





# ROCK HILL SCHOOLS FIVE YEAR FACILITIES MASTER PLAN (2016 - 2020) TABLE OF CONTENTS

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#### **Executive Summary**

The Facility Master Plan for 2016-2020 is a comprehensive overview and long-term plan for Rock Hill Schools' buildings and grounds. Laying the foundation for an ongoing master planning system, a permanent district-level team of stakeholders, the "Pathfinders" was established. The Pathfinders is comprised of key school district administrators, teachers, parents, community stakeholders, local government planning professionals, and partners in facilities planning and demographics analysis. As envisioned by the Board of Trustees of Rock Hill, this Facility Master Plan:

- Is a living document, monitored and updated annually, and available to the School Board and local and state government agencies
- Guides and controls specific planning actions and capital projects development
- Meets SC Department of Education requirements for long range planning documentation
- Is aligned with the strategic plan of Rock Hill Schools.

The Pathfinders team began with the district's strategic plan and then looked at emerging regional trends affecting schools. The resulting plan recognizes educational needs, reviews the condition and capacity of existing facilities and recommends a five-year plan of action including general strategies and specific projects to meet the needs of our learning environment beyond 2020. Our master plan goal is to transform our schools into safe, flexible, collaborative, sustainable and efficient places where students can learn, grow, connect and thrive!

Now 15 years into the 21<sup>st</sup> century, our focus needs to shift from just "21<sup>st</sup> Century learning" to preparing our children to be globally competitive citizens BEYOND 2020. Our Pre-K students need to be equipped for a world almost <u>one third</u> into the 21<sup>st</sup> Century! Emerging trends shaping school campuses and classrooms beyond 2020 include:

- Continued integration of technology into the methods of instruction and all aspects of school operations.
- Changing from "standard" classrooms to flexible design studios that meet new choices in curricula, including project-based and "online" learning delivery.
- Adapting spaces to differentiation of instruction and personalized learning styles of students.
- Increasing joint use of core support spaces through community partnerships.
- Reinforcing campus safety and security.
- Sustainable construction, operation and maintenance of buildings.

City and regional planning efforts which will influence our schools center around redevelopment of urban mixed use areas and the growth of areas convenient to the Charlotte commuting corridor and Lake Wylie. "Growing inside first" in the historic city core will affect enrollment and use of our "downtown" schools, and a recovering regional economy will drive needs in the northeast of our district.

Growth in charter schools in our community and expansion of the choice school menu within our district itself have now reached a point of pronounced impact on our facilities and support services. Beginning

#### **Executive Summary**

this year, we must address the following impacts in tandem with overall enrollment growth and the existing balanced enrollment reassignment process:

- accelerated stress on building capacity,
- complexity of student transportation (when offered),
- imbalance in facility utilization across the district, and
- unforeseen renovations required to accommodate new, expanding choice programs.

Long-term trends in projected enrollment and their impact on the capacity of our schools have changed significantly with the economic crisis. To quantify these trends, a comprehensive Integrated Planning for School and Community (IPSAC) Land Use Study was commissioned in the 2013-14 school year. conducted by the Operational Research and Education Laboratory of the North Carolina State University. The summary conclusion of the study was that "The Rock Hill Schools district is likely to experience flat growth over the next three years...(and)...there appears to be enough seats in the system at all three levels to absorb the growth expected over the next ten years." Our Pathfinders' careful review of the summary conclusions of the study leaves several additional "wild card" concerns outstanding, including:

- Impacts of immigration into the district due to the quality and extent of the choice programs currently/planned to be offered.
- Impacts of immigration into the district due to Challenge-Based Learning, the "iRock" digital transformation and other large-scale innovation initiatives underway.
- Specific emerging long range planning projections and analysis by the City of Rock Hill Planning Department.

One factor which weighs more heavily in the near term is the core building space capacity at several schools. These spaces, such as media centers, cafeterias, and gymnasiums were analyzed separately by the Pathfinders team for condition and capacity. Coupled with ongoing building condition assessments, the results showed that several elementary schools continue to present serious concerns:

Children's School:

Building age, cafeteria capacity, curriculum incompatibility, traffic access

Ebinport ES:

Building age, classroom capacity, cafeteria capacity

Northside ES:

Building age, cafeteria capacity, media center capacity

Richmond Drive ES: Building age, classroom capacity

Rosewood ES:

Building age, cafeteria capacity, traffic access

Sunset Park ES:

Building age, cafeteria capacity

It was also noted that Ebinport and Richmond Drive Elementary Schools have projected enrollments which approach or exceed 100% of capacity within the period of this Master Plan.

Another factor is our continued commitment to the capacity model for optimum school size:

• Elementary Schools:

550 – 750 students

Middle Schools:

800 – 1100 students

High Schools:

1800 – 2100 students

#### **Executive Summary**

Ebenezer Avenue Elementary School and The Children's School remain the only two schools whose classroom and core space capacity are outside this optimum size range (both smaller).

A continuing concern this year is the imbalance in school enrollment, and therefore building utilization. This is caused by a combination of demographics shifts, intra-district choice school influences, and regional charter school impacts. This year seven elementary schools are below 75% capacity; five of these are projected to remain below this level for most or all of the five year planning period: Belleview, Mt. Gallant, Oakdale, Finley Road and York Road Elementary Schools. Among this group, only Oakdale is a choice school (STEM).

A final factor is that our school district enjoys an excellent building maintenance history, making large-scale replacement and renovations due to condition unnecessary. Given our strategic planning considerations and the condition and capacity of our current inventory, expansion of our facilities is no longer the dominant feature of our master plans. Revolutionary trends now occurring in technology, school choice and pedagogy will overshadow our historic need to simply build more classrooms. Therefore, in the next five years our school district should focus on transforming our existing campuses into the optimum learning environments for tomorrow. This will be accomplished through:

- Cultivating collaboration through the transition to flexible learning spaces
- Adopting sustainability as a pathway to learning improvement
- Using professional space management practices for efficiency and stewardship
- Implementing an "elementary core conversion strategy," adding new core space capacity in our older elementary schools coupled with conversion of former core spaces into new flexible learning studios.

Implementation of this plan relies upon a five year listing of capital projects which address the needs outlined above.

Although this plan will be updated and presented to the Board of Trustees annually, the master planning system developed is an ongoing process, and this plan is intended as a living document.

Leadership continuity is important from planning through implementation. The permanent master planning team, known as "Pathfinders" stands ready to provide ongoing assistance in the implementation and updating of this plan.

#### A. Mission, Vision, Beliefs

The Rock Hill School District's mission is to engage all students in meaningful and profound learning in order to prepare them for successful futures. The overarching goal is to provide an environment where students learn, grow, connect and thrive. The process by which this is accomplished is defined by the *Rock Hill Schools Strategic Plan*. All initiatives, programs and decisions are driven by District goals within this plan, as recommended by the Superintendent and approved by the Rock Hill Schools Board of Trustees:

- Create school environments that promote student conceptual understanding and use of
  critical skills in problem solving, collaboration, and communication with the ability to
  reflect, evaluate and create in the digital environment of the 21<sup>st</sup> century.
- Create an environment that is emotionally, physically and intellectually safe for all stakeholders so that student may learn, grow, connect and thrive.
- Monitor use of data in the planning and delivery of instruction to ensure it is aligned to content standards using specific structures including professional development, differentiation, technology, and School Improvement Plans (SIP) to help all students reach their potential.

The goal areas above are in alignment with the state required areas of Teacher Administrator Quality, School Climate, and Student Achievement.

