Joint Meeting Agenda
Board of Commissioners & Board of Education

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

MEETING CALLED TO ORDER

MEETING OBJECTIVES:

I. **Understand the Assumptions and Variables Driving the Cost of New Schools, Renovations and Life-cycle Replacements, Technology, Security, Mobile Classroom Relocations, Assessment of Existing Facilities and Start-up Design for Future Building Programs**

II. **Receive and Consider the Total Estimated Cost of an Upcoming Capital Plan**

III. **Understand the County's Capital Financing Plan and Impact of the Presented Capital Plan**

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. **Major Renovation and Life-cycle Replacement Assumptions, Prioritization Approach and Scope**
Joe Desormeaux, Assistant Superintendent for Facilities
Attachment (2): Capital Improvement Program Presentation (P. 3-15)

III. Other Capital Program Categories Assumptions, Prioritization Approach and Scope

Joe Desormeaux, Assistant Superintendent for Facilities

Attachment (2): Capital Improvement Program Presentation (P. 16-27)
Attachment (3): Network Systems - Bond Spending Plan - $36M
Attachment (4): Technology Diagram

IV. Total Estimated Need for Capital Program

Joe Desormeaux, Assistant Superintendent for Facilities

Attachment (2): Capital Improvement Program Presentation (P. 28-39)

V. County's Capital Financing Plan and Impact of the Presented Capital Plan

David Cooke, County Manager

Attachment (5): Capital Financing Plan

(Attachment 5 is not included in this package, it will be distributed on Thursday)

