
Fuquay-Varina Elementary School	2				0
Green Elementary School	0				0
Green Hope Elementary School	1				1
Harris Creek Elementary School	2				1

School Name	# Pre-K Programs 2012-13	Additions 2013-14	Additions 2014-15	Additions 2015-16	Schools w/ Pre-K Facilities
Herbert Akins	1	1			1
Heritage Elementary School	1				1
Highcroft Drive Elementary School	1				1
Hilburn Elementary School	2				1
Hodge Road Elementary School	1				1
Holly Grove Elementary School	1				1
Holly Ridge Elementary School	1				1
Holly Springs Elementary School	1				1
Hunter Elementary School	0			1	1
Jeffreys Grove Elementary School	2				1
Jones Dairy Elementary School	1			1	1
Joyner Elementary School	1				1
Kingswood Elementary School	2				1
Knightdale Elementary School	2				1
Lacy Elementary School	1				1
Lake Myra	2				1
Laurel Park Elementary School	1				1
Lead Mine Elementary School	0				0
Leesville Road Elementary School	0				0
Lincoln Heights Elementary School	1	1			1
Lockhart Elementary School	1				1
Lynn Road Elementary School	2				2
Middle Creek Elementary School	1				1
Millbrook Elementary School	1		1		1
Mills Park Elementary School	1				1
Morrisville Elementary School	0				0
N Forest Pines Elementary School	1				1
North Ridge Elementary School	0				0
Northwoods Elementary School	1				1
Oak Grove Elementary School	0		1		1
Olds Elementary School	0				0
Olive Chapel Elementary School	1				1
Partnership Elementary School	0				0
Project Enlightenment	2				2
Penny Road Elementary School	0				0
Pleasant Union Elementary School	1				no observ
Poe Elementary School *	0				2
Powell Elementary School	1				0
Rand Road Elementary School	0	1			0
Reedy Creek Elementary School	0				1
Richland Creek @ DuBois Ctr (E-25)	0		1		1
River Bend	2				1

School Name	# Pre-K Programs 2012-13	Additions 2013-14	Additions 2014-15	Additions 2015-16	Schools w/ Pre-K Facilities
Rolesville Elementary School	1				1
Root Elementary School	2				1
Salem Elementary School	1				1
Sanford Creek Elementary School	2				1
Smith Elementary School	2				2
Stough Elementary School	0	1			0
Swift Creek Elementary School	0				0
Sycamore Creek Elementary School	1				1
Timber Drive Elementary School	1				1
Turner Creek Elementary School	1			1	1
Underwood Elementary School	0				0
Vance Elementary School	1			1	1
Vandora Springs Elementary School	1				1
Wake Forest Elementary School	1				1
Wakefield Elementary School	1				1
Wakelon Elementary School	2				1
Walnut Creek	1				1
Washington Elementary School	0				1
Weatherstone Elementary School	1				1
Wendell Elementary School	0				0
West Lake Elementary School	1				0
Wilburn Elementary School	2				1
Wildwood Forest Elementary School	1			1	1
Wiley Elementary School	0				0
Willow Springs Elementary School	0				0
Yates Mill Elementary School	1		1		1
York Elementary School	1				0
Zebulon Elementary School	2				0
<b>Total</b>	<b>106</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>81</b>

WCPSS has a collaborative partnership with the Shaw University Center for Early Childhood Education, Research and Development. This program serves 22 WCPSS preschool children identified with special needs in four inclusive classrooms.

Note: There are currently 5 Pre-K/K programs as part of Poe's Montessori program

**Wake County Public Schools  
Pre-K Classroom Information**

**Return on Investment and Achievement**

Research studies identify the positive impact on children when participating in high-quality early learning programs.

- More prepared to be successful in elementary school
- Less likely to need special education
- Less likely to be retained in school
- Higher rates of high school graduation
- Higher rates of college graduation
- Less likely to commit crimes
- Higher rates of employment

**Fiscal Impact:**

Cost-benefit analyses of early childhood programs find that benefits substantially exceed the costs. Financial savings occur due to reduced retentions, reduced special education services, fewer drop outs and less crime.

- The HighScope Perry Preschool Study conducted over 35 years found that the economic return to society was \$16.14 per dollar invested in this early learning program.  
*Lifetime Effects: The HighScope Perry Preschool Study Through Age 40 (2005)*  
<http://www.highscope.org/Content.asp?ContentId=219>
- A 2009 analysis of a preschool program for at-risk children in Michigan estimated that the state saved at least \$1.15 billion over the past 25 years from cost savings and revenues due to investments in the school readiness program.  
*Cost Savings Analysis of School Readiness in Michigan (2009)*  
[http://greatstartforkids.org/sites/default/files/file/ECIC\\_WilderStudy.pdf](http://greatstartforkids.org/sites/default/files/file/ECIC_WilderStudy.pdf)
- Every dollar invested in early care and education in North Carolina generates an additional 91 cents for a total of \$1.91 in new spending in the state.  
*Strengthening North Carolina Businesses through Investments in Early Care and Education (2012)*  
<http://americasedge.s3.amazonaws.com/wp-content/uploads/NC-early-ed-economic-analysis-report.pdf>
- An evaluation of the preschool program in Chicago Public Schools found that for every dollar invested, \$10.83 is projected to return to society, an 18% annual return.  
*Age 26 Cost-Benefit Analysis of the Child-Parent Center Early Education Program (2011)*  
<http://ts-si.org/files/doi101111j14678624201001563x.pdf>

**Benchmarking with Charlotte-Mecklenburg Schools**

	<b>Charlotte-Mecklenburg Schools</b>	<b>Wake County Schools</b>
Number of Pre-K Classrooms*	184	110
Number of Students Served in Classrooms*	2,977	1,647
Title I Funding for Pre-K	\$ 11.9 million	\$ 3.7 million
Local Funding for Pre-K	\$ 9.4 million	\$ 235,468

\*These numbers indicate students in both Title I and Special Education Preschool Classrooms.