As we plan for future modifications to current facilities or new facilities, the *Rock Hill Schools Strategic Plan* goals and our Professional Code will be guiding factors within the framework of the planning process.

#### **Rock Hill Schools Professional Code**

Put Students First
Nurture Relationships
Work Together for a Shared Vision
Grow Professionally
Continuously Find Ways to Improve

#### B. District Profile

Rock Hill Schools is the largest school district in York County—geographically and in student enrollment. The district is 180 square miles while York County is 696 square miles. The current enrollment of 17,631 students (PK through grade 12) ranks as the eleventh largest school district in South Carolina. The district currently has 27 schools: 1 pre-school, 17 elementary schools, 5 middle schools, 3 high schools, and 1 Applied Technology Center. The district has three academies, hosts the regional center for adult education and maintains several facilities with outleased academic and academic support programs.

The current district organizational chart is shown at Appendix 7A. The current district enrollment report is shown at Appendix 7B.

Rock Hill Schools continues to be a growing district with associated changes in our demographics. Major challenges include meeting the needs of an ever more diverse population while managing the financial impact of state shortfalls in revenue:

- 1,063 students are English Speakers of Other Languages (27 different languages)
- 49.3% of students qualify for free lunch.
- 6.3% of students qualify for reduced lunch
- 14% of students qualify for special education services

Despite these challenges, we are known for the quality of our personnel and our innovative spirit. A "can do" attitude strengthens and reinforces the problem-solving ability of our employees. We are proud of the quality of our facilities, athletics, fine arts programs and fiscal management.

Rock Hill Schools is recognized as one of the most technologically innovative districts in South Carolina. An early adopter of the 1 student:1 computer learning concept in the state, the 2015-16 school year will be the district's third year of the "iROCK" digital transformation initiative. With over 10,400 iPad mobile devices in service we are currently at 1:1 in grades 4-8 and 1:4 in high schools and grades 1-3. We are among the top three school districts in the state for capability of technology infrastructure, including wireless access points, bandwidth and speed at all campuses. All schools classrooms are equipped with interactive white boards and sound enhancement systems. We also operate a semi-virtual high school academy where students work through a self-paced blended learning module in a flexible learning environment.

# C. The Master Planning Process

In September 2010, the Board of Trustees of Rock Hill Schools endorsed a recommendation to develop a new, ongoing facilities master planning system. In October 2010 the Board amended Policy FB, Facilities Planning, to specify a Five Year Facilities Master Plan that will be updated annually. The Board further recommended that the new facility master plan should:

- Be a living document, monitored and updated annually, and distributed to the School Board and local and state government agencies as required for specific projects
- Guide and control the authorization and approval of specific planning actions, projects development and capital and certain operational expenditures
- Meet all State Department of Education requirements for long range planning documentation
- Support, and be governed by, the overall strategic plan of Rock Hill Schools

To implement the recommendations a permanent Facilities Master Planning Team, the "PATHFINDERS", was established and resourced to prepare a comprehensive Long Range Facilities Master Plan. The PATHFINDERS team structure includes facilities and planning experts, demographics analysts, educators, parents and representatives of local government and the community. In addition, School Improvement Committees (SICs) will serve to provide site-specific information, analysis and needs to the Pathfinders Team as required.

The team's approach to plan development includes a streamlined planning process, shown in Figure 1, comprised of the following elements:

- Data collection and review of projected external and internal trends and drivers
- Assessment of physical condition of district real property to meet future needs
- Establishment of updated general construction and renovation costs in unit formats conducive to the planning process
- A long range project plan of action (minimum 5 years) for use in capital program development.

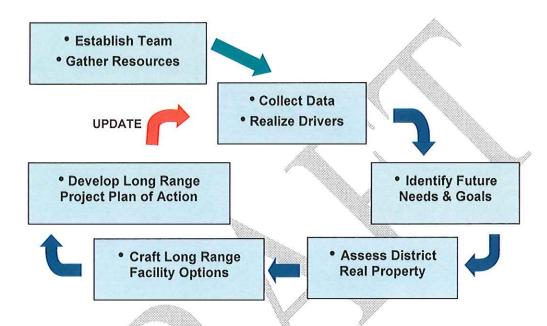


Figure 1. The Master Planning Process

Major goals of the master planning process are:

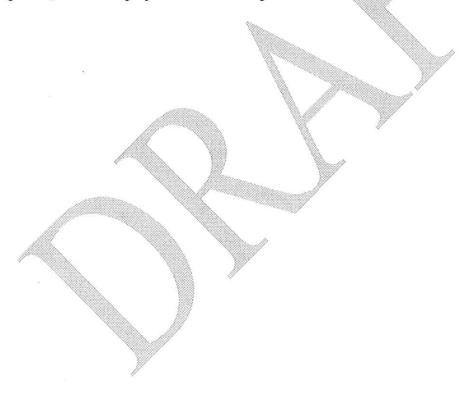
- 1. Develop a strategy to address facility improvement and the capital investments necessary to support existing and projected educational needs
- 2. Be consistent with the strategic educational goals of Rock Hill Schools
- 3. Involve all key stakeholders community, schools, administrators, the school board and other agencies of government in the planning process
- 4. Develop realistic plans to help Rock Hill Schools meet short- and long-range facilities needs, reflective of:
  - a. Current and projected financial constraints
  - b. Time constraints
  - c. Educational specifications (infrastructure function)
  - d. Quality of construction (infrastructure reliability)
- 5. Establish a Five-year Capital Improvement Plan of Action with implementation guidelines and specific project scopes, budgets and schedules. The current objective is a working draft plan to coincide with the 2015-16 operating budget and capital program development cycle.

#### D. The Plan as a Living Document

The Five-Year Facilities Master Plan is a living document that guides the facilities planning, design, and construction projects for Rock Hill Schools.

Each year the plan will be monitored and updated and will be presented to the Board of Trustees and local government agencies. Only planning actions compatible with the Master Plan should be approved. If projects are considered outside the parameters of the approved Master Plan emerge and are seriously contemplated, then the plan should be amended accordingly. As one year of the plan is implemented, a new "out-year" should be added to the plan to continually maintain a five-year plan. Updating should include any re-prioritizing of projects within the second to fourth years, based on changing needs of the school system. All statutory and regulatory requirements of the State Department of Education or other agencies should be incorporated into the Master Plan.

The 2015-2020 Master Plan maintains a near-term focus on elementary schools, due to condition of these buildings and projected growth demographics. As other areas of district facilities are impacted, additional projects will be incorporated.