VI. Wrap-up

Attachment (6): Brief History of Bond Referenda

WAKE COUNTY
PUBLIC SCHOOL SYSTEM

Capital Improvement Program

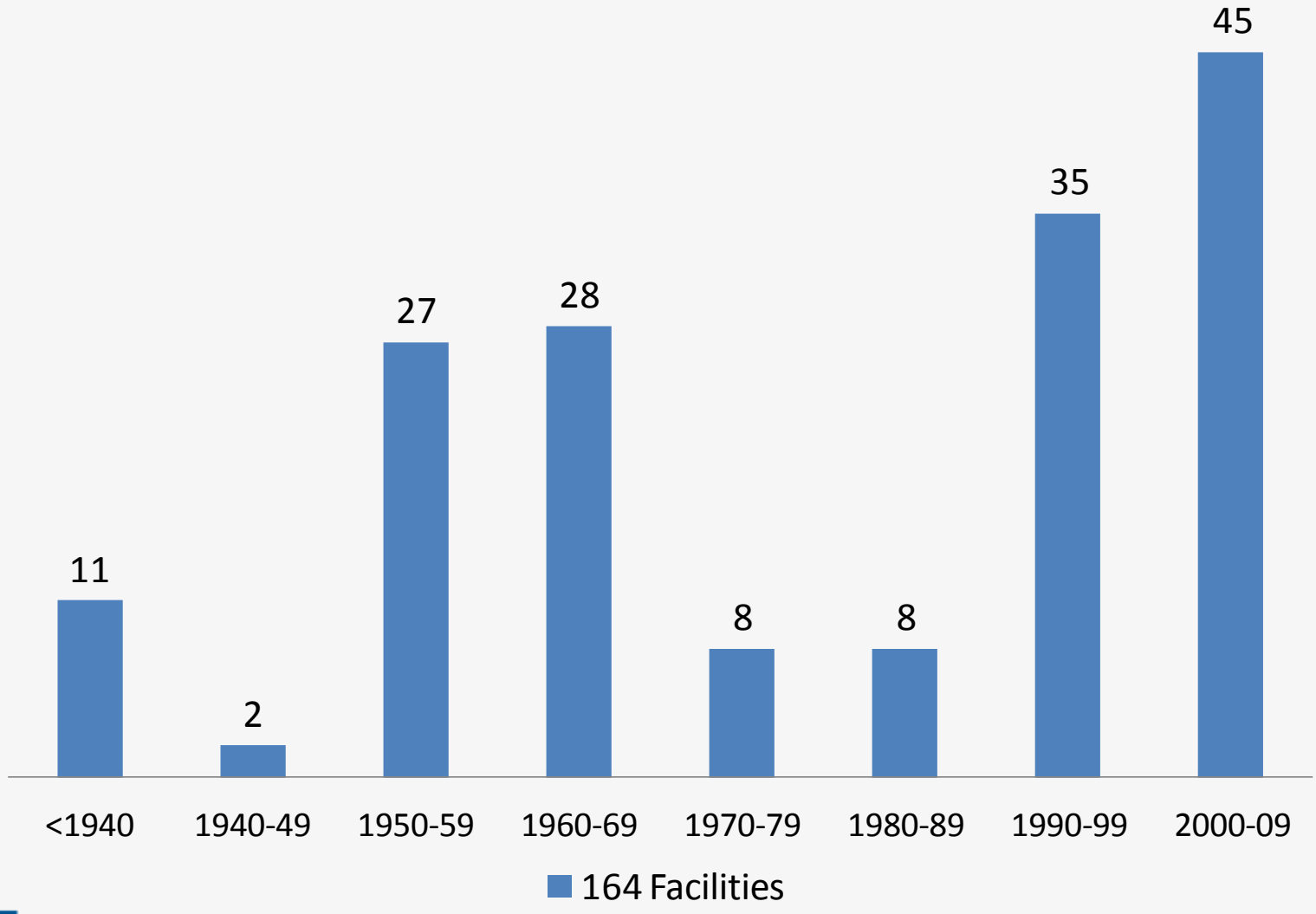
Attachment 2

Topics

- Major Renovations and Life Cycle Projects
- Other Capital Program Categories
- Total Estimated Need for the Capital Program
- Capital Financing Plan

MAJOR RENOVATIONS AND LIFE CYCLE PROJECTS

Number of New Facilities by Decade



WAKE COUNTY PUBLIC SCHOOL SYSTEM

Determining Life Cycle Replacements

- Systems approaching or which have exceeded their life cycle (5 – 20 years) will be evaluated for potential replacement
- Prioritized based on matrix priority focusing on health/safety and immediate needs
- Annual total cost of work ranges from $8.5M to $36.4M (2004-2019)
- Annual average is $16M

Prioritization Matrix

		Immediate: System(s) have failed	Short Term 0-2 Years: System(s) functioning improperly and will fail soon.	Long Term 3-5 Years: System(s) that have exceeded their useful life, but are still functioning.	Improvements: Code changes, systems upgrades, aesthetic issues, and program needs.
	Pts	**40**	**30**	**20**	**10**
High: Significant loss of capability, frequent interruptions and considerable degradation of effectiveness. **Health/Safety:** Probable chance of physical disability greater than 3 months or resource loss greater than $200,000.	10	400	300	200	100
	9	360	270	180	90
	8	320	240	160	80
Medium: Limited loss of capability. Relocations and rescheduling of work or classes required. **Health/ Safety:** Possible chance of lost workdays or resource loss greater than $10,000.	7	280	210	140	70
	6	240	180	120	60
	5	200	150	100	50
	4	160	120	80	40
Low: Minimal impact on capability. All others.	3	120	90	60	30
	2	80	60	40	20
	1	40	30	20	10

WAKE COUNTY PUBLIC SCHOOL SYSTEM

Life Cycle Replacement and Repairs

Americans with Disability Act (ADA)	Exterior Windows
Asbestos	Fencing
Asphalt Elem Track	Fire Alarm System
Asphalt Paving	Hardwood Flooring
Boiler	HVAC System
Carpet	Lighting
Chair Lift	Paint
Chiller	Playground
Controls & Instrumentation	Plumbing Fixtures
Cooler/Freezer	Roof Systems
Cooling Tower	Security System
Elevator	Switchgear
Exterior Doors	Synthetic Surfacing
Exterior Walls	Vinyl Composition Tile (VCT)

Determining Major Renovations

- Structural, Mechanical, Electrical, Plumbing, Codes, and Educational Program
- Square footage approaching/exceeding 40 years without renovation will be evaluated for a potential project
- Prioritize based on:
  - Health and Safety
  - Facility Condition Index
    (Building Repair Cost/Building Replacement Cost)
  - Academic Improvement
  - Student Assignment