**Wake County Public School System**

**Year-Round School Summary 2007-Present**

**New school construction**

YEAR	Elementary Traditional	Elementary Year-round	Middle School Traditional	Middle School Year-Round
2007-08		East Garner * (2013) North Forest Pines Sanford Creek	Wendell	East Cary
2008-09		Laurel Park Mills Park * (2010) Sycamore Creek		
2009-10		Banks Road Herbert Akins Lake Myra + (2011)		
2010-11		Alston Ridge + (2011)	Mills Park	Holly Grove
2011-12	Walnut Creek			
2012-13	Richland Creek			Rolesville

*\*converts to traditional    + converts to single track*

**2007-08 School Calendar Conversions**

Elementary School	Middle School
Ballentine Baucom * (2009) Brassfield Green Hope * (2010) Harris Creek Highcroft Drive + (2011) Hodge Road + (2013) Holly Springs Knightdale * (2009) Leesville * (2010)	Lockhart + (2013) Middle Creek Olive Chapel Pleasant Union Rand Road + (2011) Salem Vance + (2013) Wakefield Willow Springs
	East Wake + (2013) North Garner + (2013) Salem

*\*converts to traditional    + converts to single track*

**Calendar Conversion Schools (opened prior to 2007).**

Elementary School	Middle School
Green * (2013) Timber Drive + (2011)	Leesville ^

*\*converts to traditional    + converts to single track*  
*^ converts to year-round in 2009, then reverts to traditional in 2010*

<b>SPACE STANDARDS - ELEMENTARY SCHOOLS</b>	<b>SPACE STNDS - ELEM NC Dept of Public Instruction</b>	<b>SPACE STNDS - ELEM 51 TS Model - 800/10 Capacity</b>	<b>SPACE STNDS - ELEM 52 TS Model - 780/20 Capacity</b>
		Revised: 2/19/13 (SG)	Revised: 2/14/13 (SG)
<b>SPACE</b>	<b>School Planning - August 2010 SPACE STANDARDS</b>	<b>CIP 2006 WCPSS SPACE STANDARDS</b>	<b>Proposed WCPSS SPACE STANDARDS</b>

<b>CAPACITY</b>	<b>450 - 700</b>	<b>800/10 Trad., 1,046/10 Y-R</b>	<b>780/20 Trad., 1,058/20 Y-R</b>
<b>TEACHING SPACES</b>		<b>{50} (+1)</b>	<b>{50} (+2)</b>
<b>NET SQ.FT./STUDENT</b>		<b>91</b>	<b>91</b>
<b>GROSS SQ.FT./STUDENT</b>		<b>126</b>	<b>130</b>
<b>CORE</b>		<b>900</b>	<b>900</b>

<b>I. GENERAL CLASSROOMS</b>					
A.	Kindergarten/toilet	1,200	6 @ 1050	6,300	6 @ 1050 6,300
	Kindergarten Outdoor Storage	varies, by need & capacity	3 @ 50	150	3 @ 50 150
B.	1st Grade/toilet	1,000 - 1,200	6 @ 950	5,700	6 @ 950 5,700
C.	2nd-3rd Grade	1,000 - 1,200	12 @ 900	10,800	12 @ 900 10,800
D.	4th-5th Grade	850 - 1,000	10 @ 900	9,000	10 @ 900 9,000
E.	General Ed. Support CR (small group resource rms)	450	4 @ 900	3,600	4 @ 450 1,800
F.	Computer/Resource Classroom	850	1 @ 950	950	1 @ 950 950
G.	Multi-Purpose Classroom	850 - 1,200	1 @ 950	950	1 @ 950 950
	(Per DPI, for CRs less than 850sf provide additional 15-20sf for each desktop computer)	<b>0</b>	<b>{40}</b>	<b>37,450</b>	<b>{40} 35,650</b>

<b>II. SPECIAL EDUCATION SERVICES</b>					
A.	Adaptive Curriculum Classroom (suite) 100sf/student	800 - 1,600	4 @ 900	3,600	2 @ 900 1,800
	Instructional Kitchen/toilets (suite)			600	600
B.	Special Education Services CR (two w/folding partitions)	450 - 1,600	4 @ 900	3,600	3 @ 900, 3 @ 450 4,050
<b>SUB TOTAL</b>		<b>0</b>	<b>{8}</b>	<b>7,800</b>	<b>{8} 6,450</b>

<b>III. VISUAL ARTS</b>					
A.	Art Classroom	1,000 - 1,400	1	950	1 950
	Art Storage/Kiln Room	Kiln @ 40-60 /Storage @ 80-150	Kiln @ 70 / Sto @ 130	200	Kiln @ 70 / Sto @ 130 200
<b>SUB TOTAL</b>		<b>0</b>	<b>{1}</b>	<b>1,150</b>	<b>{1} 1,150</b>

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS
<b>IV. MUSIC</b>				
A.	Music Classroom	850 - 1,000	1 850	1 850
	Music Storage	150 - 300	150	150
<b>SUB TOTAL</b>		<b>0</b>	<b>{1} 1,000</b>	<b>{1} 1,000</b>
<b>V. THEATER ARTS/AUDITORIUM</b>				
<b>SUB TOTAL</b>		<b>0</b>	<b>0</b>	<b>0</b>
<b>VI. CAREER &amp; TECH ED</b>				
<b>SUB TOTAL</b>		<b>0</b>	<b>0</b>	<b>0</b>
<b>VII. BUSINESS &amp; OFFICE EDUCATION</b>				
<b>SUB TOTAL</b>		<b>0</b>	<b>0</b>	<b>0</b>
<b>VIII. MEDIA CENTER</b>				
A.	RLV area (Reading, Listening & Viewing)		900 @ 4.6 sf/student 4,140	900 @ 4.6 sf/student 4,140
B.	AV Equipment/Periodical Storage		250	250
C.	Toilet (varies by code and capacity)		40	40
D.	Media Office/Workroom		500	500
<b>SUB TOTAL</b>		<b>(4.0 - 6.0 sf/student) 3,600 - 5,400</b>	<b>4,930</b>	<b>4,930</b>