#### STRATEGIC PLANNING CONSIDERATIONS

# A. Emerging Trends

- 1. **Trends in Education.** Several trends within and external to the education profession are shaping how facilities in the future will need to support teaching and learning:
  - a. A growing, <u>diversifying student population</u>, which will drive more schools and more specialized educational programs. Learning spaces will need to be flexible to adapt to the transient nature of the student population.
  - b. <u>Shifting demographics</u>. The rapidly increasing number of retired persons could heavily impact the options available for tax revenues for public education.
  - c. An <u>increasing number of special needs children</u> in the school mainstream population, together with increasing numbers of pre-Kindergarten children served will strain expenditures for public education.
  - d. Related <u>fiscal reaction</u> will drive up the average size of schools, stabilize or reverse Teacher-Pupil ratio reductions, and foster alternative school grade groupings (e.g., K-8, 7-12, etc.)
  - e. <u>Growing demand for School Choice</u> brings competition to districts, while also challenging diversity and "place identity" that neighborhood schools provide.
  - f. <u>Technology integrating into everything</u> on campus. 21<sup>st</sup> Century educational spaces will need to be created that address media integration, media literacy, and game-based and experiential/simulation-based learning (Edtechmag.com).
  - g. The <u>increased use of one to one computing</u> will provide additional opportunities for distance learning and online course availability, permanently changing school to an "anytime, anywhere" experience.
  - h. Larger amounts of time allocated to <u>core subject instruction will be in tension with an increased demand on student wellness and exploration in the arts</u>. Spaces, while flexible, will still have to feature certain special subject capabilities.
  - i. <u>Sustainability</u> in school operations and "green" building practices will become established as the ethical and economical option for K-12 education facilities.
  - j. Classroom spaces will transform from "lecture halls" to "flexible learning studios" full of creativity and collaboration, adapted to diverse learning styles.
  - k. There will be <u>more joint use of core spaces through community partnerships</u>, even as we are forced to tighten safety and security on our campuses.
  - Classroom space will adapt to differentiation of instruction and learning styles of students. Space will also need to be flexible enough to meet specific program needs and reflect ongoing technological advances.
- 2. **Regional Development Trends.** The PATHFINDERS master planning team partnered with the Planning Department for the City of Rock Hill to analyze major City and regional planning efforts which will influence our schools in the long term.

The City's Planning and Development Annual Report is provided as Appendix 7C to this master plan. The report forecasts continued growth for the City, albeit slower than recent trends due to the slow economic recovery.

Two major external "drivers" affecting district master planning are the City's strategic redevelopment of Urban Mixed Use areas and the growth of areas convenient to the Charlotte commuting corridor and Lake Wylie. Projects with potential schools impact include emerging suburban neighborhoods on both the north and south sides of the district, the Knowledge Park re-development, the RiverWalk development and the Dave Lyle Boulevard East extension.

The City's goal to "Grow Inside First" is seen as steering us toward maintaining or increasing our presence downtown, and the vision for "Sustainable Neighborhood Centers" leads us to maintain our inventory of community-based elementary schools at current levels.

The timing of these developments is very fluid and so our plan must remain flexible. Continuing to partner and collaborate with the City to update both our plans will be the key to our success.

#### B. Impact of Choice Schools and Charter Schools

Over a decade ago Rock Hill Schools began a process of re-assignment of attendance areas in an effort to balance ethnic sub-groups and the free and reduced population in school enrollment. The measure has been largely successful, even though it has resulted in higher transportation operations costs compared to feeder districts.

Within the last four years the school choice program at Rock Hill Schools has been expanded to seven elementary schools, or around 40% of the elementary schools in the district. At the same time, the York Preparatory Academy, one of the largest traditional "brick and mortar" public charter schools, began operation, with an ongoing impact of the loss of several hundred students from the district. During the past year a second charter, the River Walk Academy began operation, drawing more students. While eventually the capacity of these charters will be reached (despite active building programs), the long-term effect of all public charter schools, including state-wide virtual charter schools will be to suppress the available enrollment for the district. It also prompts the district to adopt a posture of competing for enrollment within its community.

Within the district itself, the expansion of choice schools has produced several noticeable impacts, including competition among the district schools for enrollment. Other impacts include:

- 1. **Stress on Building Capacity** successful programs can quickly build enrollment, confounding the facility planning process and imposing temporary "fixes".
- Scale and Complexity of Student Transportation When offered as part of choice
  programs, the scale, complexity, and cost of transportation increase exponentially. When
  overlaid onto reassignment, such service becomes impractical.

- 3. **Program constraints and confinement** the converse of building capacity, a successful choice / magnet program can be constrained by either the scale (ability to accommodate enrollment) or scope (lack of a performance place for a school of the arts) of the site.
- 4. **Shifts in demographics** While a primary design goal of choice programs, in certain cases these programs can induce shifts in school enrollment that are antagonistic to the school re-assignment process. With management this can be reversed.
- 5. **Enrollment imbalance** A companion antagonistic trend to demographic shift, when a minority of schools are made choice, their success can result in strained capacity at some sites, and pronounced under-utilization of other sites. Lack of control of enrollment can in short order work to undermine the balance of the re-assignment process.
- 6. Facility renovation for specific program needs inevitably, successful choice programs require more specialized, support of their buildings. Renovations such as additional storage and wider hallways for Montessori, or laboratory space for STEM schools are required for long-term sustainment of these special programs.

# **B.** District Technology Needs

- 1. Needs Assessment. The completion of a One-to-One wireless computing environment is the primary technology consideration in the near term. In support of this effort and others, the current technology needs include:
  - Support long term deployment of a 1:1 computing environment in grades 3 and 9-12.
  - Completion of the expansion of the wireless network in the elementary schools
  - Continue support of interactive classroom packages, desktop labs, and administration laptops
  - Support the acquisition and deployment of an integrated Learning Management System and a Mobile Device Management system
  - Begin phasing out student desktop computers in classrooms.
  - Begin phasing out media center desktop computers.
- **2.** Current Technology Support Strategies. The recent financial crisis period has impacted the support staffing required for District Technology operations and management. Initiatives sought to improve service and prevent deterioration of capability include:
  - Centralized district help desk
  - Cluster support technicians
  - Additional network support staff centrally located
  - Additional instructional technology support staff centrally located
  - Data team

#### C. District Facilities Needs

#### 1. Optimum School Size

As part of the Master Planning Process, The Board of Trustees reviews school building capacities, optimal school size, grade structure, and current research before renovating existing or acquiring new facilities. School size and class size ultimately determines school capacity across the district.

Determination of each specific school's capacity is often a compromise among competing objectives and factors: area population density, existing school sizes, natural geographic barriers, road patterns, transportation times and distances, curriculum choice and student achievement objectives, student and staff safety, effective and efficient use of fiscal resources and local preferences. These factors notwithstanding, Figure 2 represents a local consensus on optimum school size for Rock Hill Schools:

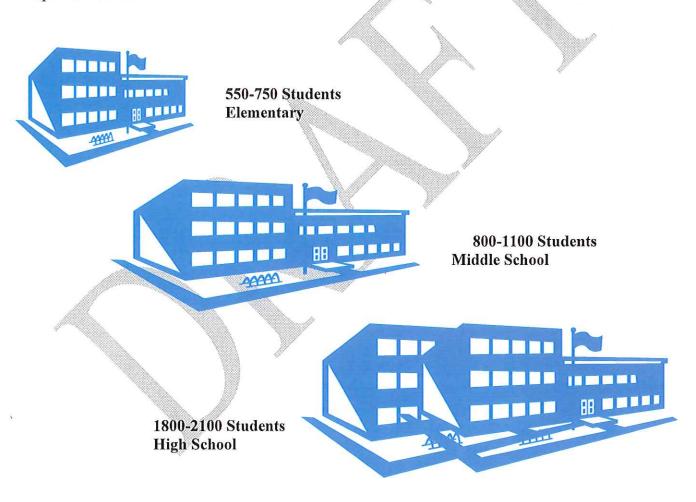


Figure 2. Model for Optimum School Size

# 2. Projected Enrollment and Capacity

The long-term trends in projected enrollment and their impact on the capacity of our schools have changed significantly with the economic crisis. To quantify these trends, a comprehensive Integrated Planning for School and Community (IPSAC) Land Use Study was commissioned in the 2013-14 school year, conducted by the Operational Research and Education Laboratory of the North Carolina State University. Using the initial 2003-04 IPSAC Land Use Study and subsequent IPSAC Updates which they also conducted, OREd Labs NCSU interviewed key community and county stakeholders and performed spatial analyses of GIS parcels to assess growth trends and impacts, providing a school district membership forecast and an out-of capacity projection table for the next ten years (through 2024).