Major Renovations

- The amenities and finishes in renovated schools will be of same standard as new schools
- Spaces in existing schools will be considered adequate if the size is not less than 75% of the standard
- Renovation costs exceeding 75% of new construction will trigger a DPI analysis of renovation vs. replacement
- Existing campuses will be evaluated for adding capacity
- Funding will be included for furniture, equipment and technology if required
- 22M SF/40 Years = 559,000 SF/Year
- Approximately $114M/Year

Deferred Major Renovation and Life Cycle

- Facilities exceeding 40 years since renovation
  - 1,118,000 SF (equal to 2 years annual amount)
  - Major Renovations $601M
- Systems exceeding industry recognized life
  - Cost for Life Cycle $63M (equal to 4 years)
- Total $664M
- Catch up in 5 yrs = $133M/Year

Major Renovations Compared to New Construction

- Why a Renovation May be More Expensive
  - Demolition costs
  - Swing Space
  - Moving to Swing Space
  - Phasing
  - Site Safety and Security with Occupants in School
  - Lead Paint and/or Asbestos Abatement
  - Premium for New Construction on Existing Site: 17%
  - Contingency Rate is Higher: 10% vs. 5%
  - Design Rate is Higher: 8% vs. 6%

Projects at Existing Schools
Major Renovations – Whole Campus

Project	Cost	Added Seats	New Capacity	Current Capacity
Green Elementary	$25,421,016	167	780	613
Vandora Springs Elementary	$26,554,825	240	780	540
Lincoln Heights Elementary	$25,314,581	194	780	586
Wiley Elementary	$14,724,019	0	361	361
Brooks Elementary	$26,421,295	251	780	529
Garner High	$74,103,499	500	2,262	1,762
Stough Elementary	$26,209,038	378	780	402
East Wake Middle	$46,068,587	328	1,280	952
West Millbrook Middle	$35,394,283	26	981	955
Apex High	$55,362,700	623	2,262	1,639
North Ridge Elementary	$26,521,016	263	780	517
Fuquay Varina High	$82,418,716	620	2,262	1,642
Total	**$464,513,576**	**3,590**	**14,088**	**10,498**

Projects at Existing Schools
Major Renovations – Partial Campus

Project	Cost	Added Seats	New Capacity	Current Capacity
East Garner Middle	$19,642,965	78	981	903
Conn Elem	$12,298,619	0	427	427
Rolesville Elem	$9,724,922	106	625	519
Wendell Elem	$16,211,981	0	457	457
Washington Elem	$3,231,599	0	529	529
Broughton High	$13,908,265	0	1,740	1,740
Swift Creek Elem	$7,914,479	0	481	481
Fuller Elem	$15,931,375	168	625	457
York Elem	$11,359,771	0	529	529
Cary High	$37,559,005	65	2,262	2,197
Millbrook High	$20,561,019	0	1,666	1,666
Hunter Elem	$12,539,264	0	546	546
Knightdale Elem	$3,297,161	0	655	655
Fuquay Varina Middle	$9,840,646	0	972	972
Sanderson High	$8,007,537	0	1,735	1,735
Enloe High	$30,859,903	0	2,347	2,347
Total	**$232,888,511**	**417**	**16,577**	**16,160**

OTHER CAPITAL PROGRAM CATEGORIES

Other Capital Program Categories

- Technology Infrastructure and Equipment
- Environmental and Accessibility
- Security
- Furniture and Educational Equipment
- Temporary Classrooms
- Public Improvements on and off site(roads, utilities)
- Program Management
- Start Up Designs
- Land Acquisition
- Facility Assessments

Other Line Items

- Technology
  - Data Infrastructure
  - Mobile Connectivity
  - Wireless
  - Power
  - School Servers
  - Devices for Teachers, Students and Classrooms
  - Annual Cost - $30M (CIP 2006 - $11.7M)