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS
<b>IX. VIDEO PRODUCTION</b>				
<b>SUB TOTAL</b>		<b>0</b>	<b>0</b>	<b>0</b>

<b>X. PHYSICAL EDUCATION</b>				
A.	Multi-Purpose Rm /Play Area	3,600 (4,800 for 900 students)	2,900	2,900
B.	Stage/Platform	800 - 1,200	850	850
C.	Office		80	80
D.	Chair Storage/Dressing	included above	200	200
E.	PE Equip. Storage/Dressing	included above	200	200
F.	Outdoor PE Storage		180	180
G.	Ramp	included above	300	300
<b>SUB TOTAL</b>		<b>0</b>	<b>4,710</b>	<b>4,710</b>

<b>XI. AUXILIARY ATHLETIC SUPPORT</b>				
<b>SUB TOTAL</b>		<b>0</b>	<b>0</b>	<b>0</b>

<b>XII. STAFF REQUIREMENTS</b>				
A.	Lounge/Kitchen/toilet	300 minimum (varies by capacity)	700	700
B.	Teachers' Workroom	300 minimum (varies by capacity)	300	300
C.	Teachers' Storage/Office	80 - 100 per teacher	3 @ 250	3 @ 250
D.	Satellite Toilets	varies by code and capacity	4 @ 40	4 @ 40
E.	Year-Round Cart Storage	varies by capacity	320	320
<b>SUB TOTAL</b>		<b>0</b>	<b>2,230</b>	<b>2,230</b>

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS
<b>XIII. ADMINISTRATION</b>				
A.	Reception Area	200 - 400	400	400
B.	Principal's Office	150 - 200	225	225
C.	Asst. Principal's Office	120 - 150	2 @ 150	2 @ 150
D.	Secretary's Office	100 - 150	150	150
E.	Locked Storage	varies by capacity	10	10
F.	Student Information Data Manager Office	80 - 120	150	150
G.	Examination Suite/Health Room/Toilet	250	200	200
H.	Records Room	100	130	130
I.	Conference Room	200	225	225
J.	PTA Office/Storage	80 - 200	180	180
K.	Lead Teacher Office	80 - 200	150	150
L.	Office Work Room	200	250	250
M.	Toilet (staff)	varies by code and capacity	40	40
N.	Supply/Storage (varies by capacity)	200	80	80
O.	Book Storage	varies by capacity	350	350
<b>SUB TOTAL</b>		<b>0</b>	<b>2,840</b>	<b>2,840</b>

<b>XIV. STUDENT SUPPORT SERVICES</b>				
A.	Guidance Room	450	300	300
B.	Exam Room	100 - 150	120	DELETE, per Kelly Creech 0
C.	Human Services Room (Testing, O.S.S.)	100 - 150	120	120
D.	Psychologist, Social Worker, <i>Nurse</i> Offices	100 - 150 each	3 @ 120	3 @ 120 360
E.	Speech/Audiology Room	100 - 150	120	120
F.	OT/PT Room	100 - 150	150	150
G.	Supply/Storage	varies by capacity	140	140
H.	Toilet (staff)	varies by code and capacity	40	40
<b>SUB TOTAL</b>		<b>0</b>	<b>1,350</b>	<b>1,230</b>

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS		
<b>XV. CHILD NUTRITION SERVICES</b>						
A.	Dining Area (not including circulation) (+ Recycling)	12 - 14 sf/student	{{(900/3) + 54}@10} +100	3,640	{{(900/3) + 54}@10} +100	3,640
B.	Food Preparation (Kitchen)	1,261 for 250 lunches served		1,020		1,020
C.	Serving Line	20-25% of dining area		800		800
D.	Office	included w/kitchen		80		80
E.	Storage (recyclables)	included w/kitchen		200		200
F.	Dry Storage	included w/kitchen		350		350
G.	Cooler/Freezer	included w/kitchen		350		350
H.	Staff Locker Rm/Toilet/WD	included w/kitchen		150		150
I.	Custodial	included w/kitchen		40		40
<b>SUB TOTAL</b>		<b>0</b>		<b>6,630</b>		<b>6,630</b>

<b>XVI. PLANT OPERATIONS</b>						
A.	Custodial Closets	varies by capacity	(5 @ 40) See N.T.G.	---	(5 @ 40) See N.T.G.	---
B.	General Stor./Receiving/Custodial Lockers	varies by capacity		900		900
C.	Building Manager's Office	varies by capacity		80		80
D.	Toilet/Lockers	varies by code and capacity		40		40
E.	Lawn Equipment Storage	varies by capacity		200		200
<b>SUB TOTAL</b>		<b>0</b>		<b>1,220</b>		<b>1,220</b>

<b>XVII. PRE-KINDERGARTEN</b>						
A.	Pre-K Classroom/with toilet	1200 - 1,400	1 @ 1100	1,100	2 @ 1100	2,200
B.	Resource Room/Lab			150		150
C.	Outdoor Storage		1 @ 50	50	2 @ 50	100
<b>SUB TOTAL</b>		<b>0</b>	<b>{1}</b>	<b>1,300</b>	<b>{2}</b>	<b>2,450</b>

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS
<b>XIX. TECHNOLOGY</b>				
A.	Head End Room	450 - 800	200	200
B.	Network Closets	15 - 120	200	200
<b>SUB TOTAL</b>		<b>0</b>	<b>400</b>	<b>400</b>

<b>Total Teaching Spaces / TOTAL NET</b>		<b>51</b>	<b>73,010</b>	<b>52</b>	<b>70,890</b>
NON-ASSIGNABLE SPACE					
Circulation, Mech. Rms., Group Toilets, Exterior Walls		varies, by need & capacity	Adjusted by no. of students	Adjusted by no. of students	27,809
Additional space for multi-story circulation			0		3,030
<b>GROSS BUILDING AREA</b>		<b>0</b>	<b>100,819</b>		<b>101,729</b>
Can wash			40		40
Loading Dock			150		150