Excerpts from the report are shown at Appendix 7D. The Study in its entirety may be found at:

http://ored-outcomes.itre.ncsu.edu/rock-hill/rock-hill-2013/

The summary conclusion of the study was that:

"The Rock Hill Schools district is likely to experience flat growth over the next three years as the affects of the recession are negated by new growth. This new growth will occur mostly as single family units are built on existing lots and will be spread throughout the district. There will be pockets of new multi-family development, especially around the Galleria area; however, the number of students produced by this development is likely to be small. As the inventory of developed lots shrinks and new developments become more attractive, additional K-12 students will come from large developments like Riverwalk (PlanSeg 209), downtown redevelopment with high-density residential, Lexington Commons (proposed, PlanSeg 235), Bristol Park (multi-family proposed, PlanSeg 407) and from the Newland Tract (possible, PlanSeg 245). These pockets of development will put pressure on some schools in the district to consider adjusting attendance zones.

There appears to be enough seats in the system at all three levels to absorb the growth expected over the next ten years."

The Board of Trustees was presented these findings in February of 2014. At the time OREd Labs also advised the Board of several "wild cards" which could "have significant impacts on the magnitude, location, and timing of development and increases in school children, including:

- A shift in the focus of residential development southward from Fort Mill into Rock Hill. Estimates from interviewees as to when this shift might occur varied from two to ten years in the future. Most interviewees believed there is a question of when, not if, such a shift will occur.
- Construction of the Dave Lyle Boulevard extension. Opening this highway link will spur development in the northeastern area of the school district, particularly on the Newland tract.

- Construction of a third highway crossing of the Catawba River north of Rock Hill. If such a link is constructed, that will fuel development pressure in the area north of Celanese Road, an area currently the focus of residential development in the school district.
- Construction of additional multi-family housing, particularly in the Dave Lyle Boulevard, Cherry Road, and Celanese Road corridors. Several apartment complexes have been constructed in the Dave Lyle Boulevard corridor, and that area and the other two named corridors were mentioned as likely locations for additional multi-family development.
- Development of Riverwalk. While development is proceeding at a relatively low pace, and has attracted few families with children, on-site amenities may attract more families with school children and/or increase the pace of development.
- The pace of recovery from the recent recession. While the housing market is showing signs of recovery, the pace and scale of the recovery will need to be watched carefully."

It should be noted our Master Planning Team, the PATHFINDERS is comprised of several of the persons interviewed in the Land Use Study process. Our team's careful review of the summary conclusions of the study leaves several additional "wild card" concerns outstanding.

Specifically, we find that the analysis and enrollment projections shown in Appendix 7D do not fully reflect the following trends, which we see as crucial to the master planning process:

- a. The additional comparison data for the capacities of core spaces within each school, such as cafeterias, gymnasiums, auditoriums, and media centers. Impacts and limitations of these areas are addressed in Part 4A of this plan.
- b. Impacts of immigration into the district due to the quality and extent of the choice and magnet programs currently/planned to be offered.
- c. Impacts of immigration into the district due to Challenge-Based Learning, the "iRock" digital transformation and other large-scale innovation initiatives underway.
- d. Some sections of emerging long range planning projections, and analysis by the City of Rock Hill Planning Department.
- e. Minor impacts due to pricing fluctuation in the construction or real estate markets. An updated modular approach to construction costs used for estimating in this master plan is found at Appendix 7E.



January 15, 2015

# Rock Hill School District 3 Facilities Master Plan PART 4 ASSESSMENT OF CURRENT RESOURCES AND FACILITIES

# A. Summary Assessment of Facilities: Inventory and Condition

#### 1. Quantity

a. General Description. Rock Hill Schools is the 11<sup>th</sup> largest school district in the state of SC. Real estate holdings encompass sites totaling over 1,136 acres. Twenty-eight sites serve as school campuses. Combined with central district administration locations, there are 31 occupied sites. Overall a total of 42 sites and centers are valued at \$550,728,006 according to insurance records. Facilities currently operated and maintained include 88 permanent buildings and structures and an inventory of 28 mobile classrooms and semi-permanent buildings, all totaling 3,446,777 square feet.

Appendix 7F shows the district's school zones and sites (real estate holdings).

#### b. Itemized facilities by use

- 1 Preschool
- 17 Elementary Schools
- 5 Middle Schools
- 3 High Schools
- 1 Career / Technology Center
- 1 Alternative Center

(The Phoenix Academy, Renaissance, Rebound, Adult Education, Special Education)

- 1 Family Resource Center (ParentSmart)
- 1 Educational Museum (The Carroll School)
- 2 District Stadiums
- 3 District Support Centers (District Office, Facilities Services, Transportation)
- 3 out-leased sites (Edgewood Center, Aquatics Center, McConnells Hwy Property)

#### c. Age of facilities (date constructed shown w/ expansion or renovation dates following)

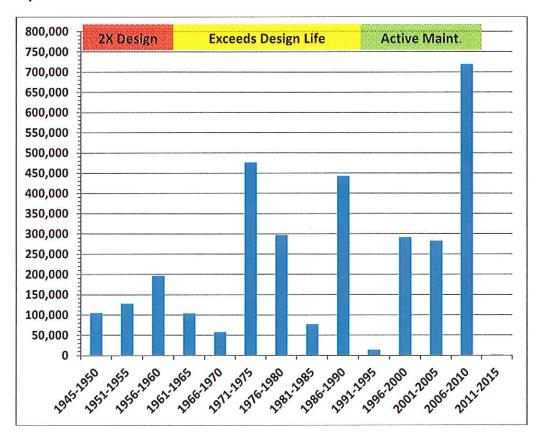
	<u>iviax. Age</u>
(1) Elementary Schools:	
Central Child Development Center – 2002	12
Belleview ES - 1955 w/exp. '76, '83, '91, '98, '07	59 27 65 57 36
Ebenezer Ave ES – 1987	27
Ebinport ES – 1949 w/exp. '55, '84, '91, '98	65
Finley Road ES - 1957 w/ exp. '78, '84, '89, '98	57
Independence ES – 1978 w/ exp. '91	36
India Hook ES – 2007	7
Lesslie ES – 1954 w/ exp. '89, '97, 2013	<b>60</b> 36
Mt Gallant ES - 1978 w/ exp. '81, '90	36
Mt Holly ES – 2008	6
Northside ES of the Arts – 1951 w/exp. '84	63
Oakdale ES – 1949 w/exp. '56, '78, '89, '97	65
Old Pointe ES - 2002 w/exp. '06	63 65 12
Richmond Drive ES - 1949 w/exp. '52, '54, '90, '97	65
Rosewood ES - 1960 w/exp. '63, '90	54
Sunset Park Center for Accelerated Studies - 1954 w/exp. '56, '61, '63, '65, '91	60
The Children's School at Sylvia Circle - 1950 w/exp. '56, '89, 2002	65 54 60 64
York Road ES – 1971 w/exp. '89	43



	Max. Age
(2) Middle Schools:	
Castle Heights MS – 2004	10
Dutchman Creek MS – 2008	6
Rawlinson Road MS - 1972 w/ exp. '89, '99, '06	42
Saluda Trail MS – 1999	15
Sullivan MS - 1959 w/ exp. '61, '63, '65, '03	15 <b>55</b>
(3) High Schools:	
Northwestern HS – 1971 w/ exp. '91, '98	43
Rock Hill HS - 1977 w/ exp. '91, '98	37
South Pointe HS - 2005	9
ATC - 1973	41
Flexible Learning Center – 1968 w/exp. '70	44

Appendix 7G displays a construction history of the current occupied school buildings, showing square footage constructed by site and by year. This history shows a steady amount of building construction over the past 70 years, including expansion of existing campuses, construction of new schools and replacement of older, obsolete buildings at some elementary school sites.