Other Line Items

- Environmental Compliance/ADA
  - Indoor Air Quality: Testing, Monitoring, Remediation
  - Lead Paint: Remediation
  - AHERA/Asbestos: Testing, Monitoring, Abatement
  - ADA: Special Needs Projects
  - HAZMAT: Spill Remediation, Lab Packs
  - UST: Remediation
  - Annual Cost - $1.7M (CIP 2006 - $2.3M)

Other Line Items

- Security – Upgrades to Existing Schools
  - Closed Circuit Television System
  - Access Control
  - Visitor Management
  - Area Notification
  - Entrance Buzzer
  - Total Cost - $18.1M

Other Line Items

- Furniture Replacement
  - Replaced on a 20 year cycle
  - Assume Major Renovation will catch a cycle
  - Cost based on 40 year cycle
  - Annual Cost - $3.4M (CIP 2006 - $400K)

- Instructional Equipment Replacement
  - Based on item life cycle
  - Annual Cost - $2.6M (CIP 2006 - $1.1M)

Other Line Items

- Mobile/Modular Classroom Relocations
  - Average Cost
    - Single Mobile - $60K/classroom
    - Modular - $54K/classroom
  - Based on 35 moves per year
    - 66% modular
    - 33% single
  - Annual Cost - $1.9M (CIP 2006 - $3M)

Other Line Items

- Public Improvements
  - Turning Lanes, Road Widening, Intersection Improvements, Utility Extensions up to and across property, etc
  - Increase during current bond:
    - 160% - Elementary Schools
    - 90% - Middle Schools
    - 70% - High Schools
  - Used Average for Current Bond plus 20%
    - Elementary Schools - $1.3M
    - Middle and High Schools - $3M
    - Renovation - $380K

Other Line Items

- Program Management Fee
  - Based on number of projects and timing
  - Cost between 2% and 4.5% of total CIP
  - CIP 2006 original funding was $22.7M

- Startup Design
  - Depends on number of projects and timing
  - CIP 2006 original funding was $22.5M

Other Line Items

- Land Acquisition Costs
  - Based on projection of 29 ES, 6 MS, 5 HS and 4 Transportation Centers
  - Already acquired 8 ES, 6 MS, 2 HS and 2 Transportation Centers
  - Includes 20 acres for ES, 64 acres for HS, 25 acres for Transportation Centers, Due Diligence, and Closing Costs
  - Total Costs - $55M (CIP 2006 - $52M)