101,009

<b>OPTIONAL:</b>				
<b>XVIII. READY TO LEARN CENTER</b>				
A.	Reception		120	120
B.	Examination/Consultation		2 @ 120	2 @ 120
C.	Health Services/Provider Staff Office		150	150
D.	Storage		120	120
E.	Toilet		40	40
<b>SUB TOTAL</b>		<b>0</b>	<b>670</b>	<b>670</b>
NON-ASSIGNABLE SPACE				
Circulation, Mech. rms., Gang Toilets, Exterior		0	45%	302
<b>GROSS BUILDING AREA</b>		<b>0</b>		<b>972</b>

<b>SPACE STANDARDS - MIDDLE SCHOOLS</b>	<b>SPACE STNDS - MIDDLE</b> NC Dept of Public Instruction	<b>SPACE STNDS - MIDDLE</b> 1,311 Capacity Middle School Revised: 2/19/13 (SG)	<b>SPACE STNDS - MIDDLE</b> 1,280 Capacity Middle School Revised: 2/14/13 (SG)
SPACE	School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS w/Cafetorium	Proposed WCPSS SPACE STANDARDS w/Cafetorium

<b>CAPACITY</b>	<b>600 - 800</b>	<b>1,311 Trad., 1,623 Y-R</b>	<b>1,280 Trad., 1,592 Y-R</b>
<b>TEACHING SPACES</b>		{82}	{81}
<b>NET SQ.FT./STUDENT</b>		103	104
<b>GROSS SQ.FT./STUDENT</b>		152	153
<b>CORE</b>		1,450	1,450

<b>I. GENERAL CLASSROOMS</b>						
A.	Regular Classroom	850 - 1,000	36 @ 850	30,600	36 @ 850	30,600
B.	Science Classroom/Lab	1,000	12 @ 1100	13,200	12 @ 1100	13,200
C.	Prep Room	250	4 @ 160	640	3 @ 250	750
D.	Chemical Storage	80	1 @ 80	80	1 @ 80	80
E.	Outdoor Storage		1 @ 45	45	1 @ 45	45
F.	General Ed. Support CR (small group resource rooms)	450	3 @ 850	2,550	3 @ 500	1,500
G.	Foreign Language Classroom	850 - 1,000			1 @ 850	850
	(Per DPI, for CRs less than 850sf provide additional 15-20sf for each desktop computer)					
<b>SUB TOTAL</b>			{51}	47,115	{52}	47,025

<b>II. SPECIAL EDUCATION SERVICES</b>						
A.	Adaptive Curriculum Classroom (2 w/suite) (100sf/student)	800 - 1,800	4 @ 750 / 3 @ 825	5,475	4 @ 825	3,300
B.	Instructional Kitchen/Toilets (w/suite)			600		600
C.	Special Ed Services CR (one w/folding partition)	450 - 1,800	6 @ 750	4,500	5 @ 850, 4 @ 450	6,050
<b>SUB TOTAL</b>			{13}	10,575	{13}	9,950

<b>III. VISUAL ARTS</b>						
A.	Art Classroom	1,000 - 1,400	2 @ 900	1,800	1 @ 1300	1,300
B.	Kiln Room	40-60		100		100
C.	Supply & Equip Storage	80-150	2 @ 180	360		225
<b>SUB TOTAL</b>			{2}	2,260	{1}	1,625

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS w/Cafetorium	Proposed WCPSS SPACE STANDARDS w/Cafetorium
<b>IV. MUSIC</b>				
A.	Chorus Room	1,000 - 1,200	1 @ 1000 1,000	1 @ 1000 1,000
B.	Band/Instrument Rm (more sf needed for larger classes)	1,000 - 1,600	1 @ 2000 2,000	1 @ 2000 2,000
C.	Practice Room	55 - 60	1 @ 75 / 2 @ 225 525	1 @ 75 / 2 @ 225 525
D.	Office/Library	150 - 200 each	250	250
E.	Instrument Storage	400 - 600	300	300
<b>SUB TOTAL</b>			{2} 4,075	{2} 4,075

<b>V. THEATER ARTS/AUDITORIUM</b>				
A.	Theater/Cafetorium (Theater Arts Rm OR Auditorium (1/4-1/3 ADM (8sf/seat)))	1,800 - 2,000 OF 2,900 - 3872	4,988	4,305
B.	Stage (Dance/Drama)	1,200 - 3,000	1 1,200	1 1,200
	Additional Dance/Drama	1,800 - 2,000	1 1,800	1 1,800
C.	Projection/Control Room	incl. above	200	200
D.	Dressing	incl. above	2 @ 180 360	2 @ 180 360
E.	Storage	incl. above	500	500
<b>SUB TOTAL</b>			{2} 9,048	{2} 8,365

<b>VI. CAREER AND TECHNICAL EDUCATION</b>				
A.	Family and Consumer Sciences (FACS) Lab	1,400 - 1,600	1 1,300	1 1,300
B.	FACS Storage	varies	1 @ 200 200	1 @ 200 200
C.	Technology Education <i>OR Exploring Biotechnology</i>	1,400 - 2,000	2 @ 900 1,800	1 @ 1,500 1,500
D.	Material Storage	varies	400	400
E.	Business Lab	1,200 - 1,400	3 @ 1100 3,300	3 @ 1100 3,300
F.	Business Office	varies	200	200
<b>SUB TOTAL</b>			{6} 7,200	{5} 6,900

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS w/Cafetorium	Proposed WCPSS SPACE STANDARDS w/Cafetorium			
<b>VIII. MEDIA CENTER</b>							
A.	RLV Area (Reading, Listening & Viewing)		1,450 @ 4.6 sf/student	5,980	1,450 @ 4.6 sf/student	5,980	
B.	AV Equipment Storage			300		300	
C.	Multi-Media Distribution			300		300	
D.	Toilet (varies by code and capacity)			40		40	
E.	Librarian Workroom/Office			410		410	
<b>SUB TOTAL</b>		(4.0 - 6.0 sf/student)	<b>5,800 - 8,700</b>	<b>{0}</b>	<b>7,030</b>	<b>{0}</b>	<b>7,030</b>