The construction history is color-coded along the time axis to reflect typical "Design Life Expectancy" of a commercial or institutional building. Based on accepted architectural and building industry standards, the expected (or "design") life of a permanent school building is 25 – 30 years.

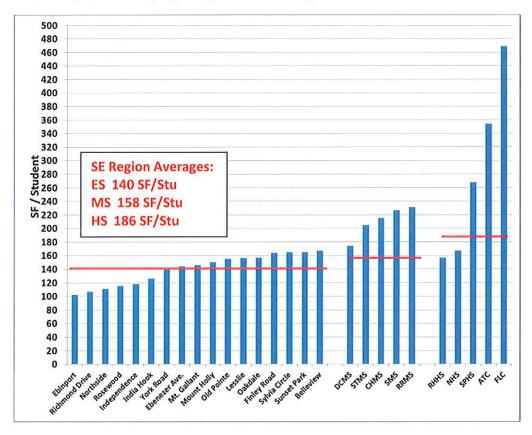


Graph 1. Construction History for Rock Hill Schools (Square Feet).



Graph 1 displays the data from Appendix 7G as district totals over time, showing a pattern of construction which correlates to the history of capital bond issuance and referendum-based building programs. It is noted that there are only a couple of periods with a low rate of construction activity. Interestingly, the least activity has occurred over the last five years. Other trends in the construction history data include:

- a moderate but significant amount of buildings, mostly elementary schools, are double the average life expectancy.
- a larger inventory of "middle-aged" buildings which have now reached the designed lifespan without major renovation. This includes most of the West Main Street properties and the Rock Hill High campus.
- the largest group of buildings that are newer, but are almost all now out of the warranty period and have to be maintained fully by the district.
- **d. Quantity Summary.** Rock Hill Schools maintains an total facilities inventory of 3,446,777 square feet, currently serving an enrollment of 17,750 students. This equates to a Facility Use Density of 194.2 SF/student, which is substantially higher than both the regional (148 SF/student) and national (139 SF/student) average densities. Graph 2 provides a breakdown of the Facility Use Densities by school category, compared with averages for the southeastern U.S.



Graph 2. Facility Use Density for Rock Hill Schools.



Elementary Schools are close to the average, middle schools are well above the average, and high schools are variable, with Rock Hill and Northwestern High Schools "tight" compared to South Pointe High Schools. This graph clearly shows the biggest opportunity for better space management at the Flexible Learning Center.

Elementary schools are the oldest group of buildings at 43.9 years average. High schools average 34.8 years while middle schools are the newest group at 25.6 years average age.

#### 2. Quality

a. Maintenance Record. In general, the 'shell' or external skin of each school is the top priority for facility maintenance. Without an adequate roof, wall, window and door systems, the effort of maintaining the facility is multiplied due to water infiltration and damage the moisture may cause. With the building envelope in order, the focus can be turned to interior finish maintenance and cleanliness. Additional measures include utility maintenance, especially energy efficiency concerning the HVAC and lighting for an economical life cycle. School sites also require maintenance with the heavy duty nature of bus, car and service traffic required. Landscaping is also always an issue as it is linked to the perception of the initial impression of the school.

The overall maintenance record of the Rock Hill Schools is adequate and maintenance planning is on schedule. Facilities and grounds are assessed on an ongoing basis with advanced use of the "SCHOOLDUDE" Maintenance Management System, including preventive maintenance inspection and use of planning and work-order modules of the system. In addition, specialized inspections are routinely conducted by Moseley Architects and by roofing, civil/environmental, mechanical, electrical and other consultants and regulatory agencies.

Specific projects identified for component systems are highlighted in Part 6A of this report. District Technology Systems are assessed in overview in Part 4B.

Of particular note is fact that over one third of the district's entire inventory has been constructed in the last 15 years. While this has led to lower levels of required maintenance in recent years, this large number of buildings are now "coming out of warranty" and are leading to significantly increasing maintenance demands in the near future.

Likewise, the increasing age of the oldest component of the inventory will demand ever increasing maintenance due simply to an average age over twice the design life.

b. Summary of Inventory Condition. The quality of the existing conditions of the RHSD3 facilities is impressive in light of the current and recently past school budgets and funding. The maintenance program and the ability to stay 'ahead of the curve' in a pro-active maintenance regimen has increased the potential use and life span of each facility. The above maintenance criteria has been followed and implemented in providing a safe, attractive school facility. Even the facilities or areas of facilities built in the late 1940's and 1950's are in good shape. This diligent process has eliminated the question of 'What do we have to demolish and replace?' but has allowed the idea of 'How can we re-use and/or add onto these facilities to optimize the existing campus?' The past and present board members, district staff, school staff, teachers, janitorial staff and maintenance staff should all be commended.

#### 3. Summary Assessment of Facilities Inventory.

Appendix 7H provides a detailed assessment of elementary school sites, with summary statistics, floor plans and site infrastructure assessment. Table 1, Analysis of Capacity for Rock Hill Schools, is derived from Appendices 7D, G and H. The table includes the core space capacity, as



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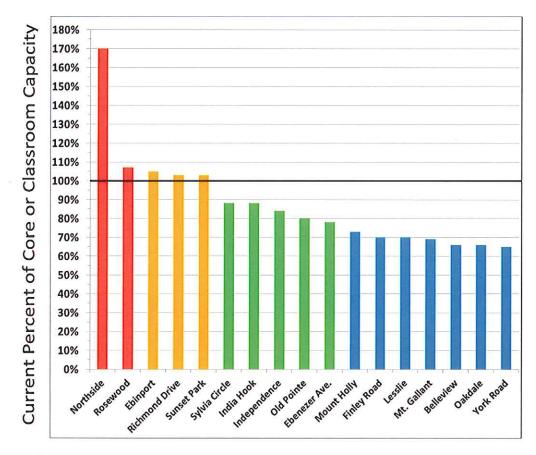
PHONE: 704.540.3755 • FAX: 704.540.3754 determined by Moseley Architects. Core capacity is defined as commons or assembly spaces, including the media center, cafeteria / kitchen, gymnasium, auditorium and other multi-purpose spaces, which can greatly affect the schools efficiency and operation.