Other Line Items

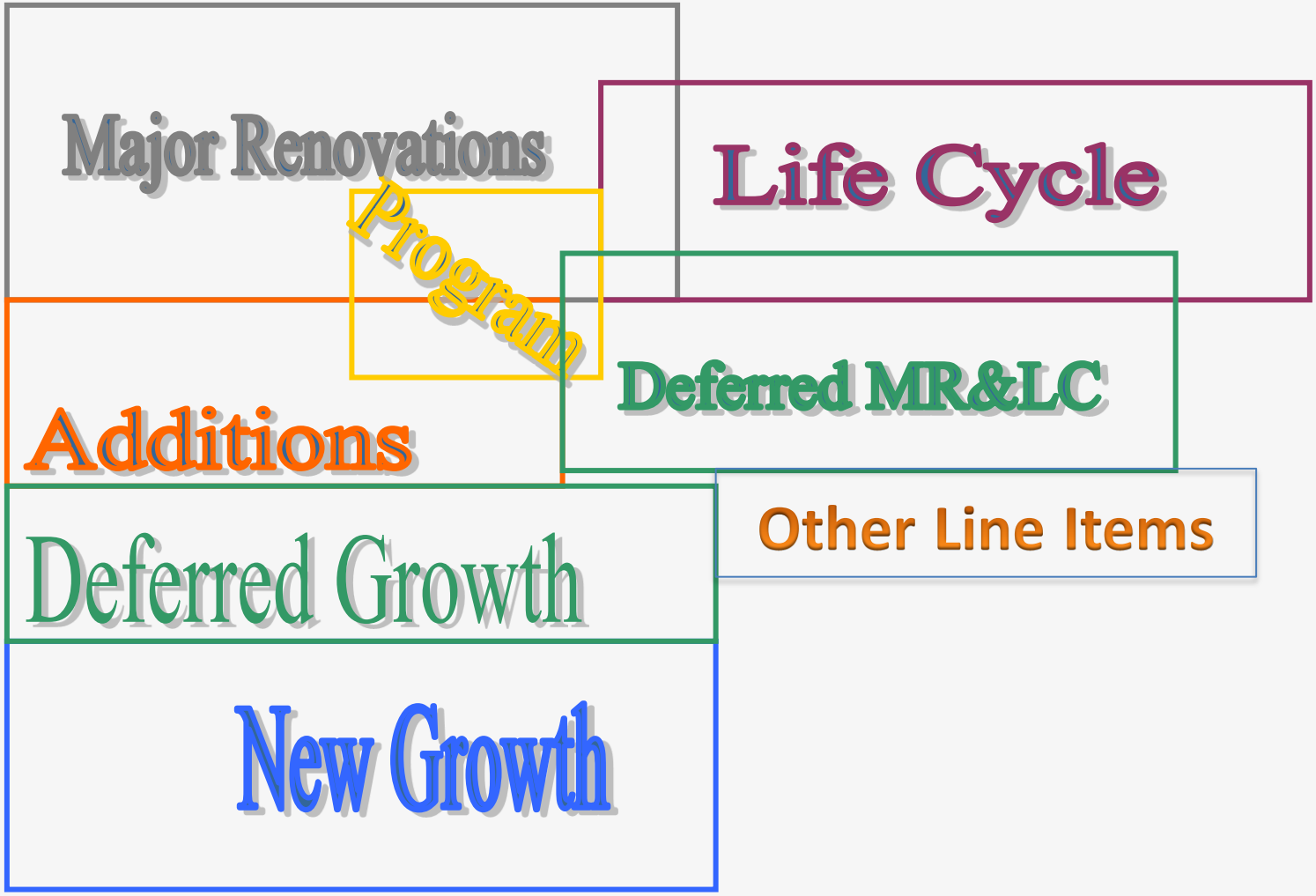
- Facility Assessments
  - Assess one seventh of square footage every year
  - Develop and quantify future capital needs
  - Inventory new facilities, systems and equipment requiring maintenance
  - Annual Costs - $355K (CIP 2006 - $560K)

Projects at Existing Schools
Other Line Items

Project	Cost
Life Cycle Replacements	93,854,571
Furniture Replacements	11,013,935
Educational Equipment Replacements	8,521,002
Environmental and ADA	5,812,268
Technology	97,169,913
Security	19,493,488
Mobile Classroom Relocation	7,522,410
Assessment of Facilities	1,150,006
Public Infrastructure	71,375,863
Property Acquisition	58,963,718
Startup Designs	15,446,721
Program Contingency	32,872,230
Program Management	55,062,951
Total	**$ 478,259,078**

TOTAL ESTIMATED NEED FOR THE CAPITAL PROGRAM

Capital Improvement Plan Components



New School Projection: Chart From Last Month

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

WAKE COUNTY PUBLIC SCHOOL SYSTEM

New School Projection: Funding from new Bond

Schools Needed by Year (Cumulative)	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Elementary	7	9	10	12	15	18	21	25	29
Middle	1	2	2	2	3	4	5	5	6
High	3	3	3	3	3	3	4	4	5
Total	11	14	15	17	21	25	30	34	40
Funds Available to Bid									

Schools Opened Each Year	2015	2016	2017	2018	2019	2020	Total
Elementary							
Middle							
High							
Total							

WAKE COUNTY PUBLIC SCHOOL SYSTEM

New School Projection: Years Schools will Open

Schools Needed by Year (Cumulative)	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Elementary	7	9	10	12	15	18	21	25	29
Middle	1	2	2	2	3	4	5	5	6
High	3	3	3	3	3	3	4	4	5
Total	11	14	15	17	21	25	30	34	40
Funds Available to Bid		Years Schools will Open							

Schools Opened Each Year	2015	2016	2017	2018	2019	2020	Total
Elementary							
Middle							
High							
Total							