<b>IX VIDEO PRODUCTION</b>						
<b>SUB TOTAL</b>						
			<b>{0}</b>	<b>0</b>	<b>{0}</b>	<b>0</b>

<b>X. PHYSICAL EDUCATION</b>						
A.	Main Gym	6,200 (one court) OR 9,270 (two smaller courts) (not incl. bleachers and safety)	Seats 1,450	12,725	Seats 1,450	12,725
	Aux. Gym	3,600	1	5,000	1	5,000
B.	Health Ed. Classroom (Multi-purpose)	850 - 1,000	4 @ 850	3,400	4 @ 850	3,400
C.	Coaches Office, Male			150		150
D.	Coaches Office, Female			150		150
E.	Boy's Locker Room	varies by code and capacity		900		900
F.	Showers/Restrooms, Boys	varies by code and capacity		200		200
G.	Girl's Locker Room	varies by code and capacity		900		900
H.	Showers/Restrooms, Girls	varies by code and capacity		200		200
I.	Training Room/First Aid			170		170
J.	Equipment Storage Room			250		250
K.	Laundry Area			150		150
L.	Uniform Storage			180		180
M.	Miscellaneous Storage			250		250
N.	Outdoor PE Storage			300		300
O.	Lobby Area/Commons			600		600
P.	Ticket Booth		2 @ 30	60	2 @ 30	60
Q.	Concession Area		2 @ 75	150	2 @ 75	150
<b>SUB TOTAL</b>			<b>{5}</b>	<b>25,735</b>	<b>{5}</b>	<b>25,735</b>

SPACE	School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS w/Cafetorium	Proposed WCPSS SPACE STANDARDS w/Cafetorium
<b>XI. AUXILIARY ATHLETIC SUPPORT</b>			
		0	0
<b>SUB TOTAL</b>		<b>{0}</b>	<b>{0}</b>

<b>XII. STAFF REQUIREMENTS</b>						
A.	Lounge/Kitchen/Toilets	300 minimum (varies by capacity)	700	700		
B.	Teachers' Wk/Office-Teaming	80 - 100 per teacher	12 @ 170	2,040	12 @ 170	2,040
C.	Satellite Toilets	varies by code and capacity	4 @ 40	160	4 @ 40	160
D.	Year-Round Cart Storage	varies by capacity		320		320
<b>SUB TOTAL</b>			<b>{0}</b>	<b>3,220</b>	<b>{0}</b>	<b>3,220</b>

<b>XIII. ADMINISTRATION</b>								
A.	Reception Area	200 - 400		400		400		
B.	Principal's Office	150 - 200		225		225		
C.	Asst. Principal's Office	120 - 150		3 @ 175		525	3 @ 175	525
D.	Secretary's Office	100 - 150		2 @ 150		300	2 @ 150	300
E.	Student Information Data Manager Office	150 - 200				150		150
F.	Health Room/Toilet			200	DELETE, per Kelly Creech			0
G.	Records Room	100				125		125
H.	Conference Room	200				225		225
I.	Locked Storage					10		10
J.	Work Room, Mail, Copy, Storage (varies by capacity)	200				300		300
K.	Toilet	varies by code and capacity				40		40
L.	ISS Classroom /Office	850 - 1,000		1		750	1	750
M.	Supply/General Storage	200				75		75
N.	Material/Book Storage Room (varies by capacity)	200				425		425
<b>SUB TOTAL</b>			<b>{1}</b>	<b>3,750</b>	<b>{1}</b>	<b>3,550</b>		<b>3,550</b>

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS w/Cafetorium	Proposed WCPSS SPACE STANDARDS w/Cafetorium
<b>XIV. STUDENT SUPPORT SERVICES</b>				
A.	Reception/Secretary	200 - 400      100 - 150	290	290
B.	Counselor Office	100 - 150	4 @ 120	4 @ 120
C.	Conf. Rm./Career Ctr. (Occupational Info.)	200	400	400
D.	Closet		10	10
E.	Human Services Room/Nurse's Office	200	2 @ 120	2 @ 120
F.	Examination Room <i>change to "Health Room/Toilet"</i>	200	120	per Kelly Creech
G.	Toilet (staff)	varies by code and capacity	40	40
H.	Psychologist/Social Worker Office	200	120	120
I.	Speech, Audiologist, OT, PT, Therapy Room	200	1 @ 120 / 1 @ 160	1 @ 120 / 1 @ 160
J.	Supply/Storage	200	120	120
K.	Student Commons/Lockers		2,500	2,500
<b>SUB TOTAL</b>			<b>{0}</b>	<b>{0}</b>
			<b>4,600</b>	<b>4,680</b>

<b>XV. CHILD NUTRITION SERVICES</b>						
A.	Dining (not including circulation) (+ Recycling)	12 - 14 sf/student	(1,450÷3) @ 12 (+100)	5,900	(1,450÷3) @ 12 (+100)	5,900
B.	Food Preparation (Kitchen)	1,518 for 500 lunches served		1,200		1,200
C.	Serving Line	20-25% of dining area		700		700
D.	Office	included w/kitchen		100		100
E.	Storage (recyclables)	included w/kitchen		175		175
F.	Dry Storage	included w/kitchen		425		425
G.	Cooler/Freezer	included w/kitchen		450		450
H.	Staff Locker Rm/Toilet/WD	included w/kitchen		160		160
I.	Custodial	included w/kitchen		40		40
<b>SUB TOTAL</b>			<b>{0}</b>	<b>9,150</b>	<b>{0}</b>	<b>9,150</b>