		Capaci	ties (1)	45th-Day Enrollment	OrEd Projected 45-Day Enrollme (From Land Use Study 2014)										
School Campus:	SQUARE FEET	Classroom Capacity	Core Capacity	2014-15 (2)	2015-16	2016-17	2017-18	2018-19	2019-20						
Elementary Schools									12						
Belleview	74,311	690	679	446	438	430	426	431	441						
Ebenezer Ave.	44,439	437	398	309	300	300	300	291	283						
Ebinport	63,795	644	595	623	627	629	629	620	626						
Finley Road	64,140	667	555	390	412 552	417	414 558	423	437 575						
Independence	61,690	621	833	524		549		566	603						
India Hook	75,979	690	798 510	605 357	590 372	575 384	574 390	580 409	431						
Lesslie	55,812	621 667	834	459	463	462	473	478	504						
Mt. Gallant Mount Holly	67,057 75,979	690	798	506	507	510	527	522	522						
Northside	55,657	552	326	555	538	545	541	543	528						
Oakdale	67,072	667	650	428	418	425	438	449	452						
Old Pointe	86,284	690	748	555	566	550	569	572	572						
Richmond Drive	68,572	621	631	641	582	580	565	551	543						
Rosewood	67,389	690	567	607	620	608	623	615	614						
Sunset Park	74,452	621	438	452	460	462	473	475	491						
Sylvia Circle	54,352	460	375	330	364	363	362	364	366						
York Road	57,790	644	882	416	386	386	409	419	429						
Totals	1,114,770	10672	10617	8203	8195	8175	8271	8308	8417						
Totals	1,114,770	10072	10017	0200	0100	0110	OL.	0000	0.111						
Middle Schools															
Castle Heights	176,678	1144	1144	821	818	788	818	831	856						
Dutchman Creek	168,952	1144	1144	969	929	944	942	943	918						
Rawlinson Road	148,823	1196	1196	645	619	596	566	561	552						
Saluda Trail	161,419	1040	1040	786	757	759	717	700	684						
Sullivan	175,848	1352	1352	775	803	816	878	908	962						
Totals	831,720	5876	5876	3996	3926	3903	3921	3943	3972						
High Schools															
Applied Technology Center	106,239														
Flexible Learning Center	126,498						100000000000000000000000000000000000000	10000	17/10/20						
Northwestern	309,472	1976	1976	1856	1729	1704	1615	1624	1626						
Rock Hill	314,035	2158	2158	1995	2016	2036	2020	2109	2144						
South Pointe	346,052	1872	1872	1291	1303	1283	1264	1269	1229						
Totals	1,202,296	6006	6006	5142	5048	5023	4899	5002	4999						
Other Sites															
Central Childhood Development Center (3)	25,267	230	na	409	392	392	392	392	392						
ParentSmart Resource Center	16,284			8											
Carroll School	3,072		CAN SERVICE						-						
District and Support Sites (three total)	98,479														
Stadiums (two total)	26,418	1000				<b>!</b>	-								
Outleased Sites (two total - one to maint.) Portables and Outbuildings utilized	85,433 43,038														
Totals	297,991														
Totals	297,991		,						The second						
System Totals	3,446,777	22784	22499	17750	17561	17493	17483	17645	17780						
Capacity Legend:	< 75%	75- 95%	95 - 100%	100-105%	> 105%										
VOTEO.		Core Capa	acity:	<80% of optimum											
NOTES:  1). Capacity based on analysis by Notational states are also and the conservative, Percent Capacity.	nd other spe	ecial prog	ram factor	s.											

Table 1. Analysis of Capacity for Rock Hill Schools.



Again this year Table 1 has been expanded to consider cases of possible under-utilization of existing capacity, reflecting an imbalance in enrollment numbers driven by concurrent reassignment policy and recently expanded choice selection in schools (See part 3 for a detailed discussion of these impacts). Graph 3, using the same color-coding convention of Table 1, better displays the large variation among elementary schools in terms of School Utilization Rate (enrollment divided by core capacity).



Graph 3. School Utilization Rate (Core) for Rock Hill Schools.

#### 4. Conclusions.

The following conclusions are drawn from the data above:

- Ebenezer Avenue ES and The Children's School at Sylvia Circle are both significantly below the
  optimum elementary school size reported in Part 3 of this Master Plan. These are the only two
  schools in the district's inventory which are smaller than the recommended size range.
- The Children's School, Sunset Park Elementary Center for Accelerated Studies, Rosewood IB Elementary School and the Northside Elementary School of the Arts all have cafeteria core capacities significantly below the optimum size for elementary schools in the district.



- Additionally, the current (2014-15) year enrollments for Northside and Rosewood Elementary Schools are significantly higher than the current limiting core capacity (cafeteria). It should be noted that both of these schools are among the original schools of choice offered within the district.
- Ebinport and Richmond Drive Elementary Schools have projected enrollments which approach or exceed 100% of capacity (regardless of type) within the period of this Master Plan.
- Rock Hill High School approaches 100% capacity by 2018. Interestingly, this trend corresponds
  to a drop in the enrollment of South Pointe High School to less than 70% of capacity.
- The Central Child Development Center, as a managed enrollment pre-school, appears to be able to remain at or above full capacity for the foreseeable future.

The data and conclusions point to the need for additional core space capacity at successful choice schools which continue to sustain or increase enrollment beyond building capacity. Opportunities for realignment of schools may result in more efficient facilities operations while improving or expanding choice options and curriculum quality overall. Some rezoning at the high school level may be needed in the coming years.

In certain circumstances involving schools, district support activities or other specialized support activities, potential opportunities for consolidation or closure of sites may emerge:

- Efficiency Enrollment has declined or the space available at a school or schools in close proximity is not being used in the most efficient and cost-effective manner.
- Physical condition of building The physical condition of the school building makes continued
  operation of the site cost-prohibitive or continued occupancy of the site unsafe or impractical.
- Alternative use of school facilities The Board may close a school to use its facilities for other programmatic/educational purposes, for support services, to open a new school or to expand an existing school.
- Change in educational focus The Board may determine that a school closure, consolidation or reorganization is necessary to address the educational needs of students such as by implementing new curricula or instructional programs.

If this is the case, it is recommended that the process be fully public and transparent to all stakeholders.

Part 4A

#### B. Current Technology Inventory

- Over 5,000 PCs
- Over 2,700 laptops
- Over 12,000 tablet computers
- Over 1,200 Promethean interactive whiteboard packages
- Over 1,200 Front Row Audio classroom sound systems
- Approximately 75 Servers
- Wireless access installed throughout all schools
- Email and Internet filtering appliances
- 110 multi-function networked printer/copiers
- Over 300 networked laser printers
- Over 2,000 ink-jet printers
- 30 stand-alone copiers
- 29 video surveillance systems with a total of 850 cameras
- Electronic web-based proximity card lock systems on over 350 exterior doors
- 88 Bus security cameras
- Fully deployed Building Automation System at each campus, with networked EMCS overlay controlling HVAC, lighting and other systems.

# C. Capital Resources and Bonding Assessment

Projects recommended by the Master Plan fall into three basic categories:

- 1. <u>Assets Protection:</u> Facilities major maintenance and repair projects required to sustain the current condition of the real property inventory, other than technology systems.
- 2. <u>Technology Plan:</u> Projects required for upgrade, enhanced application and sustained capability of major information technology systems and IT infrastructure.
- 3. <u>Facilities Upgrades</u>: Large construction projects addressing capacity shortfalls due to enrollment growth or building functionality. Projects may also address replacement of existing buildings or portions of buildings due to age or condition or major safety, energy or environmental concerns.

Funding for projects recommended by the Master Plan are mainly provided through local capital millage and the sale of general obligation bonds. The current inventory and capacity of RHS facilities has been the result of consistent long-range planning over the last 19 years, including the following bond-based building programs:

<u>February 1996</u> A \$40 million bond referendum for the construction of additional space at all levels and rezoning of elementary schools, to meet rapid enrollment growth.

March 2000 An \$80 million bond referendum for the construction of a central child development center, an elementary school, a middle school and a high school from

2002-2005 to meet continued growth, as well as roofing replacement at 16 district facilities.