WAKE COUNTY PUBLIC SCHOOL SYSTEM

New School Projection: Year Last Schools are Full

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

Funds Available to Bid | Years Schools will Open | Year Schools will be Full

Open	2015	2016	2017	2018	2019	2020	Total
Elementary							21
Middle							6
High							5
Total							32

WAKE COUNTY PUBLIC SCHOOL SYSTEM

New School Projection: Current Designs Funded

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

Funds Available to Bid | Years Schools will Open | Year Schools will be Full

Open	2015	2016	2017	2018	2019	2020	Total
Elementary	2			-	-	-	21
Middle	-	1			-	-	6
High	-	2			-	-	5
Total							32

WAKE COUNTY PUBLIC SCHOOL SYSTEM

New School Projection: Timing of New Openings

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

Funds Available to Bid | Years Schools will Open | Year Schools will be Full

Open	2015	2016	2017	2018	2019	2020	Total
Elementary	2	10	9	-	-	-	21
Middle	-	1	2	3	-	-	6
High	-	2	2	1	-	-	5
Total	2	13	13	4			32

Capital Improvement Plan Based on Assumptions

	July 14 - Dec 14	Jan 15 - Jun 15	2015-16	2016-17	Total
Total Whole Campus (12)	$ -	$ 25,421,016	$ 155,887,494	$ 283,205,066	$ 464,513,576
Total Partial Campus (16)	0	0	33,351,845	199,536,665	232,888,510
New Elementary(21)	39,544,530	217,185,138	201,330,623	0	458,060,290
New Middle (6)	36,345,362	0	85,485,481	132,075,069	253,905,912
New High (5)	131,586,489	139,653,688	71,921,649	0	343,161,826
Life-cycle Replacements	0	30,364,804	31,275,748	32,214,020	93,854,571
Life Cycle Furniture Replacement	0	3,563,342	3,670,243	3,780,350	11,013,935
Educational Equipment Replacement	0	2,756,803	2,839,507	2,924,692	8,521,002
Environmental and ADA	0	1,880,445	1,936,859	1,994,964	5,812,268
Technology Replacements	31,437,417	0	32,380,540	33,351,956	97,169,913
Security	7,429,735	0	7,555,459	4,508,294	19,493,488
Mobile Classroom Relocation & Leasing	2,594,524	0	2,752,035	2,175,852	7,522,410
Assessment of Existing Facilities	372,062	0	383,224	394,720	1,150,006
Public Infrastructure	0	33,414,093	24,265,455	13,696,315	71,375,863
Property Acquisition	31,565,777	0	10,489,415	16,908,526	58,963,718
Start-up Design for Next Program	0	0	11,498,800	3,947,921	15,446,721
Program Contingency	0	10,635,165	10,954,220	11,282,846	32,872,230
Program Management	17,814,536	0	18,348,973	18,899,442	55,062,951
Total	$ 298,690,432	$ 464,874,494	$ 706,327,568	$ 760,896,699	$ 2,230,789,192

WAKE COUNTY PUBLIC SCHOOL SYSTEM

Capital Plan Based on Assumptions

- Provides the following results
  - Almost obtains a utilization rate of 95%/97.5%
  - Significantly Reduces Temporary Classrooms
  - Year Round Schools do not Change, except M8
  - Eliminates all Identified Deferred Major Renovation and Lifecycle
  - 32 Schools and 39,078 Seats
    - 21 Elementary Schools and 16,380 seats
    - 6 Middle Schools and 7,381 seats
    - 5 High Schools and 11,310 seats
    - 28 Major Renovations and 4,007 seats
  - 25 New School Sites and 662 Acres

Factors to Consider When Determining Scenarios

- Utilization Rate
- Use of Year Round (mandatory, choice, new or existing)
- Temporary Classrooms
- Class size
- Maintain Existing School Status or Catch Up?
- Adjust Other Line Items
- Number of Years
- Debt Capacity/Indebtedness
- ??
- Number of Scenarios?

Next Month

- Scenarios
- ??