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS w/Cafetorium	Proposed WCPSS SPACE STANDARDS w/Cafetorium
<b>XVI. PLANT OPERATIONS</b>				
A.	Custodial Closets	varies by capacity	(8 @ 40) See N.T.G. 0	(8 @ 40) See N.T.G. 0
B.	Gen. Storage/Receiving/Custodial Lockers	varies by capacity	900	900
C.	Toilet	aries by code and capacity	40	40
D.	Building Manager's Office/Storage	varies by capacity	80	80
E.	Lawn Equipment Storage	varies by capacity	200	200
<b>SUB TOTAL</b>			<b>{0} 1,220</b>	<b>{0} 1,220</b>
<b>XIX. TECHNOLOGY</b>				
A.	Head End Room	450 - 800	200	200
B.	Network Closets	15 - 120	200	200
<b>SUB TOTAL</b>			<b>{0} 400</b>	<b>{0} 400</b>
<b>TOTAL TEACHING SPACES/TOTAL NET</b>			<b>{82} 135,378</b>	<b>{81} 132,925</b>
NON-ASSIGNABLE SPACE Circulation, Mech. Rms., Group Toilets, Exterior Walls			<b>47% 63,628</b>	<b>47% 62,475</b>
<b>GROSS BUILDING AREA</b>			<b>199,006</b>	<b>195,400</b>
Can Wash			40	40
Loading Dock			200	200

<b>SPACE STANDARDS - HIGH SCHOOLS</b>	<b>SPACE STNDS - HIGH</b> NC Dept of Public Instruction	<b>SPACE STNDS - HIGH</b> 2,223 Capacity High School	<b>SPACE STNDS - HIGH</b> 2,262 Capacity High School
		Revised: 2/19/13 (SG)	Revised: 2/14/13 (SG)
<b>SPACE</b>	<b>School Planning - August 2010</b> <b>SPACE STANDARDS</b>	<b>CIP 2006 WCPSS</b> <b>SPACE STANDARDS</b>	<b>Proposed WCPSS</b> <b>SPACE STANDARDS</b>

<b>CAPACITY</b>	<b>800 - 1,200</b>	<b>2,223</b>	<b>2,262</b>
<b>TEACHING SPACES</b>		<b>{111}</b>	<b>{110}</b>
<b>NET SQ.FT./STUDENT</b>		<b>99</b>	<b>97</b>
<b>GROSS SQ.FT./STUDENT</b>		<b>148</b>	<b>145</b>
<b>CORE</b>		<b>2,350</b>	<b>2,350</b>

<b>I. GENERAL CLASSROOMS</b>					
A.	Classroom	750 - 850	47 @ 850	39,950	47 @ 850 39,950
B.	Student Government			200	200
C.	Science Lab (Chemistry)	1,500			3 @ 1,500 4,500
	Science Lab (Earth/Environmental)	1,400			1 @ 1,400 1,400
	Science Lab (reconfigurable)	1,200	14 @ 1,300	18,200	10 @ 1,200 12,000
D.	Preparation Room	250	7 @ 300	2,100	4 @ 250 1,000
	Preparation Room (shared)				5 @ 250 1,250
E.	Chemical Storage Room	80		100	250
F.	General Ed. Support CR <i>(one w/folding partition)</i> <i>(small group resource rooms)</i>	450 - 850	2 @ 850	1,700	1 @ 1,000 1,000
G.	<i>Multi-Purpose Room (w/folding partition for Paideia)</i>	850 - 1,000			1 @ 1,500 1,500
	<i>(Per DPI, for CRs less than 850sf provide additional 15-20sf for each desktop computer)</i>				
<b>SUB TOTAL</b>			<b>{63}</b>	<b>62,250</b>	<b>{63} 63,050</b>

<b>II. SPECIAL EDUCATION SERVICES</b>					
A.	Adaptive Curriculum Classroom (2 w/suite) <i>(100sf/student)</i>	800 - 1,800	4 @ 850	3,400	2 @ 850 1,700
	Instructional Kitchen/Toilets (w/suite)			900	900
B.	Occupational Course of Study Classroom	800 - 1,800	3 @ 850	2,550	3 @ 850 2,550
C.	Special Ed Services CR <i>(one w/folding partition)</i>	450 - 1,800	8 @ 850	6,800	4 @ 850, 4 @ 450 5,200
<b>SUB TOTAL</b>			<b>{15}</b>	<b>13,650</b>	<b>{13} 10,350</b>

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS
<b>III. VISUAL ARTS</b>				
A.	Art Classroom	1,200 - 1,500	2 @ 1200 2,400	2 @ 1200 2,400
B.	Additional Art Classroom	1,200 - 1,500	1 @ 1200 1,200	1 @ 1200 1,200
C.	Kiln Room	40 - 60	100	100
D.	Supply & Equipment Storage	80 - 150	3 @ 150 450	3 @ 150 450
<b>SUB TOTAL</b>			<b>{3} 4,150</b>	<b>{3} 4,150</b>

<b>IV. MUSIC</b>				
A.	<i>Chorus</i> Room	1,000 - 1,500	1 @ 1200 1,200	1 @ 1200 1,200
B.	<i>Chorus</i> Storage/Library		200	200
C.	Band Room (more sf needed for larger classes)	1,600 - 1,800	1 @ 2200 2,200	1 @ 2200 2,200
D.	Ensemble Practice Rooms	150 - 200	2 @ 225 450	2 @ 225 450
E.	Band Workroom	150	100	100
F.	Uniform Storage	varies	200	200
G.	Instrument Storage	400 - 600	350	350
H.	Band Storage/Library	150 - 200 each	200	200
<b>SUB TOTAL</b>			<b>{2} 4,900</b>	<b>{2} 4,900</b>

<b>V. THEATER ARTS/AUDITORIUM</b>				
A.	Theater Seating/Orchestra Area (no pit) 1/3 to 1/2 ADM (8sf/seat)	6,272 - 9,400	Seat 850 8,075	Seat 850 8,000
B.	Stage (no fly loft)	3,000 - 5,000	1 2,600	1 2,515
C.	Projection/Control Room	varies	300	300
D.	Spot Deck	as needed	2 @ 80 160	2 @ 80 160
E.	Dance/Drama	1,800 - 2,000	2 3,600	2 @ 1800 3,600
F.	<i>Dressing Rooms</i>	incl. above		2 @ 180 360
G.	Cat Walk	INCL.	INCL. 0	INCL. 0
H.	Workroom	varies	600	500
I.	Storage	varies	800	700
J.	Chair Storage	incl. above	100	100
<b>SUB TOTAL</b>			<b>{3} 16,235</b>	<b>{3} 16,235</b>