<u>April 2005</u> A \$92 million bond referendum for the construction, furnishing and equipping of two new elementary schools and a new middle school, the expansion and renovation of several existing elementary schools, the purchase of land for additional facilities and various major repair projects at existing school facilities.

In addition to bond referenda the Board is authorized to set millage within the debt service capacity limit of eight percent (8%) of current plant value. In recent years RHS has routinely issued annual general obligation bonds of approximately \$5-6 million under this limit in order to finance the incorporation of technology into its curriculum and/or the repair and renovation of existing school facilities.

As part of the 2005 referendum a capital millage profile was adopted to progressively increase mills levied annually in order to keep pace with expected growth. At the onset of the economic crisis, the 2008-09 millage rate of 56.5 mills was reduced to 52.0 in order to mitigate the taxpayer impact of a required increase in general fund operating millage.

Recent School Board preference has been to finance the Facilities Master Plan through the Board's 8% capacity and/or to hold the district's capital debt millage rate at its 2009-2010 (current) level of 52.0 mills. The District was asked to examine alternatives within these preferences.

An analysis of 8% Debt Service Capacity in April 2014 shows an estimated capacity of \$21 million for the 2014-15 fiscal year, growing to almost \$23 million by 2017.

Within the constraint of a fixed future millage rate of 52.0 mills the requirements of the Master Plan cannot be realized through the 8% capacity, but may be possible through a properly structured bond referendum.

**Summary**: Despite continued growth, the district has maintained a fixed capital tax millage for the last six years. The district has not conducted a capital bond referendum in the last ten years.

The continued steady use of the facilities inventory and advancing age of facilities detailed in section 4A of this report produce a backlog of major repair and alteration beyond the Board's authorized capacity in the current planning time period.

Fully funding the master plan over this period will require a carefully designed, innovative bond financing strategy. A capital bond referendum for facilities modernization and efficiency should be seriously considered in the coming year to take advantage of the current highly advantageous conditions:

- a. A very favorable bond market.
- b. The relatively favorable construction pricing market.
- c. Synergistic county and city economic development initiatives.

# ANALYSIS AND STRATEGY TO SUPPORT 21<sup>ST</sup> CENTURY TEACHING AND LEARNING

**A. Overview.** Over fifteen years into the 21<sup>st</sup> century, this year we are preparing our children to become globally competitive citizens from now through the year 2029. Although our current planning timeframe is 2016-2020, we must envision our learning environments well beyond 2020 to meet our mission.

Given our strategic planning considerations detailed in Part 3 and the current condition and capability of our resources assessed in Part 4, expansion of our facilities purely to meet capacity needs is no longer the dominant feature in our plans. Even when we return to a period of high growth, the revolutionary trends in technology, school choice and pedagogy now occurring will overshadow the need to simply build more classrooms. Therefore, in the next five years our school district should focus on transforming our existing campuses into the optimum learning environments for tomorrow. This will be accomplished through

- cultivating collaboration through the transition to flexible learning spaces
- adopting sustainability as a pathway to learning improvement
- using professional space management practices for efficiency and stewardship
- implementing an "elementary core conversion strategy", adding new core space capacity in our older elementary schools coupled with conversion of former core spaces into new flexible learning studios.
- **B.** Cultivating Collaboration: Creating Flexible Spaces. Together with critical thinking, creativity and curiosity, collaboration has been recognized as a key skill for success in the 21<sup>st</sup> century. This informal, group-based approach to learning and teaching leads to dramatic increases in student achievement and faculty job satisfaction. This approach must be supported by areas within our schools which foster group interaction, informal inquiry and simultaneous activity. We will cultivate collaboration by finding ways to transform our:
  - Hallways into pathways with transient learning displays and group activity 'pockets',
  - Assembly and commons areas into large community spaces that foster a sense
    of unity and belonging, both internal to the school and reaching out to invite in the
    public for both civic use and learning mentor opportunities, and
  - Classrooms into learning 'studios' or 'neighborhoods' that feature flexible
     "make-spaces" for small and large student group activities and project-based
     learning as well as teacher collaboration spaces.
- **C.** Sustainability for Learning Improvement. Starting as a novelty, research is now conclusive that a sustainable built environment is a necessity for improved learning. From more than 20% improvement in scores due to daylighting to a reduction of stress

and absenteeism with healthier indoor air quality, constructing sustainable buildings is no longer an added expense but is actually a savings for our schools. Therefore, as a sound business principle and a moral imperative, we will adopt sustainability in the construction and operation of our school campuses. As part of our new comprehensive policy EZ for Environmental Sustainability, our efforts will lead to:

- At least 25% greater Energy and Water Efficiency per square foot than current building standards,
- At least 30% of our 2011 tons of solid waste minimized through reduction, reuse or recycling,
- Energy Star certification of all school campuses,
- LEED "Green" certification of all new buildings and major renovations projects,
- A 10% reduction in the 2011 carbon footprint of school district operated vehicles,
- Measurable reduction in the 2011 carbon footprint of all other vehicles accessing or serving our campuses, and
- Improved purchasing and consumption practices such as Energy Star appliances and reduction of freight packaging and office paper.
- **D.** Space Management for Efficiency and Stewardship. As shown in Appendix 7D, substantial future classroom capacity exists in our current facilities inventory overall. No schools are projected to be out of classroom capacity within the period of this plan. In fact, with the exception of the six elementary schools indicated in part 4A, no aspect of school capacity is a concern for the five year planning period.

Across the district, however, opportunities must be found to utilize building space more efficiently, with substantial potential savings on building maintenance and utility/energy costs. As such, this strategy aligns with the strategy on "sustainability", reducing the need to build significant additional square footage.

There are three main actions in this strategy: procedures, building use, and the "furniture effect".

- 1. **Procedures.** Implementation of the recently improved facilities use policy and procedures, addressing not only community usage but school faculty and staff room utilization, will be far more cost-effective than constructing and operating additional buildings or mobile classrooms. Efficiency measures include:
- Improved scheduling procedures for common, shared rooms and areas,
- Proactive management of materials and supplies stored on campus, including minimizing 'hoarded' inventories and more organized use of storage space,
- Tailoring the energy usage in storage areas compared to continuously occupied areas,

- Establishment of assignment procedures for classroom and office space based on recognized standards
- Coordination of events planning to consolidate to a most efficient building "footprint".
- 2. **Building Use.** As discussed in Part 4A of this plan, the utilization of facilities at the overall district level must be monitored and managed to sustain financial resources. As shown in Graph 2 of that section, the best opportunities to make better use of the space we have at our schools is among the middle schools as a group, and with the Flexible Learning Center, in particular.

With regard to school campuses, the Pathfinders Team does recognize that consolidation or relocation of schools, curricula or programs in our district are community-driven and –impacted events, and should be managed as a process that is fully public and transparent to all stakeholders.

With regard to non-school, district level support facilities, the Pathfinders Team sees significant opportunities for consolidation and re-alignment of spaces, and these should be pursued with high priority.