Network Systems - Bond Spending Plan - $36M

Data Infrastructure - $24M

High speed network connections are essential in today's classrooms. Many of our schools use shared 10 megabit connections to each computer while newer and renovated schools enjoy connections a hundred times faster. Network electronics and the cable infrastructure need to be updated in order to provide adequate bandwidth in all educational spaces.

Mobile Connectivity - $1.5M

Mobile units are now requiring internal wireless connectivity for the use of laptop carts and tablets. In order to accommodate this need we are connecting them back to the main network via fiber optic cable. This provides sufficient bandwidth to support wireless access points in this environment.

Wireless - $9M

We have experienced explosive growth in the use of wireless devices in our schools. All schools in Wake County have wireless connectivity but only the newer schools are equipped to handle a large number of devices using the network simultaneously. More high capacity access points are needed.

Power - $500K

Network wiring closets are in need of more electrical power over dedicated circuits to support network powered (POE) devices such as wireless access points and security cameras. Appropriately sized Uninterruptible Power Supplies are needed to protect critical network equipment during power surges and brief outages.

School Servers - $1M

School based file servers are used for local data storage, application delivery and account management for staff and students. Older units must be replaced to provide adequate storage, reliability and compatibility with current operating system software.

Accessing Our Future

Building Better Learning Spaces

WHY?

- Personalized Learning
- Job Skills
- K-12 Information and Tech Standards
- NC Teacher/Administrator Evaluations
- Digital Content Access

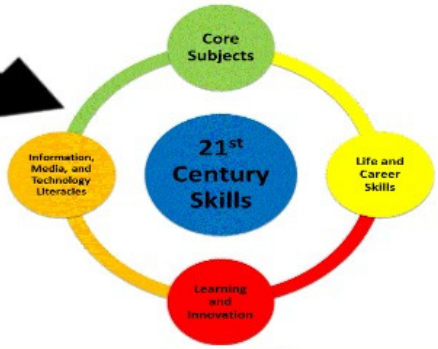
High Expectations= equitable $ for programming, technology and practices in our classrooms

"Equitable resources regardless of age"

21st Century Learning

WAKE COUNTY PUBLIC SCHOOL SYSTEM

Mission Critical



Classroom Baseline

Teachers

Mobile Device

Students

3:1 Student to Device (laptop, iPad, or tablet)

Sharing

Projector, Interactive whiteboard, document camera, sound

1+2=

Refresh stage

50,000 devices
$25 million

11,000 classrooms
$29 million

$18 million for 3 years= $54 million

BRIEF HISTORY OF BOND REFERENDA
(1999 – 2006)

June 8, 1999:

The June 1999 School Bond Referendum failed; with 65% of voters voting "NO."

The amount of the referendum was $650 million, as part of an overall capital program of $940 million. The plan would have required an increase in the property tax rate of 13 cents over three years to pay for the debt service and capital requirements.

Following the failed bond referendum, the Board of County Commissioners increased the property tax rate by 10 cents for the FY 2000 Budget, with eight cents dedicated to pay for school capital needs.

November 7, 2000:

The November 2000 School Bond referendum succeeded with 77.90% of voters voting "YES."

The amount of the bond referendum was $500 million, as part of an overall capital plan of $550 million. After the failed referendum in June 1999, a citizens' advisory committee was formed to evaluate the failed referendum, school capital needs, and outline a new Capital Spending Plan.

The capital plan and referendum did not require an increase in the property tax rate to support the debt service and capital requirements.

October 7, 2003:

The October 2003 School Bond Referendum succeeded with; 64.21% of voters voting "YES."

The amount of the bond referendum was $450 million, as part of an overall capital plan of $564 million.

The capital plan and referendum did not require an increase in the property tax rate to support the debt service and capital requirements.

November 7, 2006:

The November 7, 2006 School Bond Referendum succeeded with 53.2% of voters voting "YES."

The amount of the referendum was $970 billion, as part of an overall capital program of $1.056 billion. The plan required an estimated increase in the property tax rate of 4.7 cents.

Of the 4.7 cents, 2.7 cents was required to support the debt service and capital requirements and 2.0 cents were needed to support opening and operating the new schools.