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS		
<b>VI. CAREER AND TECHNICAL EDUCATION</b>						
A.	Family and Consumer Sciences (FACS) Lab	1,600 - 2,000	1 @ 1,500	1,500	1 @ 1700	1,700
	Storage	varies		200		130
B.	<i>Family and Consumer Sciences Design Classroom</i>	1,400 - 1,600			1 @ 1470	1,470
	Dressing/Storage	varies		60		60
C.	Family and Consumer Sciences Classroom	1,400 - 1,600	2 @ 1,025	2,050	1 @ 940	940
	Storage	varies				60
D.	<i>Technology Engineering and Design</i>	1,300 - 1,600	1 @ 1,300	1,300	1 @ 1600	1,600
	Storage	varies		500		200
E.	Computer/Network Engineering	1,600 - 2,000	1 @ 1,800	1,800	1 @ 1500	1,500
	Storage	varies		200	1 @ 100	100
F.	<i>Trade &amp; Industrial / Ag Education / Culinary Lab</i>	1,600 - 2,000	1 @ 1,800	1,800	2 @ 1800	3,600
	Material Storage	varies		400	2 @ 200	400
	Tool Storage	varies		250	2 @ 200	400
G.	Tech Course TBD or <i>Digital Media</i>	850 - 1,000	1 @ 1,650	1,650	1 @ 1800	1,800
	Storage	varies				200
H.	<i>Health Sciences / Biotechnology / FACS / Public Sa</i>	2,000 - 2,500			2 @ 1380	2,760
	Storage	varies			2 @ 120	240
I.	Business & Information Technology Computer Lab	1,200 - 1,400	4 @ 1,200	4,800	4 @ 1200	4,800
J.	Marketing Education Computer Lab	1,000 - 1,200	2 @ 1,200	2,400	2 @ 1200	2,400
	<i>Work-Based Learning Room</i>	varies	2 @ 120	240	2 @ 120	240
K.	CADD Drafting	1,600 - 2,000	2 @ 1,480	2,960	1 @ 1500	1,500
	Storage	varies	2 @ 120	240	1 @ 200	200
L.	Tech Course TBD or <i>SciVis and Game Art Design</i>	1,600 - 2,000	1 @ 1,650	1,650	1 @ 1200	1,200
M.	Agriculture Greenhouse (if applicable)			0		
<b>SUB TOTAL</b>			{16}	<b>24,000</b>	<b>{18}</b>	<b>27,500</b>

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS
<b>VIII. MEDIA CENTER</b>				
A.	RLV Area (Reading, Listening & Viewing)		2,350 @ 4.5 sf/student 10,575	2,350 @ 4.5 sf/student 10,575
B.	AV Equipment Storage		350	350
C.	Multi-Media Distribution Ctr/Periodical Storage		350	350
D.	Teachers' Curriculum Lab		300	300
E.	Toilet (varies by code and capacity)		45	45
F.	Media Workroom/Office		550	550
<b>SUB TOTAL</b>		(4.0 - 6.0 sf/student) 94,00 - 14,100	{0} 12,170	{0} 12,170
<b>IX VIDEO PRODUCTION</b>				
A.	Video Production/Edit		260	260
B.	Video Equip Storage		50	50
<b>SUB TOTAL</b>		400 - 600	{0} 310	{0} 310

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS
<b>X. PHYSICAL EDUCATION</b>				
A.	Main Gym	12,400 (two courts) (not including bleachers and safety space)	Seats 2,200 {2}      16,100	Seat 2200 {2}      16,100
B.	Auxiliary Gym	6,500	{1}      6,500	1      6,500
	Multi-Purpose Room <i>(moved to General CRs)</i>		1 @ 1,500      1,500	0      0
C.	Health Education Classrooms	750 - 850	3 @ 850      2,550	3 @ 850      2,550
D.	Wellness/Weight Training Room	2,000 - 3,000	2 @ 1,600      3,200	2      3,200
E.	Athletic Director Office		120	120
F.	Boys Team Locker Room	varies by code and capacity	1,900	1,900
G.	Boys Class Locker Room	varies by code and capacity	1,500	1,500
H.	Showers/Restrooms, Boys	varies by code and capacity	1 @ 200 / 1 @ 400      600	1 @ 200 / 1 @ 400      600
I.	Girls Team Locker Room	varies by code and capacity	1,500	1,500
J.	Girls Class Locker Room	varies by code and capacity	1,500	1,500
K.	Showers/Restrooms, Girls	varies by code and capacity	1 @ 300 / 1 @ 500      800	1 @ 300 / 1 @ 500      800
L.	Training Room/First Aid		400	400
M.	Laundry Area		200	200
N.	PE Equip. Storage Room		1,000	1,000
O.	Team General Storage		800	800
P.	Outdoor Equipment		600	600
Q.	Lobby Area/Commons		2,930	2,930
R.	Ticket Booth		75	75
S.	Concessions Area		100	100
<b>SUB TOTAL</b>			{9}      43,875	{8}      42,375
<b>XI. AUXILIARY ATHLETIC SUPPORT</b>				
		(see end)	(see end)	(see end)

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS
<b>XII. STAFF REQUIREMENTS</b>				
A.	Faculty Area	80 - 100 per teacher	6 @ 925 5,550	6 @ 925 5,550
B.	Faculty Conference	200	6 @ 150 900	6 @ 150 900
C.	Faculty Toilets	varies by code and capacity	9 @ 40 360	9 @ 40 360
D.	Faculty Dressing/Shower/Toilet (PE, athletics, dance)	varies by code and capacity	2 @ 125 250	2 @ 125 250
<b>SUB TOTAL</b>			{0} 7,060	{0} 7,060