- 3. The Furniture Effect. The third space management area is the effect that furnishings and equipment can have on the square feet we use. It is a new trend in school operations management, and the Pathfinders believe it can not only make older, smaller classrooms "work" like larger rooms, but it can actually, drastically improve teaching and learning.
- **E.** The Elementary Core Conversion Strategy. The backdrop and stage upon which the strategies above can be implemented is our ongoing building assessment process. In addition to factors like building age, last renovation, and physical condition, we examined the capacity of our core building spaces, such as media centers, cafeterias, and gymnasiums. Several shortfalls were noted in our elementary schools:

• Children's School: Building age, cafeteria capacity, curriculum

incompatibility, traffic access

• Ebinport ES: Building age, classroom capacity, cafeteria capacity

Northside ES:
 Building age, cafeteria capacity, media center capacity

• Richmond Drive ES: Building age, classroom capacity

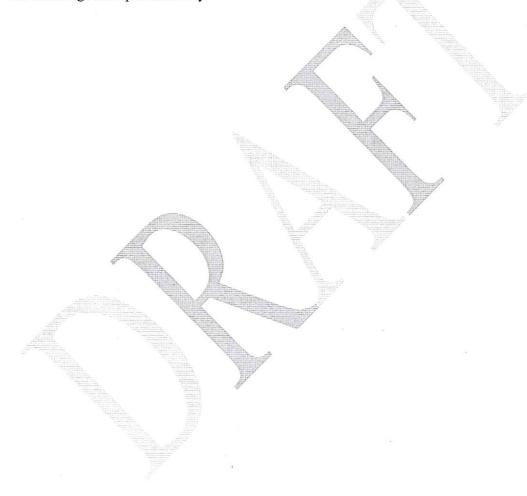
• Rosewood ES: Building age, cafeteria capacity, traffic access

Sunset Park ES: Building age, cafeteria capacity

Overall, our school district enjoys an excellent building maintenance history, and has also benefited from detailed work in recent years to balance school zones and maintain community-centered schools. Building upon these benefits, the strategy to meet future needs is to renovate, modernize and improve our existing school campuses as a first priority.

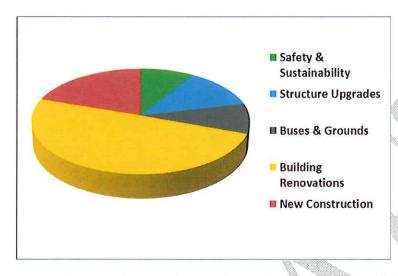
Ongoing building condition assessments compel us to focus our master planning efforts on our elementary schools as a group in the near term. This will be accomplished through upgrades and alterations to our existing elementary campuses "in-place" as much as possible. Additions of badly needed specialized spaces such as cafeterias will allow alteration and conversion of the former space into highly collaborative, flexible learning studios. Where possible we will take advantage of this construction activity to convert selected classroom wings into more efficient and effective learning neighborhoods.

This "elementary core conversion" approach itself is also both inherently sustainable in re-purposing existing buildings, and provides the opportunity to manage space through the building more productively.



#### PROJECT OPTIONS AND SCHEDULES

Five Year Plan Projects List. The culmination of the Master Planning Process described in Part 2 is a listing of executable list of capital improvement and renewal projects. Projects are crafted by the Pathfinders Team based on trends, drivers and needs identified (Part 3), facility capacity and capability analyzed (Part 4) and strategies developed (Part 5). While the exact list of projects and their individual scopes will continuously evolve, a five year listing is provided below.



Project Areas. Currently there are 51 projects in the list that are prioritized and phased by year. These projects are grouped into 5 main areas of work:

- 1. Safety and energy efficiency projects include upgrades to district-wide campus security systems, environmental restorations, and energy efficiency retrofits.
- 2. Repairs, upgrades and replacement of major building

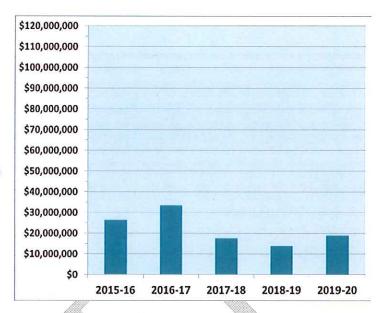
systems such as roofs, exterior walls, plumbing, and HVAC systems. We'll also upgrade building automation systems, furnishings and other equipment at all campuses.

- 3. We'll also make safety-oriented improvements to our campus grounds and replace our oldest activity buses, keeping fleet maintenance costs down and safety for our students at the top of the list. Campus grounds includes secondary athletic fields and elementary playgrounds.
- 4. Site-specific renovations and modernization. Since our main goal is transforming our existing inventory, over half of the work will be for our 10 oldest Elementary buildings and 5 oldest secondary schools. Elementary work includes replacement of undersized cafeterias and conversion of existing space to flexible learning spaces. Secondary schools work includes architectural renovations to the original buildings at our 5 oldest middle and high schools.
- 5. The rest will be used for **new school construction and additions** to existing schools to increase capacity when we need it in a few years.

**Project Scheduling.** The five project areas above are listed in a general order of priority. The Pathfinders Team also prioritized and phased each individual project by year to enable better management of the construction and minimize impacts to existing school operations. Project planning also considers criticality of a particular school or building condition, and market factors like cost of materials, which contractors and which kind of contracts will provide the best price.

Graph 4 summarizes an overall spending execution plan across the five years of the master plan. Projects are phased and spread out the implementation to ensure adequate resources are available each week and each month to execute the plan safely and correctly.

Graph 4 shows that peak spending occurs in the first two years, with an early priority on renovations and modernization work and most of the new construction and expansion set in the "out-years." The multi-site, systems based projects are loaded fairly constantly across the years, reflecting both the never-ending nature of the work (like roofing) and the growing, evolving state of the art of the some systems (like security and safety infrastructure). Equipment purchases are also constantly loaded over the years, reflecting ongoing fleet and school inventory re-capitalization initiatives.



Graph 4. Five Year Plan Projects Implementation Plan.

**Project Work by Site.** Table 2 shows how the five year plan and capital program benefits each RHS site / school individually. Table 2 is shown as a basic "checklist" of applicability since the individual site work for many of the multi-site systems oriented projects is still being developed. Most of these projects will "touch" every site in the district (such as video surveillance systems) or every school category (like athletics fields at high schools). On average, the program contains at least 18 projects for each school, and the average across the district is 20 projects/site.

PROJECT AREA	RHHS	NHS	SPHS	ATC	FLC	CHMS	DCMS	RRMS	SMS	STMS	BVES	EAES	EPES	FRES	IES	IHES	LES	MGES	MHES	NSES	OPES	ODES	RDES	RWES	SPES	CSSC	YRES	CCDC	00	FSD	TRANS	CarrS	EdgeC	D3S	D3SS	RHAC
Safety and Energy Efficiency	V	1	1	V	V	V	V	1	V	1	V	V	V	1	1	1	V	V	V	1	V	V	V	V	V	1	V	1	1	1	V	V		1	1	8
Repairs and Replacements	V	1	1	1	V	V	V	1	V	V	V	V	V	V	V	1	V	V	V	V	V	V	V	1	V	V	V	1	1	1	V	V		11		F
Activity Bus Replacement												Г																T					6	1		
Grounds & Athletic Facilities Improvements	1	1	1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		100				Sec. 193	
Technology Upgrades	V	1	V	1	V	V	V	1	V	1	V	V	V	V	V	1	V	1	V	1	V	1	V	1	V	V	V	1	3	1	15	7.5				ī
Renovation & Modernization: Elementary											1	1	1	1			1			1		1	1	1	1	1			Orthodol Con		No.		0.100			
Renovation & Modernization: Middle and High Schools	1	1		1				1	1																				2000			8				
Renovation & Modernization: District-Wide					1										1			1									V		1	1	1	TO BEND	384			
Additions to Elementary Schools													1			1				1			V		1				18 N 88	Man Brit	To the last	N				100
New Construction																																	, d		8	

Table 2. Five Year Plan Project Site List for Rock Hill Schools.