<b>XIII. ADMINISTRATION</b>				
A.	Reception Area	200 - 400	400	400
B.	Principal's Office	150 - 200	225	225
C.	Asst. Principal's Office	120 - 150	1 @ 150 / 4 @ 200 950	1 @ 150 / 4 @ 200 950
D.	Secretary's Office	100 - 150	3 @ 150 450	3 @ 150 450
E.	Student Information Data Manager Office	150 - 200	175	175
F.	Bookkeeping Office	80 - 200	150	150
G.	Attendance Office	80 - 200	170	170
H.	Conference Room	200	2 @ 225 450	2 @ 225 450
I.	Locked Storage		20	20
J.	Workroom, Mail, Copy, Storage (varies by capacity)	200	1 @ 400 / 1 @ 100 500	1 @ 400 / 1 @ 100 500
K.	Toilets (staff)	varies by code and capacity	2 @ 40 80	2 @ 40 80
L.	Bus Supervisor/Secretary Office	80 - 200	2 @ 150 300	2 @ 150 300
M.	Book/Material Storage (varies by capacity)	200	700	1 700
N.	Community Schools Coordinator/Security	80 - 200	2 @ 120 240	2 @ 120 240
<b>SUB TOTAL</b>			{0} 4,810	{0} 4,810

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS
<b>XIV. STUDENT SUPPORT SERVICES</b>				
A.	Reception/Secretary	200 - 400      100 - 150	400	400
	Secretary's Office	100 - 150	150	150
B.	Counselor Office	100 - 150	6 @ 120	6 @ 120
C.	Conference Room	200	250	250
D.	Closet		10	10
E.	Intervention Coordinator/AIG Office	200		120
F.	Human Services/Nurse Office	200	2 @ 120	1 @ 120
G.	Health Exam Rooms/Toilets	200	1 @ 130 / 1 @ 100	2 @ 120 / 2 @ 40
H.	Toilets (staff)	varies by code and capacity	2 @ 40	2 @ 40
I.	Psychologist/Social Worker Office	200	120	120
J.	Speech/Audiology	200	120	120
K.	OT/PT Room	200	160	160
L.	Technicians Office	200	120	120
M.	IE Conference (Industrial Education)	100 - 200	120	120
N.	Records Room/Vault (varies by capacity)	100	300	300
O.	SAP/Resource Officer	200	170	170
P.	Student Lockers		6,600	6,240
<b>SUB TOTAL</b>			{0}	{0}
			9,790	9,520

SPACE	School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS
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<b>XV. CHILD NUTRITION SERVICES</b>						
A.	Dining Area (not including circulation) +Recycling	12 - 14 sf/student	((2350 ÷ 3) @ 13) + 181	10,364	((2350+3) @ 13) +181	10,364
B.	Food Preparation (Kitchen)	1,938 for 750 lunches served		1,600		1,600
C.	Serving Line	20-25% of dining area		1,550		1,550
D.	Office	included w/kitchen		100		100
E.	Storage (recyclables)	included w/kitchen		200		200
F.	Dry Storage	included w/kitchen		600		600
G.	Cooler/Freezer	included w/kitchen		500		500
H.	Staff Locker Rm/Toilet/WD	included w/kitchen		200		200
I.	Custodial	included w/kitchen		40		40
<b>SUB TOTAL</b>			{0}	<b>15,154</b>	{0}	<b>15,154</b>

<b>XVI. PLANT OPERATIONS</b>						
	<i>Maintenance Cluster - Office/Conditioned Storage (if needed, 600 sq.ft.)</i>		if needed		if needed	
	<i>Maintenance Cluster - Unconditioned Storage (if needed, 400 sq.ft.)</i>		if needed		if needed	
A.	Custodial Closets	varies by capacity	(9 @ 40) See N.T.G.	0	(9 @ 40) See N.T.G.	0
B.	Gen. Storage/Receiving/Custodial Lockers	varies by capacity		1,200		1,600
C.	Toilet	varies by code and capacity		40		40
D.	Custodial Office/Storage	varies by capacity		120		120
E.	Lawn Equipment Storage	varies by capacity		500		500
<b>SUB TOTAL</b>			{0}	<b>1,860</b>	{0}	<b>2,260</b>

SPACE		School Planning - August 2010 SPACE STANDARDS	CIP 2006 WCPSS SPACE STANDARDS	Proposed WCPSS SPACE STANDARDS
<b>XIX. TECHNOLOGY</b>				
A.	Head End Room	450 - 800	1 @ 200      200	1 @ 400      400
B.	Network Closets	15 - 120 each	6 @ 40      240	
<b>SUB TOTAL</b>			{0}      440	{0}      400
<b>TOTAL TEACHING SPACES/TOTAL NET</b>			{111}      220,654	{110}      220,244
NON-ASSIGNABLE SPACE			49%      108,120	49%      107,920
Circulation, Mech. Rms., Group Toilets, Exterior Walls				
<b>GROSS BUILDING AREA</b>			<b>328,774</b>	<b>328,164</b>
Can Wash			80	40
Loading Dock			300	200
			329,154	328,404
<b>XI. AUXILIARY ATHLETIC SUPPORT</b>				
A.	Stadium	varies by school system, code and capacity	1 @ 2000 / 1 @ 500      0	1 @ 2000 / 1 @ 500 seats      0
B.	Concession Stands	varies by school system, code and capacity	540	540
C.	Concession Storage	varies by school system, code and capacity	60	60
D.	Press Box	varies by school system, code and capacity	400	400
E.	Ticket Booths	varies by school system, code and capacity	60	60
F.	Equipment Storage	varies by school system, code and capacity	400	400
G.	Team Storage	varies by school system, code and capacity	150	150
H.	Public Toilets	varies by school system, code and capacity	2,500	2,500
<b>SUB TOTAL</b>			<b>4,110</b>	<b>4,110</b>
NON-ASSIGNABLE SPACE			13%      534	13%      534
Circulation, Mech Rms, Exterior Walls				
<b>GROSS BUILDING AREA</b>			<b>4,644</b>	<b>4,644</b>